WEBVTT

NOTE duration:"01:27:35.0620000"

NOTE language:en-us

NOTE Confidence: 0.80948734

00:00:00.000 --> 00:00:02.575 On tonight to Smilow shares

NOTE Confidence: 0.80948734

00:00:02.575 --> 00:00:04.635 on colorectal cancer advances.

NOTE Confidence: 0.80948734

00:00:04.640 --> 00:00:07.190 This is timely because it's

NOTE Confidence: 0.80948734

00:00:07.190 --> 00:00:09.230 colorectal Cancer Awareness Month.

NOTE Confidence: 0.8665641

00:00:11.290 --> 00:00:14.008 So I have with a great lineup for tonight

NOTE Confidence: 0.8665641

00:00:14.008 --> 00:00:16.624 I will introduce myself 1st and Pamela

NOTE Confidence: 0.8665641

00:00:16.624 --> 00:00:19.086 Kunze and I'm an associate professor

NOTE Confidence: 0.8665641

00:00:19.086 --> 00:00:21.786 of medicine and medical oncology and

NOTE Confidence: 0.8665641

00:00:21.786 --> 00:00:24.590 I'm the director for the Center for

NOTE Confidence: 0.8665641

00:00:24.590 --> 00:00:26.110 Gastrointestinal Cancers at Yale.

NOTE Confidence: 0.8665641

00:00:26.110 --> 00:00:28.020 I'll be introducing and serving

NOTE Confidence: 0.8665641

00:00:28.020 --> 00:00:30.290 as a moderator for the Q&A,

NOTE Confidence: 0.8665641

00:00:30.290 --> 00:00:31.706 which is a reminder.

NOTE Confidence: 0.8665641

00:00:31.706 --> 00:00:33.476 Please send your questions through

NOTE Confidence: 0.8665641

00:00:33.476 --> 00:00:34.850 the chat throughout.

NOTE Confidence: 0.8665641

00:00:34.850 --> 00:00:37.310 The meeting will weaken interspersed

NOTE Confidence: 0.8665641

00:00:37.310 --> 00:00:40.176 some of the questions after speakers

NOTE Confidence: 0.8665641

00:00:40.176 --> 00:00:43.470 and we can also do it some at the end.

NOTE Confidence: 0.8665641

00:00:43.470 --> 00:00:45.618 I'd like to introduce shabbier you're

NOTE Confidence: 0.8665641

00:00:45.618 --> 00:00:47.937 he's a professor of medicine and

NOTE Confidence: 0.8665641

00:00:47.937 --> 00:00:50.391 gastro enterology he's the director of

NOTE Confidence: 0.8665641

00:00:50.391 --> 00:00:52.804 screening and Prevention program and the

NOTE Confidence: 0.8665641

00:00:52.804 --> 00:00:55.508 Co leader of the Colorectal Cancer program.

NOTE Confidence: 0.8665641

00:00:55.508 --> 00:00:57.896 He will be speaking tonight on

NOTE Confidence: 0.8665641

00:00:57.896 --> 00:00:59.512 colorectal cancer screening and

NOTE Confidence: 0.8665641

00:00:59.512 --> 00:01:01.654 prevention Doctor Vic Ready is an

NOTE Confidence: 0.8665641

00:01:01.654 --> 00:01:03.260 associate professor of surgery,

NOTE Confidence: 0.8665641

00:01:03.260 --> 00:01:05.498 specifically colorectal surgery and a Co

NOTE Confidence: 0.8665641

00:01:05.498 --> 00:01:07.909 leader of the Colorectal Cancer program.

NOTE Confidence: 0.8665641

00:01:07.910 --> 00:01:08.916 Hill speaking,

NOTE Confidence: 0.8665641

00:01:08.916 --> 00:01:10.928 speaking about surgical management.

NOTE Confidence: 0.8665641

00:01:10.930 --> 00:01:13.492 Doctor Jeremy Courtney on Ski is an

NOTE Confidence: 0.8665641

00:01:13.492 --> 00:01:15.515 associate professor of clinical medicine

NOTE Confidence: 0.8665641

00:01:15.515 --> 00:01:18.089 and medical oncology and the chief

NOTE Confidence: 0.8665641

00:01:18.089 --> 00:01:20.719 Network officer for Smilow Cancer Hospital.

NOTE Confidence: 0.8665641

00:01:20.720 --> 00:01:23.096 He'll be speaking about changing paradigms

NOTE Confidence: 0.8665641

00:01:23.096 --> 00:01:25.580 and rectal cancer and the emerging

NOTE Confidence: 0.8665641

00:01:25.580 --> 00:01:27.660 role of total neoadjuvant therapy.

NOTE Confidence: 0.8665641

00:01:27.660 --> 00:01:29.700 And last but not least,

NOTE Confidence: 0.8665641

00:01:29.700 --> 00:01:31.408 to doctor Michael Cicchini,

NOTE Confidence: 0.8665641

00:01:31.408 --> 00:01:33.116 assistant professor of medicine

NOTE Confidence: 0.8665641

00:01:33.116 --> 00:01:34.999 and medical Oncology and Co.

NOTE Confidence: 0.8665641

00:01:35.000 --> 00:01:37.448 Leader of the Colorectal Cancer program,

NOTE Confidence: 0.8665641

00:01:37.450 --> 00:01:39.535 and he'll be speaking about

NOTE Confidence: 0.8665641

00:01:39.535 --> 00:01:41.203 personalized treatments for patients.

NOTE Confidence: 0.8665641

00:01:41.210 --> 00:01:44.620 Living with metastatic colorectal cancer.

NOTE Confidence: 0.8665641

00:01:44.620 --> 00:01:46.618 So just to start us off,

NOTE Confidence: 0.8665641

00:01:46.620 --> 00:01:48.618 I'd like to provide some context.

NOTE Confidence: 0.8665641

00:01:48.620 --> 00:01:50.340 Colorectal cancer is the third

NOTE Confidence: 0.8665641

00:01:50.340 --> 00:01:52.749 leading cause of cancer in the United

NOTE Confidence: 0.8665641

00:01:52.749 --> 00:01:54.609 States for both men and women.

NOTE Confidence: 0.8665641

00:01:54.610 --> 00:01:58.096 This is the top 10 list.

NOTE Confidence: 0.8665641

00:01:58.100 --> 00:02:00.459 It's also the third leading cause of

NOTE Confidence: 0.8665641

00:02:00.459 --> 00:02:02.748 cancer death for both men and women,

NOTE Confidence: 0.8665641

00:02:02.750 --> 00:02:05.032 behind lung and prostate cancer for men

NOTE Confidence: 0.8665641

00:02:05.032 --> 00:02:07.730 and behind lung and breast cancer for women,

NOTE Confidence: 0.8665641

00:02:07.730 --> 00:02:09.893 the good news is there is a

NOTE Confidence: 0.8665641

00:02:09.893 --> 00:02:12.039 lot we can do about that,

NOTE Confidence: 0.8665641

00:02:12.040 --> 00:02:14.696 and the doctor you will be speaking about.

NOTE Confidence: 0.8665641

00:02:14.700 --> 00:02:17.356 This is a preventable disease in many cases,

NOTE Confidence: 0.8665641

00:02:17.360 --> 00:02:20.339 and we hope to teach you about that tonight.

NOTE Confidence: 0.8665641

00:02:20.340 --> 00:02:21.975 Colorectal cancer has been in

NOTE Confidence: 0.8665641

00:02:21.975 --> 00:02:24.330 the news quite a bit this year,

NOTE Confidence: 0.8665641

00:02:24.330 --> 00:02:26.409 certainly with and last year with the

NOTE Confidence: 0.8665641

00:02:26.409 --> 00:02:28.309 tragic death of Chadwick Boseman,

NOTE Confidence: 0.8665641

00:02:28.310 --> 00:02:31.076 who died of colorectal cancer to

NOTE Confidence: 0.8665641

00:02:31.076 --> 00:02:32.459 very young age.

NOTE Confidence: 0.8665641

00:02:32.460 --> 00:02:34.210 Also, because a new guideline,

NOTE Confidence: 0.8665641

00:02:34.210 --> 00:02:36.275 the United States Preventive Services

NOTE Confidence: 0.8665641

00:02:36.275 --> 00:02:38.702 Task Force is recommended that we

NOTE Confidence: 0.8665641

00:02:38.702 --> 00:02:40.454 start screening at an earlier age

NOTE Confidence: 0.8665641

00:02:40.454 --> 00:02:42.609 and this is still in draft form,

NOTE Confidence: 0.8665641

00:02:42.610 --> 00:02:44.710 but is very likely to be

NOTE Confidence: 0.8665641

00:02:44.710 --> 00:02:45.760 recommended informally approved.

NOTE Confidence: 0.8665641

00:02:45.760 --> 00:02:48.424 So just to give you a little bit

NOTE Confidence: 0.8665641

00:02:48.424 --> 00:02:51.826 of a teaser of some of the topics

NOTE Confidence: 0.8665641

00:02:51.826 --> 00:02:54.400 will will talk about tonight.

NOTE Confidence: 0.8665641

00:02:54.400 --> 00:02:56.829 So I will stop there and pass

NOTE Confidence: 0.8665641

00:02:56.829 --> 00:02:58.949 the baton to doctor your.

NOTE Confidence: 0.7221574

00:03:12.850 --> 00:03:16.740 And you're still unmute. There we go.

NOTE Confidence: 0.845847

00:03:16.740 --> 00:03:18.550 Still haven't gotten used to

NOTE Confidence: 0.845847

00:03:18.550 --> 00:03:20.360 zoom all the time anyways.

NOTE Confidence: 0.845847

00:03:20.360 --> 00:03:21.648 Thank you very much.

NOTE Confidence: 0.845847

00:03:21.648 --> 00:03:24.718 How is it is a pleasure to be here

NOTE Confidence: 0.845847

00:03:24.718 --> 00:03:26.830 tonight to share these time with

NOTE Confidence: 0.845847

00:03:26.830 --> 00:03:29.634 with our colleagues and all of you

NOTE Confidence: 0.845847

00:03:29.634 --> 00:03:31.988 and trying to understand a little

NOTE Confidence: 0.845847

00:03:31.988 --> 00:03:33.908 bit better about several aspects

NOTE Confidence: 0.845847

00:03:33.908 --> 00:03:35.560 of colorectal cancer and so.

NOTE Confidence: 0.845847

00:03:35.560 --> 00:03:38.370 Happy to hear I have.

NOTE Confidence: 0.845847

00:03:38.370 --> 00:03:40.458 Know what I'm?

NOTE Confidence: 0.845847

00:03:40.460 --> 00:03:42.794 Conflicts of interest to disclose and

NOTE Confidence: 0.845847

00:03:42.794 --> 00:03:45.284 I always find that starting global

NOTE Confidence: 0.845847

00:03:45.284 --> 00:03:48.308 kind of helps put things in perspective,

NOTE Confidence: 0.845847

00:03:48.310 --> 00:03:51.201 and this is a world map of

NOTE Confidence: 0.845847

00:03:51.201 --> 00:03:52.440 colorectal cancer incidence.

NOTE Confidence: 0.845847

00:03:52.440 --> 00:03:54.088 That's that's from the

NOTE Confidence: 0.845847

00:03:54.088 --> 00:03:55.324 World Health Organization,

NOTE Confidence: 0.845847

00:03:55.330 --> 00:03:57.808 and it corresponds to the 2018.

NOTE Confidence: 0.845847

00:03:57.810 --> 00:04:00.060 And basically this is the

NOTE Confidence: 0.845847

00:04:00.060 --> 00:04:01.860 incidence of colorectal cancer

NOTE Confidence: 0.845847

00:04:01.860 --> 00:04:04.407 and the darker it is the color,

NOTE Confidence: 0.845847

00:04:04.410 --> 00:04:06.888 the higher the incidents it is.

NOTE Confidence: 0.845847

00:04:06.890 --> 00:04:08.960 And as you can see,

NOTE Confidence: 0.845847

00:04:08.960 --> 00:04:11.540 there's a huge, actually huge gay.

NOTE Confidence: 0.845847

00:04:11.540 --> 00:04:13.736 Cap from there less than 6.2

NOTE Confidence: 0.845847

00:04:13.736 --> 00:04:16.770 of the of the lower risk areas.

NOTE Confidence: 0.845847

00:04:16.770 --> 00:04:17.682 Southeast Asia.

NOTE Confidence: 0.845847

00:04:17.682 --> 00:04:18.594 For instance,

NOTE Confidence: 0.845847

00:04:18.594 --> 00:04:21.330 some areas of South Sub saharian

NOTE Confidence: 0.845847

00:04:21.406 --> 00:04:23.608 Africa to the match much higher

NOTE Confidence: 0.845847

00:04:23.608 --> 00:04:26.407 level of more than 26.8 that we see.

NOTE Confidence: 0.845847

00:04:26.410 --> 00:04:27.790 That's per 100,000 individuals

NOTE Confidence: 0.845847

00:04:27.790 --> 00:04:29.515 of mostly coinciding with the

NOTE Confidence: 0.845847

00:04:29.515 --> 00:04:31.239 more industrialized countries.

NOTE Confidence: 0.845847

00:04:31.240 --> 00:04:33.968 So what we see really is that the

NOTE Confidence: 0.845847

00:04:33.968 --> 00:04:37.266 richer in general the richer country gets,

NOTE Confidence: 0.845847

00:04:37.270 --> 00:04:39.676 the more colorectal cancer we get.

NOTE Confidence: 0.845847

00:04:39.680 --> 00:04:42.648 And that happens with other cancers too.

NOTE Confidence: 0.845847

00:04:42.650 --> 00:04:43.380 But anyways,

NOTE Confidence: 0.845847

00:04:43.380 --> 00:04:46.300 So what I'm trying to show is that

NOTE Confidence: 0.845847

00:04:46.379 --> 00:04:48.989 this is something that can really

NOTE Confidence: 0.845847

00:04:48.989 --> 00:04:51.738 be modified in changes quite a bit,

NOTE Confidence: 0.845847

00:04:51.740 --> 00:04:54.337 and there's some data or some studies

NOTE Confidence: 0.845847

00:04:54.337 --> 00:04:56.317 that show that individuals who

NOTE Confidence: 0.845847

00:04:56.317 --> 00:04:59.068 move from low risk areas to higher

NOTE Confidence: 0.845847

00:04:59.068 --> 00:05:01.606 risk areas by the next generation.

NOTE Confidence: 0.845847

00:05:01.610 --> 00:05:03.565 That next generation was already

NOTE Confidence: 0.845847

00:05:03.565 --> 00:05:05.129 having similar incidents as

NOTE Confidence: 0.845847

00:05:05.129 --> 00:05:06.748 the locals lower heavy.

NOTE Confidence: 0.845847

00:05:06.750 --> 00:05:10.142 So that really speaks a lot about so

NOTE Confidence: 0.845847

00:05:10.142 --> 00:05:12.896 many factors that play a big role.

NOTE Confidence: 0.845847

00:05:12.900 --> 00:05:15.546 Depending on where we live and.

NOTE Confidence: 0.845847

00:05:15.550 --> 00:05:17.608 Probably what we eat in all these

NOTE Confidence: 0.845847

00:05:17.608 --> 00:05:19.795 types of aspects and this is something

NOTE Confidence: 0.845847

00:05:19.795 --> 00:05:21.661 that I'm gonna show right here.

NOTE Confidence: 0.845847

00:05:21.670 --> 00:05:25.625 There are some factors that are clearly.

NOTE Confidence: 0.845847

00:05:25.630 --> 00:05:27.807 We have a very clear Association in

00:05:27.807 --> 00:05:30.154 terms of either increasing the risk

00:05:30.154 --> 00:05:32.409 of colorectal cancer or actually

00:05:32.409 --> 00:05:33.740 preventing preventing wrist.

00:05:33.740 --> 00:05:36.820 This is expressed here as a relative risk,

00:05:36.820 --> 00:05:38.775 which would mean everything that's

00:05:38.775 --> 00:05:41.555 above one would be a higher risk

00:05:41.555 --> 00:05:44.159 than if we didn't have that factor,

00:05:44.160 --> 00:05:46.176 and so everything that is below

00:05:46.176 --> 00:05:48.447 one that would mean a preventively

00:05:48.447 --> 00:05:50.587 so meaning that that Association

00:05:50.587 --> 00:05:51.871 is is preventing,

00:05:51.880 --> 00:05:54.496 or that factor would prevent the

00:05:54.496 --> 00:05:56.240 development of colorectal cancer.

00:05:56.240 --> 00:05:59.320 In here we can see as as risk

00:05:59.320 --> 00:06:01.560 factors that increase risks.

00:06:01.560 --> 00:06:04.380 We have heavy alcohol consumption.

NOTE Confidence: 0.845847

00:06:04.380 --> 00:06:06.480 Obesity consumption of red meat.

NOTE Confidence: 0.845847

00:06:06.480 --> 00:06:09.420 We're talking about 100 grams a day.

NOTE Confidence: 0.845847

00:06:09.420 --> 00:06:11.520 Processed meat also very important.

NOTE Confidence: 0.845847

00:06:11.520 --> 00:06:13.836 Also smoking even former smokers do

NOTE Confidence: 0.845847

00:06:13.836 --> 00:06:16.618 have do still have a an increased

NOTE Confidence: 0.845847

00:06:16.618 --> 00:06:18.548 risk of colorectal cancer and

NOTE Confidence: 0.845847

00:06:18.548 --> 00:06:20.759 about the preventive factors.

NOTE Confidence: 0.845847

00:06:20.760 --> 00:06:24.960 Two of them seem to be quite clear right now.

NOTE Confidence: 0.845847

00:06:24.960 --> 00:06:25.916 Physical activity,

NOTE Confidence: 0.845847

00:06:25.916 --> 00:06:28.784 maintaining a good level of physical

NOTE Confidence: 0.845847

00:06:28.784 --> 00:06:30.938 activity that decrease the risk

NOTE Confidence: 0.845847

00:06:30.938 --> 00:06:33.556 again below one and at dairy product

NOTE Confidence: 0.845847

00:06:33.631 --> 00:06:35.989 consumption that seems to have us.

NOTE Confidence: 0.845847

00:06:35.990 --> 00:06:36.344 Also,

NOTE Confidence: 0.845847

00:06:36.344 --> 00:06:39.530 at the cruise we so there are a lot

NOTE Confidence: 0.84572905

00:06:39.618 --> 00:06:42.208 of things that as you can see,

NOTE Confidence: 0.84572905

00:06:42.210 --> 00:06:44.460 we can do something about it

NOTE Confidence: 0.84572905

00:06:44.460 --> 00:06:46.989 and we can modify and that's

NOTE Confidence: 0.84572905

00:06:46.989 --> 00:06:49.803 modifying that can modify the risk.

NOTE Confidence: 0.84572905

00:06:49.810 --> 00:06:51.693 But we've also known for a long

NOTE Confidence: 0.84572905

00:06:51.693 --> 00:06:54.359 time that we see a lot of what's

NOTE Confidence: 0.84572905

00:06:54.359 --> 00:06:55.436 called familial clustering,

NOTE Confidence: 0.84572905

00:06:55.440 --> 00:06:57.663 so it's more likely that we have we have

NOTE Confidence: 0.84572905

00:06:57.663 --> 00:06:59.688 a family Member who's had colorectal

NOTE Confidence: 0.84572905

00:06:59.688 --> 00:07:02.639 cancer that we may have a colorectal cancer,

NOTE Confidence: 0.84572905

00:07:02.640 --> 00:07:04.824 and that's something that I'm showing here.

NOTE Confidence: 0.84572905

00:07:04.830 --> 00:07:06.082 Again, relative risk about

NOTE Confidence: 0.84572905

00:07:06.082 --> 00:07:07.334 one would be higher,

NOTE Confidence: 0.84572905

00:07:07.340 --> 00:07:09.434 just having one first degree relative

NOTE Confidence: 0.84572905

00:07:09.434 --> 00:07:11.147 pretty much like doubles our

NOTE Confidence: 0.84572905

00:07:11.147 --> 00:07:12.967 risk even a little bit more than.

NOTE Confidence: 0.84572905

00:07:12.970 --> 00:07:15.161 And if we didn't have any and

NOTE Confidence: 0.84572905

00:07:15.161 --> 00:07:16.100 1st degree relatives,

NOTE Confidence: 0.84572905

00:07:16.100 --> 00:07:17.081 they usually are.

NOTE Confidence: 0.84572905

00:07:17.081 --> 00:07:18.716 We called first degree relatives

NOTE Confidence: 0.84572905

00:07:18.716 --> 00:07:19.949 or siblings that were.

NOTE Confidence: 0.84572905

00:07:19.950 --> 00:07:22.456 Parents and never had descendants are kids.

NOTE Confidence: 0.84572905

00:07:22.460 --> 00:07:24.400 Actually that's those are

NOTE Confidence: 0.84572905

00:07:24.400 --> 00:07:26.340 the first degree relatives.

NOTE Confidence: 0.84572905

00:07:26.340 --> 00:07:28.980 If we have one or more first degree

NOTE Confidence: 0.84572905

00:07:28.980 --> 00:07:31.294 relative and one of them at least

NOTE Confidence: 0.84572905

00:07:31.294 --> 00:07:33.294 one of them who developed that

NOTE Confidence: 0.84572905

00:07:33.294 --> 00:07:35.358 cancer at age younger than 50,

NOTE Confidence: 0.84572905

00:07:35.360 --> 00:07:37.030 they risk is even higher.

NOTE Confidence: 0.84572905

00:07:37.030 --> 00:07:39.028 Actually an having two or more

NOTE Confidence: 0.84572905

00:07:39.028 --> 00:07:40.027 first degree relatives,

NOTE Confidence: 0.84572905

00:07:40.030 --> 00:07:42.440 their risk is very high.

NOTE Confidence: 0.84572905

00:07:42.440 --> 00:07:44.400 One more second degree relatives

NOTE Confidence: 0.84572905

00:07:44.400 --> 00:07:46.938 and even one more first degree

NOTE Confidence: 0.84572905

00:07:46.938 --> 00:07:49.448 relatives with one advanced adenoma.

NOTE Confidence: 0.84572905

00:07:49.450 --> 00:07:51.670 Those polyps that we called

NOTE Confidence: 0.84572905

00:07:51.670 --> 00:07:53.890 premalignant that even that increases

NOTE Confidence: 0.84572905

00:07:53.967 --> 00:07:56.017 our risk of colorectal cancer.

NOTE Confidence: 0.84572905

00:07:56.020 --> 00:07:58.967 So really where we're getting into is

NOTE Confidence: 0.84572905

00:07:58.967 --> 00:08:02.421 that we have a set of factors that

NOTE Confidence: 0.84572905

00:08:02.421 --> 00:08:05.066 are playing a very important role

NOTE Confidence: 0.84572905

00:08:05.066 --> 00:08:07.790 and and really there the development

NOTE Confidence: 0.84572905

00:08:07.790 --> 00:08:10.748 of cancer is kind of like these.

NOTE Confidence: 0.84572905

00:08:10.748 --> 00:08:13.980 The result of the interaction of lifestyle,

NOTE Confidence: 0.84572905

00:08:13.980 --> 00:08:14.920 environmental factors,

NOTE Confidence: 0.84572905

00:08:14.920 --> 00:08:15.860 dietary factors.

NOTE Confidence: 0.84572905

00:08:15.860 --> 00:08:19.133 Engines in the majority of cases it

NOTE Confidence: 0.84572905

00:08:19.133 --> 00:08:21.028 is the environmental lifestyle factors

NOTE Confidence: 0.84572905

00:08:21.028 --> 00:08:23.356 that play a much more significant

NOTE Confidence: 0.84572905

00:08:23.356 --> 00:08:25.960 role an in a smaller percentage of

NOTE Confidence: 0.84572905

00:08:25.960 --> 00:08:27.856 cases but very significant percentage

NOTE Confidence: 0.84572905

00:08:27.856 --> 00:08:30.130 of cases where it really weighs

NOTE Confidence: 0.84572905

00:08:30.194 --> 00:08:31.998 heavily isn't genetic factors.

NOTE Confidence: 0.84572905

00:08:32.000 --> 00:08:32.858 But again,

NOTE Confidence: 0.84572905

00:08:32.858 --> 00:08:35.861 none of them really seem to work

NOTE Confidence: 0.84572905

00:08:35.861 --> 00:08:37.668 independently and we really have

NOTE Confidence: 0.84572905

00:08:37.668 --> 00:08:40.170 to keep any in mind that those

NOTE Confidence: 0.84572905

00:08:40.170 --> 00:08:42.098 are all important factors.

NOTE Confidence: 0.84572905

00:08:42.100 --> 00:08:43.372 Another important factor.

NOTE Confidence: 0.84572905

00:08:43.372 --> 00:08:46.340 I would like to mention is when

NOTE Confidence: 0.84572905

00:08:46.417 --> 00:08:48.511 we are talking about the genetics

NOTE Confidence: 0.84572905

00:08:48.511 --> 00:08:52.260 part of it is that if we take any

NOTE Confidence: 0.84572905

00:08:52.260 --> 00:08:54.076 individual who develops corrective

NOTE Confidence: 0.84572905

00:08:54.076 --> 00:08:56.490 cancer at each older than 50,

NOTE Confidence: 0.84572905

00:08:56.490 --> 00:08:59.234 it's gonna be between 5 and 10%

NOTE Confidence: 0.84572905

00:08:59.240 --> 00:09:01.592 that they're going to be justified

NOTE Confidence: 0.84572905

00:09:01.592 --> 00:09:02.768 by genetic factors.

NOTE Confidence: 0.84572905

00:09:02.770 --> 00:09:04.730 Some that are inherited from

NOTE Confidence: 0.84572905

00:09:04.730 --> 00:09:06.690 one generation to the next.

NOTE Confidence: 0.84572905

00:09:06.690 --> 00:09:09.042 But as we diagnose those cancers

NOTE Confidence: 0.84572905

00:09:09.042 --> 00:09:10.610 at a younger age,

NOTE Confidence: 0.84572905

00:09:10.610 --> 00:09:12.620 these percentage of the ones

NOTE Confidence: 0.84572905

00:09:12.620 --> 00:09:14.630 that really the genetic factors.

NOTE Confidence: 0.84572905

00:09:14.630 --> 00:09:18.630 Play a much bigger role that's go up to 20%,

NOTE Confidence: 0.84572905

00:09:18.630 --> 00:09:21.528 and if we take individuals who are

NOTE Confidence: 0.84572905

00:09:21.528 --> 00:09:23.430 diagnosed earlier than each 35,

NOTE Confidence: 0.84572905

00:09:23.430 --> 00:09:26.630 as we can see over 3035% of them

NOTE Confidence: 0.84572905

00:09:26.630 --> 00:09:29.030 will be due to genetic factors.

NOTE Confidence: 0.84572905

00:09:29.030 --> 00:09:31.830 So the younger our diagnosis is made,

NOTE Confidence: 0.84572905

00:09:31.830 --> 00:09:36.789 the much more likely it is that it was.

NOTE Confidence: 0.84572905

00:09:36.790 --> 00:09:39.555 The genic factors have a much bigger

NOTE Confidence: 0.84572905

00:09:39.555 --> 00:09:43.050 role in the development of this cancer,

NOTE Confidence: 0.84572905

00:09:43.050 --> 00:09:45.250 so that's something important to

NOTE Confidence: 0.84572905

00:09:45.250 --> 00:09:48.422 always keep in mind when we're seeing

NOTE Confidence: 0.84572905

00:09:48.422 --> 00:09:51.086 developing cancer at a young age.

NOTE Confidence: 0.84572905

00:09:51.090 --> 00:09:53.676 And that's the good news that

NOTE Confidence: 0.84572905

00:09:53.676 --> 00:09:56.459 I would like to give here.

NOTE Confidence: 0.8271671

00:09:56.460 --> 00:10:00.236 That really, this is the most exciting info.

NOTE Confidence: 0.8271671

00:10:00.240 --> 00:10:02.736 And I'm going to share tonight,

NOTE Confidence: 0.8271671

00:10:02.740 --> 00:10:04.820 which is these graph here?

NOTE Confidence: 0.8271671

00:10:04.820 --> 00:10:08.030 This is from 1930 until 2017.

NOTE Confidence: 0.8271671

00:10:08.030 --> 00:10:11.550 And now here what we have is rate,

NOTE Confidence: 0.8271671

00:10:11.550 --> 00:10:13.715 which is per 100,000 individuals

17

NOTE Confidence: 0.8271671

00:10:13.715 --> 00:10:16.397 and both for males and females

NOTE Confidence: 0.8271671

00:10:16.397 --> 00:10:19.025 we've seen since the mid 1980s.

NOTE Confidence: 0.8271671

00:10:19.030 --> 00:10:20.802 This very steady decline,

NOTE Confidence: 0.8271671

00:10:20.802 --> 00:10:23.017 very significant declining incidence of

NOTE Confidence: 0.8271671

00:10:23.017 --> 00:10:25.337 colorectal cancer and mortality, both.

NOTE Confidence: 0.8271671

00:10:25.337 --> 00:10:29.446 So that's been certainly a big success.

NOTE Confidence: 0.8271671

00:10:29.450 --> 00:10:32.126 Yeah, in terms of cancer, very,

NOTE Confidence: 0.8271671

00:10:32.126 --> 00:10:33.910 very encouraging trends here.

NOTE Confidence: 0.8271671

00:10:33.910 --> 00:10:37.025 And if we average it all out

NOTE Confidence: 0.8271671

00:10:37.025 --> 00:10:39.259 and between 2006 in 2015,

NOTE Confidence: 0.8271671

00:10:39.260 --> 00:10:41.990 the annual decrease in colorectal cancer

NOTE Confidence: 0.8271671

00:10:41.990 --> 00:10:44.609 incidence has been averaging about 3.7%.

NOTE Confidence: 0.8271671

00:10:44.610 --> 00:10:46.590 This is huge.

NOTE Confidence: 0.8271671

00:10:46.590 --> 00:10:49.230 This is very significant.

NOTE Confidence: 0.8271671

00:10:49.230 --> 00:10:51.410 That decrease that we've seen,

NOTE Confidence: 0.8271671

00:10:51.410 --> 00:10:53.590 and we've seen this decrease,

NOTE Confidence: 0.8271671

00:10:53.590 --> 00:10:54.898 particularly even among

NOTE Confidence: 0.8271671

00:10:54.898 --> 00:10:56.206 the older individuals.

NOTE Confidence: 0.8271671

00:10:56.210 --> 00:10:57.080 So really,

NOTE Confidence: 0.8271671

00:10:57.080 --> 00:11:00.125 a pretty formidable change in trend here,

NOTE Confidence: 0.8271671

00:11:00.130 --> 00:11:02.620 and we've seen that as we

NOTE Confidence: 0.8271671

00:11:02.620 --> 00:11:04.930 were seeing in this again,

NOTE Confidence: 0.8271671

00:11:04.930 --> 00:11:07.730 this is incidence since 2000.

NOTE Confidence: 0.8271671

00:11:07.730 --> 00:11:10.906 Going down at the same time as we've

NOTE Confidence: 0.8271671

00:11:10.906 --> 00:11:14.027 been seeing the use of screening tools,

NOTE Confidence: 0.8271671

00:11:14.030 --> 00:11:14.858 particularly here,

NOTE Confidence: 0.8271671

00:11:14.858 --> 00:11:17.756 we are showing colonoscopy use so really

NOTE Confidence: 0.8271671

00:11:17.756 --> 00:11:20.215 a good match between the increase

NOTE Confidence: 0.8271671

00:11:20.215 --> 00:11:22.696 use of screening tools and decrease

NOTE Confidence: 0.8271671

00:11:22.696 --> 00:11:25.783 in the incidence rate of colorectal cancer.

NOTE Confidence: 0.8271671

00:11:25.790 --> 00:11:28.310 Not everything is due to that.

NOTE Confidence: 0.8271671

00:11:28.310 --> 00:11:30.830 We know that because even we,

NOTE Confidence: 0.8271671

00:11:30.830 --> 00:11:32.930 when we started doing more

NOTE Confidence: 0.8271671

00:11:32.930 --> 00:11:34.610 systematic colon cancer screening,

NOTE Confidence: 0.8271671

00:11:34.610 --> 00:11:38.032 the trend for correcting cancer to go down.

NOTE Confidence: 0.8271671

00:11:38.032 --> 00:11:39.960 Had already been established,

NOTE Confidence: 0.8271671

00:11:39.960 --> 00:11:42.470 but certainly.

NOTE Confidence: 0.8271671

00:11:42.470 --> 00:11:44.545 Very likely this huge acceleration

NOTE Confidence: 0.8271671

00:11:44.545 --> 00:11:46.620 in the decrease of colorectal

NOTE Confidence: 0.8271671

00:11:46.693 --> 00:11:48.445 cancer incidence has had a lot

NOTE Confidence: 0.8271671

00:11:48.445 --> 00:11:50.278 to do with the generalization

NOTE Confidence: 0.8271671

00:11:50.278 --> 00:11:52.666 of colorectal cancer screening.

NOTE Confidence: 0.8271671

00:11:52.670 --> 00:11:53.812 So really,

NOTE Confidence: 0.8271671

00:11:53.812 --> 00:11:57.809 a success story of of public health.

NOTE Confidence: 0.8271671

00:11:57.810 --> 00:11:58.304 So,

NOTE Confidence: 0.8271671

00:11:58.304 --> 00:11:58.798 well,

NOTE Confidence: 0.8271671

00:11:58.798 --> 00:12:01.762 we've known for years that because

NOTE Confidence: 0.8271671

00:12:01.762 --> 00:12:03.710 of that decrease,

NOTE Confidence: 0.8271671

00:12:03.710 --> 00:12:06.518 because this clear Association

NOTE Confidence: 0.8271671

00:12:06.518 --> 00:12:09.326 with the increasing screening

NOTE Confidence: 0.8271671

00:12:09.326 --> 00:12:12.977 decrease in incidents that the US.

NOTE Confidence: 0.8271671

00:12:12.980 --> 00:12:15.780 The multi.

NOTE Confidence: 0.8271671

00:12:15.780 --> 00:12:18.498 USPSTF which is a group that

NOTE Confidence: 0.8271671

00:12:18.498 --> 00:12:21.921 basically what it does is it say

NOTE Confidence: 0.8271671

00:12:21.921 --> 00:12:23.945 independent group of researchers

NOTE Confidence: 0.8271671

00:12:23.945 --> 00:12:27.914 were what they do is they come up

NOTE Confidence: 0.8271671

00:12:27.914 --> 00:12:30.269 with using the current literature.

NOTE Confidence: 0.8271671

00:12:30.270 --> 00:12:32.525 They come up with recommendations

NOTE Confidence: 0.8271671

00:12:32.525 --> 00:12:35.353 when it comes to mostly screening

NOTE Confidence: 0.8271671

00:12:35.353 --> 00:12:37.808 and prevention initiatives and this

NOTE Confidence: 0.8271671

00:12:37.808 --> 00:12:40.831 is a very highly regarded group

NOTE Confidence: 0.8271671

00:12:40.831 --> 00:12:43.281 that documents had mentioned before

00:12:43.281 --> 00:12:46.380 that it was that really issues.

00:12:46.380 --> 00:12:48.540 Recommendations and and they

00:12:48.540 --> 00:12:51.133 are usually followed by mostly

00:12:51.133 --> 00:12:53.368 by our primary care community.

00:12:53.370 --> 00:12:56.919 So and in 2016 they they already

00:12:56.919 --> 00:12:59.409 had recommended screening for years.

00:12:59.410 --> 00:13:02.422 In 2016 they said well screening

00:13:02.422 --> 00:13:04.436 average risk, asymptomatic adults,

00:13:04.436 --> 00:13:06.448 people 50 to 75.

00:13:06.450 --> 00:13:08.965 It is of sustained substantial

00:13:08.965 --> 00:13:11.480 benefit that's been really proven,

00:13:11.480 --> 00:13:14.810 and there they really give this

00:13:14.810 --> 00:13:17.030 strong backing to that.

00:13:17.030 --> 00:13:19.934 The benefits of early detection and

00:13:19.934 --> 00:13:21.870 intervention for corrective cancer

00:13:21.946 --> 00:13:24.310 screening decline after age 75 and

NOTE Confidence: 0.8271671

00:13:24.310 --> 00:13:26.349 the decision to screen individuals

NOTE Confidence: 0.8271671

00:13:26.349 --> 00:13:29.058 from 70s and 85 starts really depends

NOTE Confidence: 0.8271671

00:13:29.058 --> 00:13:32.396 on the overall status of of every individual,

NOTE Confidence: 0.8271671

00:13:32.400 --> 00:13:34.540 because as we get older,

NOTE Confidence: 0.8271671

00:13:34.540 --> 00:13:37.893 if we have more other underlying conditions

NOTE Confidence: 0.8271671

00:13:37.893 --> 00:13:41.369 that can really be at all in our health,

NOTE Confidence: 0.8271671

00:13:41.370 --> 00:13:44.442 it may be it may not be as

NOTE Confidence: 0.8271671

00:13:44.442 --> 00:13:47.430 beneficial As for someone who still.

NOTE Confidence: 0.8271671

00:13:47.430 --> 00:13:49.060 In a pretty good health,

NOTE Confidence: 0.8271671

00:13:49.060 --> 00:13:52.670 even if they are at this range of age and

NOTE Confidence: 0.81304055

00:13:52.764 --> 00:13:56.070 after age 85. At, they really don't make

NOTE Confidence: 0.81304055

00:13:56.070 --> 00:13:58.230 a recommendation for screening because

NOTE Confidence: 0.81304055

00:13:58.304 --> 00:14:00.817 they think that the risks probably in

NOTE Confidence: 0.81304055

00:14:00.817 --> 00:14:03.429 most cases would outweigh the benefits,

NOTE Confidence: 0.81304055

00:14:03.430 --> 00:14:06.328 so that's where they were in 2016.

NOTE Confidence: 0.81304055

00:14:06.330 --> 00:14:09.516 And and for the for a number of years

NOTE Confidence: 0.81304055

00:14:09.516 --> 00:14:12.377 really screening starting at age 50 has

NOTE Confidence: 0.81304055

00:14:12.377 --> 00:14:15.473 been the norm and very well accepted

NOTE Confidence: 0.81304055

00:14:15.473 --> 00:14:18.742 public health measure that we know that

NOTE Confidence: 0.81304055

00:14:18.750 --> 00:14:20.982 saves lives and there are different

NOTE Confidence: 0.81304055

00:14:20.982 --> 00:14:23.719 ways of screening for colorectal cancer.

NOTE Confidence: 0.81304055

00:14:23.720 --> 00:14:24.737 The one most.

NOTE Confidence: 0.81304055

00:14:24.737 --> 00:14:26.432 Of eyes are more familiar

NOTE Confidence: 0.81304055

00:14:26.432 --> 00:14:28.040 with his colonoscopy,

NOTE Confidence: 0.81304055

00:14:28.040 --> 00:14:30.218 which is again taking using this

NOTE Confidence: 0.81304055

00:14:30.218 --> 00:14:32.488 flexible tube with the camera there

NOTE Confidence: 0.81304055

00:14:32.488 --> 00:14:35.426 that is introduced to the ****** and we

NOTE Confidence: 0.81304055

00:14:35.426 --> 00:14:38.250 look at the entire large bowel and it

NOTE Confidence: 0.81304055

00:14:38.335 --> 00:14:41.254 allows us also for removal of polyps

NOTE Confidence: 0.81304055

00:14:41.254 --> 00:14:44.357 which is really at the end of the day.

NOTE Confidence: 0.81304055

00:14:44.360 --> 00:14:46.215 What really saves lives are

NOTE Confidence: 0.81304055

00:14:46.215 --> 00:14:47.328 removing early lesions,

NOTE Confidence: 0.81304055

00:14:47.330 --> 00:14:49.556 so that's one of the tests

NOTE Confidence: 0.81304055

00:14:49.556 --> 00:14:51.040 that commonly is done,

NOTE Confidence: 0.81304055

00:14:51.040 --> 00:14:53.637 but there are other approaches that City

NOTE Confidence: 0.81304055

00:14:53.637 --> 00:14:56.060 colon ography for instance which is.

NOTE Confidence: 0.81304055

00:14:56.060 --> 00:14:58.340 As the name says,

NOTE Confidence: 0.81304055

00:14:58.340 --> 00:15:01.063 it's a form of CAT scan that's

NOTE Confidence: 0.81304055

00:15:01.063 --> 00:15:02.230 really developed specifically

NOTE Confidence: 0.81304055

00:15:02.301 --> 00:15:03.986 to look for colon lesions,

NOTE Confidence: 0.81304055

00:15:03.990 --> 00:15:06.654 and then there's two based tests

NOTE Confidence: 0.81304055

00:15:06.654 --> 00:15:09.192 that are basically looking at some

NOTE Confidence: 0.81304055

00:15:09.192 --> 00:15:11.565 of them looking at blood in so

NOTE Confidence: 0.81304055

00:15:11.565 --> 00:15:13.637 called blood in stool blood that

NOTE Confidence: 0.81304055

00:15:13.637 --> 00:15:16.368 we may not be able to see yet.

NOTE Confidence: 0.81304055

00:15:16.368 --> 00:15:19.450 Many tumors when they start being big enough,

NOTE Confidence: 0.81304055

00:15:19.450 --> 00:15:21.365 they start shedding some blood

NOTE Confidence: 0.81304055

00:15:21.365 --> 00:15:23.600 and we may not see it,

NOTE Confidence: 0.81304055

00:15:23.600 --> 00:15:26.180 but these tests to detect them.

NOTE Confidence: 0.81304055

00:15:26.180 --> 00:15:28.715 Another is actually detect blood

NOTE Confidence: 0.81304055

00:15:28.715 --> 00:15:31.753 and also some DNA alterations that

NOTE Confidence: 0.81304055

00:15:31.753 --> 00:15:34.672 come from the cells that could be

NOTE Confidence: 0.81304055

00:15:34.672 --> 00:15:37.306 being seated by the by the tumors.

NOTE Confidence: 0.81304055

00:15:37.310 --> 00:15:39.535 So in the recommendations I

NOTE Confidence: 0.81304055

00:15:39.535 --> 00:15:40.870 was mentioning before,

NOTE Confidence: 0.81304055

00:15:40.870 --> 00:15:43.656 there are the USPS TF did not

NOTE Confidence: 0.81304055

00:15:43.656 --> 00:15:47.359 make a strong case for any of them

NOTE Confidence: 0.81304055

00:15:47.359 --> 00:15:49.769 because the emphasis is really.

NOTE Confidence: 0.81304055

00:15:49.770 --> 00:15:51.114 They all work.

NOTE Confidence: 0.81304055

00:15:51.114 --> 00:15:53.802 The emphasis is the most important

NOTE Confidence: 0.81304055

00:15:53.802 --> 00:15:56.417 aspect is getting screening done.

NOTE Confidence: 0.81304055

26

00:15:56.420 --> 00:15:59.348 The technique is a little bit less important,

NOTE Confidence: 0.81304055

00:15:59.350 --> 00:16:00.448 much more important.

NOTE Confidence: 0.81304055

00:16:00.448 --> 00:16:02.278 Let's get Sprint for sure,

NOTE Confidence: 0.81304055

00:16:02.280 --> 00:16:03.950 so they separated between direct

NOTE Confidence: 0.81304055

00:16:03.950 --> 00:16:06.300 visualization test which is the colonoscopy.

NOTE Confidence: 0.81304055

00:16:06.300 --> 00:16:08.130 And if that's the case,

NOTE Confidence: 0.81304055

00:16:08.130 --> 00:16:09.960 is every 10 years sigmoidoscopies,

NOTE Confidence: 0.81304055

00:16:09.960 --> 00:16:11.790 which is the shorter version

NOTE Confidence: 0.81304055

00:16:11.790 --> 00:16:12.888 every five years?

NOTE Confidence: 0.81304055

00:16:12.890 --> 00:16:15.088 Or sigmoid osca P with with a

NOTE Confidence: 0.81304055

00:16:15.088 --> 00:16:17.392 cold blood test every year or

NOTE Confidence: 0.81304055

00:16:17.392 --> 00:16:19.108 city colonography every year,

NOTE Confidence: 0.81304055

00:16:19.110 --> 00:16:21.306 and then the stool based tests

NOTE Confidence: 0.81304055

00:16:21.306 --> 00:16:22.770 which are basically FFOBT?

NOTE Confidence: 0.81304055

00:16:22.770 --> 00:16:24.966 That's an old test that's pretty

NOTE Confidence: 0.81304055

00:16:24.966 --> 00:16:27.510 much no longer use, but then the.

NOTE Confidence: 0.81304055

00:16:27.510 --> 00:16:29.670 This fit test and this multi

NOTE Confidence: 0.81304055

00:16:29.670 --> 00:16:30.839 target DNA tests.

NOTE Confidence: 0.81304055

00:16:30.840 --> 00:16:32.605 That's called those are the

NOTE Confidence: 0.81304055

00:16:32.605 --> 00:16:34.017 ones that are recommended.

NOTE Confidence: 0.81304055

00:16:34.020 --> 00:16:34.796 And again,

NOTE Confidence: 0.81304055

00:16:34.796 --> 00:16:37.512 there's no emphasis and one of them

NOTE Confidence: 0.81304055

00:16:37.512 --> 00:16:40.742 is just to make sure that we we do it.

NOTE Confidence: 0.81304055

00:16:40.750 --> 00:16:42.520 Whatever works best for everyone.

NOTE Confidence: 0.81304055

00:16:42.520 --> 00:16:44.976 The not so good news is with Doctor

NOTE Confidence: 0.81304055

00:16:44.976 --> 00:16:47.468 comes just mentioned at the beginning.

NOTE Confidence: 0.81304055

00:16:47.470 --> 00:16:49.950 Also which is you know along with this

NOTE Confidence: 0.81304055

00:16:49.950 --> 00:16:52.164 very nice decrease in incidents on

NOTE Confidence: 0.81304055

00:16:52.164 --> 00:16:54.910 the of colorectal cancer among the young.

NOTE Confidence: 0.81304055

00:16:54.910 --> 00:16:56.020 Older than 50,

NOTE Confidence: 0.81304055

00:16:56.020 --> 00:16:58.240 we've seen this really steady rise.

NOTE Confidence: 0.81304055

00:16:58.240 --> 00:17:01.048 Uh of colorectal cancer among the

NOTE Confidence: 0.81304055

00:17:01.048 --> 00:17:04.360 younger ones in 20 to 49 that's

NOTE Confidence: 0.81304055

00:17:04.360 --> 00:17:06.610 been very steady and obviously

NOTE Confidence: 0.81304055

00:17:06.610 --> 00:17:09.292 a very worrisome trend to the

NOTE Confidence: 0.81304055

00:17:09.292 --> 00:17:11.830 point that if we look at

NOTE Confidence: 0.8098155

00:17:11.830 --> 00:17:15.094 the incidents of a 50 year old here

NOTE Confidence: 0.8098155

00:17:15.094 --> 00:17:18.484 in this graph here in the incidence

NOTE Confidence: 0.8098155

00:17:18.484 --> 00:17:21.340 of 45 year old basically it.

NOTE Confidence: 0.8098155

00:17:21.340 --> 00:17:23.645 2015 the incidents of colorectal

NOTE Confidence: 0.8098155

00:17:23.645 --> 00:17:26.949 cancer for a 45 year old was

NOTE Confidence: 0.8098155

00:17:26.949 --> 00:17:29.685 exactly the same as the incidents.

NOTE Confidence: 0.8098155

00:17:29.690 --> 00:17:32.539 For a 50 year old in 1993,

NOTE Confidence: 0.8098155

00:17:32.540 --> 00:17:34.982 so for what we thought it

NOTE Confidence: 0.8098155

00:17:34.982 --> 00:17:36.610 was intolerable in 1993.

NOTE Confidence: 0.8098155

00:17:36.610 --> 00:17:38.246 It is right now.

NOTE Confidence: 0.8098155

00:17:38.246 --> 00:17:41.090 It's going down from 50 to 45.

NOTE Confidence: 0.8098155

00:17:41.090 --> 00:17:43.625 So really again, very worrisome

NOTE Confidence: 0.8098155

00:17:43.625 --> 00:17:46.990 trend and it's really a goddess.

NOTE Confidence: 0.8098155

00:17:46.990 --> 00:17:48.870 Uncertain an another important aspect

NOTE Confidence: 0.8098155

00:17:48.870 --> 00:17:51.596 we've known for a long time that

NOTE Confidence: 0.8098155

00:17:51.596 --> 00:17:53.541 African Americans do have higher

NOTE Confidence: 0.8098155

00:17:53.541 --> 00:17:55.918 incidence rates and they have been

NOTE Confidence: 0.8098155

00:17:55.918 --> 00:17:58.210 having also higher incidence among the

NOTE Confidence: 0.8098155

00:17:58.210 --> 00:18:00.540 younger individuals to Bud was, well,

NOTE Confidence: 0.8098155

00:18:00.540 --> 00:18:03.235 we've seen over the last few years.

NOTE Confidence: 0.8098155

00:18:03.240 --> 00:18:05.568 Is that actually the other groups,

NOTE Confidence: 0.8098155

00:18:05.570 --> 00:18:07.262 including non Hispanic whites,

NOTE Confidence: 0.8098155

00:18:07.262 --> 00:18:09.377 have seen that increase going

NOTE Confidence: 0.8098155

00:18:09.377 --> 00:18:11.760 up to the point that right now,

NOTE Confidence: 0.8098155

00:18:11.760 --> 00:18:13.464 basically among the young

NOTE Confidence: 0.8098155

00:18:13.464 --> 00:18:15.168 onset colorectal cancers among

NOTE Confidence: 0.8098155

00:18:15.168 --> 00:18:17.269 individuals who are younger than 50.

NOTE Confidence: 0.8098155

00:18:17.270 --> 00:18:19.125 The incident between African Americans

NOTE Confidence: 0.8098155

00:18:19.125 --> 00:18:21.569 and whites is pretty much the same,

NOTE Confidence: 0.8098155

00:18:21.570 --> 00:18:24.426 so the concern is for everyone seem so.

NOTE Confidence: 0.8098155

00:18:24.430 --> 00:18:26.115 the American Cancer Society a

NOTE Confidence: 0.8098155

00:18:26.115 --> 00:18:28.512 couple of years ago came up with

NOTE Confidence: 0.8098155

00:18:28.512 --> 00:18:30.456 these guidelines saying we need to

NOTE Confidence: 0.8098155

00:18:30.456 --> 00:18:33.169 move down to 8:45 for average risk

NOTE Confidence: 0.8098155

00:18:33.169 --> 00:18:35.164 individuals because of this translator,

NOTE Confidence: 0.8098155

00:18:35.170 --> 00:18:37.336 we're showing they they got some

NOTE Confidence: 0.8098155

00:18:37.336 --> 00:18:39.110 modeling done and they did.

NOTE Confidence: 0.8098155

00:18:39.110 --> 00:18:41.894 They figure out that this was a good

NOTE Confidence: 0.8098155

00:18:41.894 --> 00:18:43.684 public health recommendation to go

NOTE Confidence: 0.8098155

00:18:43.684 --> 00:18:46.630 down to 45 and his actor and showed.

NOTE Confidence: 0.8098155

00:18:46.630 --> 00:18:48.199 The USPSTF has.

NOTE Confidence: 0.8098155

00:18:48.199 --> 00:18:50.814 Review the recommendation to go

NOTE Confidence: 0.8098155

00:18:50.814 --> 00:18:54.237 down to 45 and from all we know.

NOTE Confidence: 0.8098155

00:18:54.240 --> 00:18:56.268 This is probably going to get

NOTE Confidence: 0.8098155

00:18:56.268 --> 00:18:57.282 approved pretty soon,

NOTE Confidence: 0.8098155

00:18:57.290 --> 00:18:59.425 and that's where we are going to

NOTE Confidence: 0.8098155

00:18:59.425 --> 00:19:01.220 get started screening for average

NOTE Confidence: 0.8098155

00:19:01.220 --> 00:19:02.040 risk individuals.

NOTE Confidence: 0.8098155

00:19:02.040 --> 00:19:02.700 So again,

NOTE Confidence: 0.8098155

00:19:02.700 --> 00:19:04.680 the message is the most important

NOTE Confidence: 0.8098155

00:19:04.680 --> 00:19:07.064 thing is get screen, no matter how,

NOTE Confidence: 0.8098155

00:19:07.064 --> 00:19:08.972 we just need to get screened

NOTE Confidence: 0.8098155

00:19:08.972 --> 00:19:10.848 and that's starting at 45.

NOTE Confidence: 0.8098155

00:19:10.850 --> 00:19:12.535 But obviously there's family history

NOTE Confidence: 0.8098155

00:19:12.535 --> 00:19:14.920 we need to talk about it earlier.

NOTE Confidence: 0.8098155

00:19:14.920 --> 00:19:17.286 We need to talk sooner than that,

NOTE Confidence: 0.8098155

00:19:17.290 --> 00:19:19.330 and that's kind of my message.

NOTE Confidence: 0.8098155

00:19:19.330 --> 00:19:20.678 Thank you very much.

NOTE Confidence: 0.8483788

00:19:23.760 --> 00:19:25.726 Thank you Doctor, you're so

NOTE Confidence: 0.8483788

00:19:25.726 --> 00:19:28.090 will I think what will do

NOTE Confidence: 0.8483788

00:19:28.176 --> 00:19:30.438 is move on to Doctor Reddy.

NOTE Confidence: 0.8483788

00:19:30.440 --> 00:19:32.912 Maybe we'll just kind of get

NOTE Confidence: 0.8483788

00:19:32.912 --> 00:19:34.988 through our presentations and I'll

NOTE Confidence: 0.8483788

00:19:34.988 --> 00:19:37.118 pass the virtual baton to you.

NOTE Confidence: 0.7220869

00:19:45.960 --> 00:19:48.078 So I'm back ready. I'm colorectal surgeon.

NOTE Confidence: 0.722086900000001

00:19:48.080 --> 00:19:51.000 Have been here at DL and I'm going to be

NOTE Confidence: 0.722086900000001

00:19:51.077 --> 00:19:53.879 talking about surgical management of colon

NOTE Confidence: 0.722086900000001

00:19:53.879 --> 00:19:57.286 and rectal cancers as I do a lot of these.

NOTE Confidence: 0.722086900000001

00:19:57.290 --> 00:20:00.711 Now when after Doctor Laura. You know,

NOTE Confidence: 0.722086900000001

00:20:00.711 --> 00:20:03.420 does a colonoscopy and finds a cancer.

NOTE Confidence: 0.722086900000001

00:20:03.420 --> 00:20:06.324 You know he sends the patients to us.

NOTE Confidence: 0.722086900000001

00:20:06.330 --> 00:20:07.233 And you know,

NOTE Confidence: 0.722086900000001

00:20:07.233 --> 00:20:09.340 usually when we look at colon cancer,

NOTE Confidence: 0.722086900000001

00:20:09.340 --> 00:20:10.850 colon cancer, and rectal cancer,

NOTE Confidence: 0.722086900000001

00:20:10.850 --> 00:20:12.650 we kind of approach them differently.

NOTE Confidence: 0.722086900000001

00:20:12.650 --> 00:20:14.757 So here's a picture of a colon.

NOTE Confidence: 0.722086900000001

00:20:14.760 --> 00:20:15.964 The appendix is somewhere

NOTE Confidence: 0.722086900000001

00:20:15.964 --> 00:20:17.469 right here in the corner.

NOTE Confidence: 0.722086900000001

00:20:17.470 --> 00:20:19.270 Here's the small intestine coming in.

NOTE Confidence: 0.722086900000001

00:20:19.270 --> 00:20:21.272 This is the first portion of the

NOTE Confidence: 0.722086900000001

00:20:21.272 --> 00:20:22.889 colon called the right colon,

NOTE Confidence: 0.722086900000001

00:20:22.890 --> 00:20:25.146 and then you come all the way down

NOTE Confidence: 0.722086900000001

00:20:25.146 --> 00:20:27.340 to the ****** which is down here.

NOTE Confidence: 0.722086900000001

00:20:27.340 --> 00:20:30.066 Normally we see this is the sort of the

NOTE Confidence: 0.722086900000001

00:20:30.066 --> 00:20:32.278 distribution of the cancers that we see,

NOTE Confidence: 0.722086900000001

00:20:32.280 --> 00:20:34.710 so 30% tend to be in the right colon,

NOTE Confidence: 0.722086900000001

00:20:34.710 --> 00:20:36.922 10% tend to be in this area

NOTE Confidence: 0.722086900000001

00:20:36.922 --> 00:20:38.330 called the transverse colon.

NOTE Confidence: 0.722086900000001

00:20:38.330 --> 00:20:40.906 15% tend to be in the left colon,

NOTE Confidence: 0.722086900000001

00:20:40.910 --> 00:20:42.530 25% in the sigmoid colon,

NOTE Confidence: 0.722086900000001

00:20:42.530 --> 00:20:45.848 and about 20% in the ******.

NOTE Confidence: 0.722086900000001

00:20:45.850 --> 00:20:47.330 Now when we see someone

NOTE Confidence: 0.722086900000001

00:20:47.330 --> 00:20:48.218 with colorectal cancer,

NOTE Confidence: 0.722086900000001

00:20:48.220 --> 00:20:50.285 we don't right away jump to surgery.

NOTE Confidence: 0.722086900000001

00:20:50.290 --> 00:20:52.796 We do some kind of initial work

NOTE Confidence: 0.722086900000001

00:20:52.796 --> 00:20:55.179 up before we go for surgery.

NOTE Confidence: 0.722086900000001

00:20:55.180 --> 00:20:57.287 And some of the first things that

NOTE Confidence: 0.722086900000001

00:20:57.287 --> 00:20:59.907 we do is that we get blood work.

NOTE Confidence: 0.722086900000001

00:20:59.910 --> 00:21:02.076 We get this cancer marker called

NOTE Confidence: 0.722086900000001

00:21:02.076 --> 00:21:04.369 a CEA to establish a baseline.

NOTE Confidence: 0.722086900000001

00:21:04.370 --> 00:21:06.737 And then we almost always get a CAT scan

NOTE Confidence: 0.722086900000001

00:21:06.737 --> 00:21:09.266 and the purpose of the CAT scan is to

NOTE Confidence: 0.722086900000001

00:21:09.266 --> 00:21:11.258 identify the staging of the patient.

NOTE Confidence: 0.722086900000001

00:21:11.260 --> 00:21:12.922 Now a lot of times patients

NOTE Confidence: 0.722086900000001

00:21:12.922 --> 00:21:14.699 ask me after a CAT scan,

NOTE Confidence: 0.722086900000001

00:21:14.700 --> 00:21:17.570 if if I can tell them if it's stage one,

NOTE Confidence: 0.722086900000001

00:21:17.570 --> 00:21:18.742 2, three or four.

NOTE Confidence: 0.722086900000001

00:21:18.742 --> 00:21:21.112 The only thing we can tell on the

NOTE Confidence: 0.722086900000001

00:21:21.112 --> 00:21:23.023 CAT scan is stage four or not.

NOTE Confidence: 0.722086900000001

00:21:23.030 --> 00:21:25.086 Now how do we know it's stage four

NOTE Confidence: 0.722086900000001

00:21:25.086 --> 00:21:26.858 stage for basically means it's got

NOTE Confidence: 0.722086900000001

00:21:26.858 --> 00:21:29.295 to deliver or the long and in this

NOTE Confidence: 0.722086900000001

00:21:29.295 --> 00:21:31.339 picture I usually like to show my

NOTE Confidence: 0.722086900000001

00:21:31.339 --> 00:21:33.452 patients their CAT scans and in this

NOTE Confidence: 0.722086900000001

00:21:33.452 --> 00:21:35.559 picture you can see in the liver.

NOTE Confidence: 0.722086900000001

00:21:35.560 --> 00:21:37.090 There's a couple of lesions,

NOTE Confidence: 0.722086900000001

00:21:37.090 --> 00:21:39.220 so this is Stage 4, colon cancer,

NOTE Confidence: 0.722086900000001

00:21:39.220 --> 00:21:41.660 and usually if it's stage 4 colon cancer,

NOTE Confidence: 0.722086900000001

00:21:41.660 --> 00:21:44.100 they end up seeing someone like Doctor Kunz,

NOTE Confidence: 0.722086900000001

00:21:44.100 --> 00:21:44.854 director Courtney,

NOTE Confidence: 0.722086900000001

00:21:44.854 --> 00:21:46.739 Insecure Doctor Chaney for chemotherapy

NOTE Confidence: 0.722086900000001

00:21:46.739 --> 00:21:49.148 before we do any surgical resection.

NOTE Confidence: 0.722086900000001

00:21:49.150 --> 00:21:51.075 And sometimes you know you know you

NOTE Confidence: 0.722086900000001

00:21:51.075 --> 00:21:53.546 go in for before you go for surgery.

NOTE Confidence: 0.722086900000001

00:21:53.550 --> 00:21:55.657 We even have them go for another

NOTE Confidence: 0.722086900000001

00:21:55.657 --> 00:21:57.170 colonoscopy because let's say there

NOTE Confidence: 0.722086900000001

00:21:57.170 --> 00:21:59.109 was a cancer and we couldn't identify.

NOTE Confidence: 0.722086900000001

00:21:59.110 --> 00:22:01.470 Or you know when they did the colonoscopy

NOTE Confidence: 0.722086900000001

00:22:01.470 --> 00:22:03.510 they couldn't tell exactly where it was.

NOTE Confidence: 0.722086900000001

00:22:03.510 --> 00:22:05.694 Sometimes we have them go back in

NOTE Confidence: 0.722086900000001

00:22:05.694 --> 00:22:08.160 and put a little tattoo on that

NOTE Confidence: 0.722086900000001

00:22:08.160 --> 00:22:10.822 area so that we can identify it

NOTE Confidence: 0.722086900000001

00:22:10.822 --> 00:22:12.450 when we're doing surgery.

NOTE Confidence: 0.722086900000001

00:22:12.450 --> 00:22:14.016 Now whenever we go for surgery,

NOTE Confidence: 0.722086900000001

00:22:14.020 --> 00:22:16.316 you know people always ask me can you

NOTE Confidence: 0.722086900000001

00:22:16.316 --> 00:22:18.829 just take out a little piece of the colon

NOTE Confidence: 0.722086900000001

00:22:18.829 --> 00:22:21.168 and not take out like half the colon?

NOTE Confidence: 0.722086900000001

00:22:21.170 --> 00:22:21.516 Unfortunately,

NOTE Confidence: 0.722086900000001

00:22:21.516 --> 00:22:23.246 what determines whether we take

NOTE Confidence: 0.722086900000001

00:22:23.246 --> 00:22:25.766 out just a piece or a bigger piece

NOTE Confidence: 0.722086900000001

00:22:25.766 --> 00:22:27.380 is actually the blood supply of

NOTE Confidence: 0.8620572

00:22:27.440 --> 00:22:28.848 the colon. So, for example,

NOTE Confidence: 0.8620572

00:22:28.848 --> 00:22:30.850 if a colon cancer happens to be

NOTE Confidence: 0.8620572

00:22:30.911 --> 00:22:32.636 somewhere right in this area,

NOTE Confidence: 0.8620572

00:22:32.640 --> 00:22:34.784 we have to take out a bigger piece

NOTE Confidence: 0.8620572

00:22:34.784 --> 00:22:37.184 just so we can get all the lymph

NOTE Confidence: 0.8620572

00:22:37.184 --> 00:22:39.166 nodes get good margins in whatever

NOTE Confidence: 0.8620572

00:22:39.166 --> 00:22:41.320 remaining piece of colon is left,

NOTE Confidence: 0.8620572

00:22:41.320 --> 00:22:43.800 has good blood supply.

NOTE Confidence: 0.8620572

00:22:43.800 --> 00:22:45.780 So when we look at the

NOTE Confidence: 0.8620572

00:22:45.780 --> 00:22:47.100 management of this surgically,

NOTE Confidence: 0.8620572

00:22:47.100 --> 00:22:48.444 there's several different approaches.

NOTE Confidence: 0.8620572

00:22:48.444 --> 00:22:49.452 There's the traditional

NOTE Confidence: 0.8620572

00:22:49.452 --> 00:22:51.060 approach which is open surgery,

NOTE Confidence: 0.8620572

00:22:51.060 --> 00:22:52.956 which most patients end up with

NOTE Confidence: 0.8620572

00:22:52.956 --> 00:22:54.631 an operation and an incision

NOTE Confidence: 0.8620572

00:22:54.631 --> 00:22:56.336 which is about this big.

NOTE Confidence: 0.8620572

00:22:56.340 --> 00:22:58.320 All of these surgeries are equivalent,

NOTE Confidence: 0.8620572

00:22:58.320 --> 00:23:00.834 it's just that you know different

NOTE Confidence: 0.8620572

00:23:00.834 --> 00:23:03.016 surgeries you know you have

NOTE Confidence: 0.8620572

00:23:03.016 --> 00:23:05.136 bigger scars or lesser scars.

NOTE Confidence: 0.8620572

00:23:05.140 --> 00:23:05.636 You know,

NOTE Confidence: 0.8620572

00:23:05.636 --> 00:23:07.372 I tend to favor more of those

NOTE Confidence: 0.8620572

00:23:07.372 --> 00:23:08.598 lapre scopic surgery where

NOTE Confidence: 0.8620572

00:23:08.598 --> 00:23:10.434 you know we put little holes.

NOTE Confidence: 0.8620572

00:23:10.440 --> 00:23:12.312 We bump the belly full of air and

NOTE Confidence: 0.8620572

00:23:12.312 --> 00:23:13.789 then using these instruments,

NOTE Confidence: 0.8620572

00:23:13.790 --> 00:23:16.014 we go in and we do the surgery.

NOTE Confidence: 0.8620572

00:23:16.020 --> 00:23:18.012 In this case you can see this is

NOTE Confidence: 0.8620572

00:23:18.012 --> 00:23:19.829 the right colon and we're kind

NOTE Confidence: 0.8620572

00:23:19.829 --> 00:23:21.713 of dividing and taking the blood

NOTE Confidence: 0.8620572

00:23:21.778 --> 00:23:23.605 vessels in this area so that we

NOTE Confidence: 0.8620572

00:23:23.605 --> 00:23:25.678 can take out all the lymph nodes.

NOTE Confidence: 0.8620572

00:23:25.678 --> 00:23:28.005 And another option that we also give

NOTE Confidence: 0.8620572

00:23:28.005 --> 00:23:29.973 is this thing called robotic surgery

NOTE Confidence: 0.8620572

00:23:29.973 --> 00:23:32.386 and this is an example of a robot.

NOTE Confidence: 0.8620572

00:23:32.390 --> 00:23:34.220 It's one of the older robots

NOTE Confidence: 0.8620572

00:23:34.220 --> 00:23:36.351 and usually the way it works out

NOTE Confidence: 0.8620572

00:23:36.351 --> 00:23:38.311 is that you know the surgeon is

NOTE Confidence: 0.8620572

00:23:38.377 --> 00:23:40.159 sitting kind of in a corner.

NOTE Confidence: 0.8620572

00:23:40.160 --> 00:23:41.655 There's an assistant standing right

NOTE Confidence: 0.8620572

00:23:41.655 --> 00:23:43.791 by the bedside and the robot sits

NOTE Confidence: 0.8620572

00:23:43.791 --> 00:23:45.835 there and using these same little holes,

NOTE Confidence: 0.8620572

00:23:45.840 --> 00:23:49.880 it goes inside and we do the surgery.

NOTE Confidence: 0.8620572

00:23:49.880 --> 00:23:51.518 And when we do the surgery,

NOTE Confidence: 0.8620572

00:23:51.520 --> 00:23:53.086 it sort of looks like this

NOTE Confidence: 0.8620572

00:23:53.086 --> 00:23:54.789 and the inside of the belly.

NOTE Confidence: 0.8620572

00:23:54.790 --> 00:23:56.708 Here's here's the colon in the back.

NOTE Confidence: 0.8620572

00:23:56.710 --> 00:23:57.520 The blood vessels.

NOTE Confidence: 0.8620572

00:23:57.520 --> 00:23:59.710 The lymph nodes are usually in this area,

NOTE Confidence: 0.8620572

00:23:59.710 --> 00:24:01.700 and here are instruments working

NOTE Confidence: 0.8620572

00:24:01.700 --> 00:24:03.690 on all of these things.

NOTE Confidence: 0.8620572

00:24:03.690 --> 00:24:05.412 And usually the advantage of this

NOTE Confidence: 0.8620572

00:24:05.412 --> 00:24:06.862 minimally invasive surgery is that

NOTE Confidence: 0.8620572

00:24:06.862 --> 00:24:08.350 instead of having a big incision,

NOTE Confidence: 0.8620572

00:24:08.350 --> 00:24:10.268 you have a couple of small holes,

NOTE Confidence: 0.8620572

00:24:10.270 --> 00:24:12.030 and then an incision where

NOTE Confidence: 0.8620572

00:24:12.030 --> 00:24:14.190 usually the cancer is taken down.

NOTE Confidence: 0.8620572

00:24:14.190 --> 00:24:16.310 Now whenever we approach colon

NOTE Confidence: 0.8620572

00:24:16.310 --> 00:24:17.158 cancer surgery.

NOTE Confidence: 0.8620572

00:24:17.160 --> 00:24:19.351 The goals of the surgery is to

NOTE Confidence: 0.8620572

00:24:19.351 --> 00:24:21.329 thoroughly explore the belly to make

NOTE Confidence: 0.8620572

00:24:21.329 --> 00:24:23.279 sure there's no small nodules or

NOTE Confidence: 0.8620572

00:24:23.279 --> 00:24:25.557 anything that the CAT scan could not see.

NOTE Confidence: 0.8620572

00:24:25.560 --> 00:24:27.520 And then the primary goal is to

NOTE Confidence: 0.8620572

00:24:27.520 --> 00:24:29.684 respect the bowel segment which has the

NOTE Confidence: 0.8620572

00:24:29.684 --> 00:24:32.090 cancer in it and achieve negative margins.

NOTE Confidence: 0.8620572

00:24:32.090 --> 00:24:34.638 Meaning we take enough tissue on all

NOTE Confidence: 0.8620572

00:24:34.638 --> 00:24:37.407 sites that no cancer is left behind.

NOTE Confidence: 0.8620572

00:24:37.410 --> 00:24:38.234 At the same time,

NOTE Confidence: 0.8620572

00:24:38.234 --> 00:24:40.087 we take out a lot of lymph nodes

NOTE Confidence: 0.8620572

00:24:40.087 --> 00:24:41.773 which drained that piece of the

NOTE Confidence: 0.8620572

00:24:41.773 --> 00:24:43.796 bowel so that we can see if the

NOTE Confidence: 0.8620572

00:24:43.796 --> 00:24:45.690 cancer is scaped the colon and gone

NOTE Confidence: 0.8620572

00:24:45.690 --> 00:24:47.610 into the into the bloodstream or

NOTE Confidence: 0.8620572

00:24:47.610 --> 00:24:49.299 lymphatic system because the lymph

NOTE Confidence: 0.8620572

00:24:49.299 --> 00:24:51.255 nodes usually tend to catch them.

NOTE Confidence: 0.8620572

00:24:51.260 --> 00:24:52.052 Fortunately for us,

NOTE Confidence: 0.8620572

00:24:52.052 --> 00:24:54.260 when we take out all these lymph nodes,

NOTE Confidence: 0.8620572

00:24:54.260 --> 00:24:56.492 you know no part of the body swells

NOTE Confidence: 0.8620572

00:24:56.492 --> 00:24:59.151 up like they do in other parts and

NOTE Confidence: 0.8620572

00:24:59.151 --> 00:25:00.873 other cancers like breast cancer

NOTE Confidence: 0.8620572

00:25:00.873 --> 00:25:03.347 or cancers in the arm and leg. Um?

NOTE Confidence: 0.8620572

00:25:03.347 --> 00:25:06.283 So when we do right colon cancer surgery.

NOTE Confidence: 0.8603724

00:25:06.290 --> 00:25:07.928 So here you look at this is

NOTE Confidence: 0.8603724

00:25:07.928 --> 00:25:09.466 the cancer an even? If we?

NOTE Confidence: 0.8603724

00:25:09.466 --> 00:25:10.924 Even if the cancer is here,

NOTE Confidence: 0.8603724

00:25:10.930 --> 00:25:12.874 we can just take out this little piece.

NOTE Confidence: 0.8603724

00:25:12.880 --> 00:25:14.476 We end up taking out all of

NOTE Confidence: 0.8603724

00:25:14.476 --> 00:25:16.297 this even if the cancer is here,

NOTE Confidence: 0.8603724

00:25:16.300 --> 00:25:18.244 we end up taking out all of this.

NOTE Confidence: 0.8603724

00:25:18.250 --> 00:25:19.190 Believe it or not,

NOTE Confidence: 0.8603724

00:25:19.190 --> 00:25:20.930 it's as if the cancer is here.

NOTE Confidence: 0.8603724

00:25:20.930 --> 00:25:22.638 We actually to get a negative margin,

NOTE Confidence: 0.8603724

00:25:22.640 --> 00:25:25.839 we gotta take a little bit more.

NOTE Confidence: 0.8603724

00:25:25.840 --> 00:25:27.016 Similarly, for left cancer,

NOTE Confidence: 0.8603724

00:25:27.016 --> 00:25:28.486 if the cancer is here,

NOTE Confidence: 0.8603724

00:25:28.490 --> 00:25:30.836 we just take this piece out.

NOTE Confidence: 0.8603724

00:25:30.840 --> 00:25:32.496 Little bit lower if you notice,

NOTE Confidence: 0.8603724

00:25:32.500 --> 00:25:34.439 we take up almost always about a

NOTE Confidence: 0.8603724

00:25:34.439 --> 00:25:36.634 foot of colon and we also take out

NOTE Confidence: 0.8603724

00:25:36.634 --> 00:25:38.600 all the lymph nodes in this area.

NOTE Confidence: 0.8603724

00:25:38.600 --> 00:25:40.862 These are the blood vessels that

NOTE Confidence: 0.8603724

00:25:40.862 --> 00:25:43.260 supply we take out everything.

NOTE Confidence: 0.8603724

00:25:43.260 --> 00:25:45.020 Now for colon cancer.

NOTE Confidence: 0.8603724

00:25:45.020 --> 00:25:45.900 You know,

NOTE Confidence: 0.8603724

00:25:45.900 --> 00:25:47.592 after the surgery you're in the

NOTE Confidence: 0.8603724

00:25:47.592 --> 00:25:49.428 hospital for about three to four days.

NOTE Confidence: 0.8603724

00:25:49.430 --> 00:25:51.326 There are some restrictions on what

NOTE Confidence: 0.8603724

00:25:51.326 --> 00:25:53.770 you can eat for the first 2 weeks,

NOTE Confidence: 0.8603724

00:25:53.770 --> 00:25:55.576 but after that you can come sort

NOTE Confidence: 0.8603724

00:25:55.576 --> 00:25:57.490 of go back to normal activity

NOTE Confidence: 0.8603724

00:25:57.490 --> 00:25:59.650 and even after surgery you know

NOTE Confidence: 0.8603724

00:25:59.650 --> 00:26:01.210 depending on the lymph nodes.

NOTE Confidence: 0.8603724

00:26:01.210 --> 00:26:02.806 Depending on the pathology then you

NOTE Confidence: 0.8603724

00:26:02.806 --> 00:26:04.650 end up seeing the oncologist for

NOTE Confidence: 0.8603724

00:26:04.650 --> 00:26:06.475 chemotherapy and discussion of that.

NOTE Confidence: 0.8603724

00:26:06.480 --> 00:26:07.272 But you know,

NOTE Confidence: 0.8603724

00:26:07.272 --> 00:26:08.856 I won't go into the details

NOTE Confidence: 0.8603724

00:26:08.856 --> 00:26:10.200 of the chemotherapy,

NOTE Confidence: 0.8603724

00:26:10.200 --> 00:26:12.286 but usually even after surgery you end

NOTE Confidence: 0.8603724

00:26:12.286 --> 00:26:14.538 up getting blood work every three months.

NOTE Confidence: 0.8603724

00:26:14.540 --> 00:26:16.591 CAT scans every year unless you have

NOTE Confidence: 0.8603724

00:26:16.591 --> 00:26:18.539 some high risk features and usually

NOTE Confidence: 0.8603724

00:26:18.539 --> 00:26:20.877 we recommend a colonoscopy in a year.

NOTE Confidence: 0.8603724

00:26:20.880 --> 00:26:22.490 And based on what you find on

NOTE Confidence: 0.8603724

00:26:22.490 --> 00:26:23.870 that colonoscopy, you may get it.

NOTE Confidence: 0.8603724

00:26:23.870 --> 00:26:24.330 You know,

NOTE Confidence: 0.8603724

00:26:24.330 --> 00:26:26.829 every year or every two years or

NOTE Confidence: 0.8603724

00:26:26.829 --> 00:26:29.400 every three years or every five years.

NOTE Confidence: 0.8603724

00:26:29.400 --> 00:26:31.056 Now we talked about colon cancer,

NOTE Confidence: 0.8603724

00:26:31.060 --> 00:26:34.210 so let's talk about rectal cancer.

NOTE Confidence: 0.8603724

00:26:34.210 --> 00:26:34.794 You know,

NOTE Confidence: 0.8603724

00:26:34.794 --> 00:26:36.546 rectal cancer is something that I

NOTE Confidence: 0.8603724

00:26:36.546 --> 00:26:38.786 worked on a lot more for rectal cancer.

NOTE Confidence: 0.8603724

00:26:38.790 --> 00:26:40.610 Just like you know when a patient

NOTE Confidence: 0.8603724

00:26:40.610 --> 00:26:42.219 shows up with rectal cancer,

NOTE Confidence: 0.8603724

00:26:42.220 --> 00:26:44.215 we don't go right away for surgery.

NOTE Confidence: 0.8603724

00:26:44.220 --> 00:26:46.148 We actually get the CAT scan to make

NOTE Confidence: 0.8603724

00:26:46.148 --> 00:26:48.218 sure it hasn't spread anywhere else.

NOTE Confidence: 0.8603724

00:26:48.220 --> 00:26:49.936 If it hasn't spread anywhere else.

NOTE Confidence: 0.8603724

00:26:49.940 --> 00:26:52.228 We we, we still do the blood work,

NOTE Confidence: 0.8603724

00:26:52.230 --> 00:26:53.940 but in addition to the cats,

NOTE Confidence: 0.8603724

00:26:53.940 --> 00:26:55.830 can we get an MRI or ultrasound

NOTE Confidence: 0.8603724

00:26:55.830 --> 00:26:57.948 ultrasound used to be the older technique?

NOTE Confidence: 0.8603724

00:26:57.950 --> 00:26:59.492 We prefer the MRI because we

NOTE Confidence: 0.8603724

00:26:59.492 --> 00:27:01.090 can see much more features.

NOTE Confidence: 0.8603724

00:27:01.090 --> 00:27:03.130 For example in this patient.

NOTE Confidence: 0.8603724

00:27:03.130 --> 00:27:04.810 You can see this is the.

NOTE Confidence: 0.8603724

00:27:04.810 --> 00:27:06.810 This is the backbone.

NOTE Confidence: 0.8603724

00:27:06.810 --> 00:27:08.310 Here's the tailbone.

NOTE Confidence: 0.8603724

00:27:08.310 --> 00:27:10.830 And here's the ****** and the cancers here.

NOTE Confidence: 0.8603724

00:27:10.830 --> 00:27:12.853 So kind of close to the tailbone

NOTE Confidence: 0.8603724

00:27:12.853 --> 00:27:14.473 and this gives us pictures

NOTE Confidence: 0.8603724

00:27:14.473 --> 00:27:16.188 of here's the cancer again.

NOTE Confidence: 0.8603724

00:27:16.190 --> 00:27:18.423 You can see that it's not invading

NOTE Confidence: 0.8603724

00:27:18.423 --> 00:27:20.907 into the fact which is a good thing.

NOTE Confidence: 0.8603724

00:27:20.910 --> 00:27:23.502 Now we also use the MRI to identify

NOTE Confidence: 0.8603724

00:27:23.502 --> 00:27:25.638 any tumors to go into the fact,

NOTE Confidence: 0.8603724

00:27:25.640 --> 00:27:28.144 or any tumors that have gone into the

NOTE Confidence: 0.8603724

00:27:28.144 --> 00:27:31.103 left notes so that we can give them

NOTE Confidence: 0.8603724

00:27:31.103 --> 00:27:33.399 chemotherapy and radiation before we operate.

NOTE Confidence: 0.8603724

00:27:33.400 --> 00:27:34.648 Jeremy will be talking

NOTE Confidence: 0.8603724

00:27:34.648 --> 00:27:35.896 about total knee argument,

NOTE Confidence: 0.8603724

00:27:35.900 --> 00:27:36.929 chemotherapy and radiation,

NOTE Confidence: 0.8603724

00:27:36.929 --> 00:27:38.301 which is slightly different

NOTE Confidence: 0.8603724

00:27:38.301 --> 00:27:40.290 than what we used to do before.

NOTE Confidence: 0.8606939

00:27:40.290 --> 00:27:42.922 But it is a new technique and

NOTE Confidence: 0.8606939

00:27:42.922 --> 00:27:45.399 I'll let him talk about it.

NOTE Confidence: 0.8606939

00:27:45.400 --> 00:27:47.960 Now same thing. You know, one of the

NOTE Confidence: 0.8606939

00:27:47.960 --> 00:27:49.880 goals of surgery for rectal cancer.

NOTE Confidence: 0.8606939

00:27:49.880 --> 00:27:51.480 Again, we look all around.

NOTE Confidence: 0.8606939

00:27:51.480 --> 00:27:54.174 Make sure that we don't identify

NOTE Confidence: 0.8606939

00:27:54.174 --> 00:27:55.970 any natural somewhere else.

NOTE Confidence: 0.8606939

00:27:55.970 --> 00:27:58.330 You know, so that you know changes are

NOTE Confidence: 0.8606939

00:27:58.330 --> 00:28:00.448 management and the primary goal is to get

NOTE Confidence: 0.8606939

00:28:00.448 --> 00:28:02.709 rid of the cancer with negative margins.

NOTE Confidence: 0.8606939

00:28:02.710 --> 00:28:04.810 Yet all the love notes.

NOTE Confidence: 0.8606939

00:28:04.810 --> 00:28:05.946 But for rectal cancer,

NOTE Confidence: 0.8606939

00:28:05.946 --> 00:28:07.650 there are a few more important

NOTE Confidence: 0.8606939

00:28:07.707 --> 00:28:09.369 things that come into play one.

49

NOTE Confidence: 0.8606939

00:28:09.370 --> 00:28:11.624 Because it's lower down in the bottom,

NOTE Confidence: 0.8606939

00:28:11.630 --> 00:28:12.515 it's very hard.

NOTE Confidence: 0.8606939

00:28:12.515 --> 00:28:13.990 Sometimes in some patients to

NOTE Confidence: 0.8606939

00:28:13.990 --> 00:28:15.180 reattach their intestines.

NOTE Confidence: 0.8606939

00:28:15.180 --> 00:28:17.808 We do everything possible to reattach

NOTE Confidence: 0.8606939

00:28:17.808 --> 00:28:20.039 their intestines and avoid a bag.

NOTE Confidence: 0.8606939

00:28:20.040 --> 00:28:22.317 And if you take a part of the ******

NOTE Confidence: 0.8606939

00:28:22.320 --> 00:28:24.339 or most of the ****** I always explain

NOTE Confidence: 0.8606939

00:28:24.339 --> 00:28:26.107 to my patients that the ****** is

NOTE Confidence: 0.8606939

00:28:26.107 --> 00:28:28.083 sort of like the garbage can you know

NOTE Confidence: 0.8606939

00:28:28.083 --> 00:28:30.322 if you make it smaller you gotta go

NOTE Confidence: 0.8606939

00:28:30.322 --> 00:28:32.327 to the bathroom a lot more so you

NOTE Confidence: 0.8606939

00:28:32.327 --> 00:28:34.209 don't want to make it so small that

NOTE Confidence: 0.8606939

00:28:34.209 --> 00:28:35.727 you're going to bathroom 20 times.

NOTE Confidence: 0.8606939

00:28:35.730 --> 00:28:38.362 So we want to make sure that patients

NOTE Confidence: 0.8606939

00:28:38.362 --> 00:28:40.270 have acceptable functional results.

NOTE Confidence: 0.8606939

00:28:40.270 --> 00:28:41.008 Because you know,

NOTE Confidence: 0.8606939

00:28:41.008 --> 00:28:42.238 if you're going every hour,

NOTE Confidence: 0.8606939

00:28:42.240 --> 00:28:45.336 I think your life is limited.

NOTE Confidence: 0.8606939

00:28:45.340 --> 00:28:46.636 So for rectal cancer,

NOTE Confidence: 0.8606939

00:28:46.636 --> 00:28:48.976 the anatomy of the ****** is important

NOTE Confidence: 0.8606939

00:28:48.976 --> 00:28:51.124 because these are the muscles that

NOTE Confidence: 0.8606939

00:28:51.124 --> 00:28:53.477 control whether you poop or not and if

NOTE Confidence: 0.8606939

00:28:53.477 --> 00:28:55.379 the cancer is involving these muscles,

NOTE Confidence: 0.8606939

00:28:55.380 --> 00:28:57.005 it's actually better to take

NOTE Confidence: 0.8606939

00:28:57.005 --> 00:28:59.296 out the **** and give it back.

NOTE Confidence: 0.8606939

00:28:59.296 --> 00:29:00.941 Because if you do anything

NOTE Confidence: 0.8606939

00:29:00.941 --> 00:29:02.820 to damage these muscles.

NOTE Confidence: 0.8606939

00:29:02.820 --> 00:29:05.370 Then you're going to be incontinent.

NOTE Confidence: 0.8606939

00:29:05.370 --> 00:29:06.920 So for surgically you know,

NOTE Confidence: 0.8606939

00:29:06.920 --> 00:29:08.470 we start from the easiest

NOTE Confidence: 0.8606939

00:29:08.470 --> 00:29:09.710 to the most complicated,

NOTE Confidence: 0.8606939

00:29:09.710 --> 00:29:10.950 for the easiest ones.

NOTE Confidence: 0.8606939

00:29:10.950 --> 00:29:12.190 For these small lesions.

NOTE Confidence: 0.8606939

00:29:12.190 --> 00:29:14.422 So let's say there's a someone who's old

NOTE Confidence: 0.8606939

00:29:14.422 --> 00:29:16.838 who can tolerate a big operation award.

NOTE Confidence: 0.8606939

00:29:16.840 --> 00:29:19.282 The cancer is very small and

NOTE Confidence: 0.8606939

00:29:19.282 --> 00:29:20.096 very superficial.

NOTE Confidence: 0.8606939

00:29:20.100 --> 00:29:21.900 You know we go in through the ****

NOTE Confidence: 0.8606939

00:29:21.900 --> 00:29:24.250 and you know we we cut it out and then

NOTE Confidence: 0.8606939

00:29:24.314 --> 00:29:26.789 stitch it up so that the cancer is gone.

NOTE Confidence: 0.8606939

00:29:26.790 --> 00:29:28.526 Problem with this is that this has a

NOTE Confidence: 0.8606939

00:29:28.526 --> 00:29:30.139 higher chance of the cancer coming back,

NOTE Confidence: 0.8606939

00:29:30.140 --> 00:29:32.120 so we don't like to do it and someone

NOTE Confidence: 0.8606939

00:29:32.120 --> 00:29:33.721 who's healthy or someone who has

NOTE Confidence: 0.8606939

00:29:33.721 --> 00:29:35.460 got bad features in their cancer.

NOTE Confidence: 0.8606939

00:29:35.460 --> 00:29:40.090 We like to do these for polyps or some very.

NOTE Confidence: 0.8606939

00:29:40.090 --> 00:29:40.958 You know,

NOTE Confidence: 0.8606939

00:29:40.958 --> 00:29:43.128 very early cancers which have

NOTE Confidence: 0.8606939

00:29:43.128 --> 00:29:45.270 low potential for spreading.

NOTE Confidence: 0.8606939

00:29:45.270 --> 00:29:47.174 Now I'm same thing you know this

NOTE Confidence: 0.8606939

00:29:47.174 --> 00:29:48.859 the same tumor was higher up.

NOTE Confidence: 0.8606939

00:29:48.860 --> 00:29:50.792 If you notice this is very close

NOTE Confidence: 0.8606939

00:29:50.792 --> 00:29:51.620 to the bottom.

NOTE Confidence: 0.8606939

00:29:51.620 --> 00:29:53.732 If it's higher up we have these specialized

NOTE Confidence: 0.8606939

00:29:53.732 --> 00:29:55.477 equipment where we go in laparoscopically,

NOTE Confidence: 0.8606939

00:29:55.480 --> 00:29:57.686 Lee through the bottom through the **** go

NOTE Confidence: 0.8606939

00:29:57.686 --> 00:30:00.300 all the way up into the ****** and some.

NOTE Confidence: 0.8606939

00:30:00.300 --> 00:30:02.000 Even up to the colon,

NOTE Confidence: 0.8606939

00:30:02.000 --> 00:30:03.884 and we use these instruments and

NOTE Confidence: 0.8606939

00:30:03.884 --> 00:30:05.990 a camera with light shining down,

NOTE Confidence: 0.8606939

00:30:05.990 --> 00:30:08.654 and we're able to take these cancers again.

NOTE Confidence: 0.8606939

00:30:08.660 --> 00:30:10.658 These are not great for cancers

NOTE Confidence: 0.8606939

00:30:10.658 --> 00:30:11.990 that go anywhere deeper.

NOTE Confidence: 0.8606939

00:30:11.990 --> 00:30:14.305 These are mostly for cancers

NOTE Confidence: 0.8606939

00:30:14.305 --> 00:30:17.460 which are just on the surface.

NOTE Confidence: 0.8606939

00:30:17.460 --> 00:30:19.236 But our more traditional operation is,

NOTE Confidence: 0.8606939

00:30:19.240 --> 00:30:19.834 you know,

NOTE Confidence: 0.8606939

00:30:19.834 --> 00:30:21.913 in this case you can see this.

NOTE Confidence: 0.8490755

00:30:21.920 --> 00:30:22.763 Here's the cancer.

NOTE Confidence: 0.8490755

00:30:22.763 --> 00:30:25.180 It's in the upper portion of the ******.

NOTE Confidence: 0.8490755

00:30:25.180 --> 00:30:27.273 We take out the entire sigmoid colon

NOTE Confidence: 0.8490755

00:30:27.273 --> 00:30:29.633 and then we go a distance below the

NOTE Confidence: 0.8490755

00:30:29.633 --> 00:30:31.996 tumor and we take out all the lymph

NOTE Confidence: 0.8490755

00:30:31.996 --> 00:30:34.089 nodes in that area and the purpose

NOTE Confidence: 0.8490755

00:30:34.090 --> 00:30:35.973 of taking out the sigmoid colon is

NOTE Confidence: 0.8490755

00:30:35.973 --> 00:30:38.248 that we can take this healthy bowel.

NOTE Confidence: 0.8490755

00:30:38.250 --> 00:30:40.626 Higher rope and hook it into the ******

NOTE Confidence: 0.8490755

00:30:40.630 --> 00:30:43.096 so that you have full control in the old

NOTE Confidence: 0.8490755

00:30:43.096 --> 00:30:45.504 days before we knew things, you know.

NOTE Confidence: 0.8490755

00:30:45.504 --> 00:30:47.314 Whenever patients you know so.

NOTE Confidence: 0.8490755

00:30:47.320 --> 00:30:49.189 This is the ******. Here's the bottom.

NOTE Confidence: 0.8490755

00:30:49.190 --> 00:30:50.786 Let's say the cancer was here.

NOTE Confidence: 0.8490755

00:30:50.790 --> 00:30:52.798 What people used to do is just go

NOTE Confidence: 0.8490755

00:30:52.798 --> 00:30:54.799 right in the fat and left behind.

NOTE Confidence: 0.8490755

00:30:54.800 --> 00:30:56.136 Some of this fact.

NOTE Confidence: 0.8490755

00:30:56.136 --> 00:30:57.806 And when they did this,

NOTE Confidence: 0.8490755

00:30:57.810 --> 00:30:59.472 there was a higher chance of

NOTE Confidence: 0.8490755

00:30:59.472 --> 00:31:00.580 the cancer coming back.

NOTE Confidence: 0.8490755

00:31:00.580 --> 00:31:01.873 So. You know,

NOTE Confidence: 0.8490755

00:31:01.873 --> 00:31:04.028 for the past 3040 years,

NOTE Confidence: 0.8490755

00:31:04.030 --> 00:31:06.165 we've been doing this where we go

NOTE Confidence: 0.8490755

00:31:06.165 --> 00:31:08.543 and take out all this fat which

NOTE Confidence: 0.8490755

00:31:08.543 --> 00:31:10.278 contains all the love notes.

NOTE Confidence: 0.8490755

00:31:10.280 --> 00:31:12.107 Around the ****** in this area is

NOTE Confidence: 0.8490755

00:31:12.107 --> 00:31:14.057 called the measure ****** and we take

NOTE Confidence: 0.8490755

00:31:14.057 --> 00:31:16.358 it out so that we can minimize the

NOTE Confidence: 0.8490755

00:31:16.358 --> 00:31:18.446 chance of this cancer coming back.

NOTE Confidence: 0.8490755

00:31:18.450 --> 00:31:20.473 So let's say you know you never

NOTE Confidence: 0.8490755

00:31:20.473 --> 00:31:21.340 did chemotherapy radiation.

NOTE Confidence: 0.8490755

00:31:21.340 --> 00:31:22.516 Any of those even,

NOTE Confidence: 0.8490755

00:31:22.516 --> 00:31:24.809 even if you were recommended to do them.

NOTE Confidence: 0.8490755

00:31:24.810 --> 00:31:26.826 But if we just did this operation,

NOTE Confidence: 0.8490755

00:31:26.830 --> 00:31:28.570 that chance of the cancer coming

NOTE Confidence: 0.8490755

00:31:28.570 --> 00:31:30.590 back before if you did this port,

NOTE Confidence: 0.8490755

00:31:30.590 --> 00:31:32.318 if you sort of did this,

NOTE Confidence: 0.8490755

00:31:32.320 --> 00:31:34.343 the chance of it coming back was

NOTE Confidence: 0.8490755

00:31:34.343 --> 00:31:36.838 more than 20% just doing a proper

NOTE Confidence: 0.8490755

00:31:36.838 --> 00:31:39.280 operation dropped to less than 7%.

NOTE Confidence: 0.8490755

00:31:39.280 --> 00:31:40.189 So you know.

NOTE Confidence: 0.8490755

00:31:40.189 --> 00:31:42.310 So this is what we do nowadays,

NOTE Confidence: 0.8490755

00:31:42.310 --> 00:31:44.698 and this is called the total

NOTE Confidence: 0.8490755

00:31:44.698 --> 00:31:45.892 measure rectal excision.

NOTE Confidence: 0.8490755

00:31:45.900 --> 00:31:47.120 Again, this gives a picture,

NOTE Confidence: 0.8490755

00:31:47.120 --> 00:31:48.264 so if you notice,

NOTE Confidence: 0.8490755

00:31:48.264 --> 00:31:49.980 here's the tailbone we go almost

NOTE Confidence: 0.8490755

00:31:50.039 --> 00:31:51.796 on the tailbone to take out all

NOTE Confidence: 0.8490755

00:31:51.796 --> 00:31:53.759 this fat and all the lymph nodes.

NOTE Confidence: 0.8490755

00:31:53.760 --> 00:31:54.585 Take this out,

NOTE Confidence: 0.8490755

00:31:54.585 --> 00:31:56.235 take healthy tissue from higher up.

NOTE Confidence: 0.8490755

00:31:56.240 --> 00:31:58.728 Bring it down to the ****** and reattach it.

NOTE Confidence: 0.8066499

00:32:01.680 --> 00:32:02.925 This is more pictographic thing

NOTE Confidence: 0.8066499

00:32:02.925 --> 00:32:04.660 where you know when we're operating.

NOTE Confidence: 0.8066499

00:32:04.660 --> 00:32:06.020 This is what we see.

NOTE Confidence: 0.8066499

00:32:06.020 --> 00:32:07.370 We see the sacral bone.

NOTE Confidence: 0.8066499

00:32:07.370 --> 00:32:09.538 We see the coccyx we're digging things out.

NOTE Confidence: 0.8066499

00:32:09.540 --> 00:32:10.888 We have to preserve.

NOTE Confidence: 0.8066499

00:32:10.888 --> 00:32:12.910 You know the tubes called ureters,

NOTE Confidence: 0.8066499

00:32:12.910 --> 00:32:14.548 which are tubes that take *****

NOTE Confidence: 0.8066499

00:32:14.550 --> 00:32:16.454 from the kidney down to the bladder.

NOTE Confidence: 0.8066499

00:32:16.460 --> 00:32:18.364 We also tried to preserve these nerves.

NOTE Confidence: 0.8066499

00:32:18.370 --> 00:32:20.004 These nerves help with ****** function

NOTE Confidence: 0.8066499

00:32:20.004 --> 00:32:22.196 and you know we work hard to preserve

NOTE Confidence: 0.8066499

00:32:22.196 --> 00:32:24.102 these and if this was an open

NOTE Confidence: 0.8066499

00:32:24.102 --> 00:32:25.739 surgery would actually put a stapler,

NOTE Confidence: 0.8066499

00:32:25.740 --> 00:32:27.378 you know, cut it off here.

NOTE Confidence: 0.8066499

00:32:27.380 --> 00:32:28.408 You see the cancer.

NOTE Confidence: 0.8066499

00:32:28.408 --> 00:32:31.078 We cut it off so we get out of it

NOTE Confidence: 0.8066499

00:32:31.078 --> 00:32:33.014 and then we go through the bottom

NOTE Confidence: 0.8066499

00:32:33.014 --> 00:32:35.570 and come from the top and kind of re

NOTE Confidence: 0.8066499

00:32:35.570 --> 00:32:38.318 attached to intestines using the stapler.

NOTE Confidence: 0.8066499

00:32:38.320 --> 00:32:39.808 And a lot of them they see this

NOTE Confidence: 0.8066499

00:32:39.808 --> 00:32:40.730 in the pathology.

NOTE Confidence: 0.8066499

00:32:40.730 --> 00:32:42.044 They talk about Donuts and this

NOTE Confidence: 0.8066499

00:32:42.044 --> 00:32:43.140 is what the Donuts are.

NOTE Confidence: 0.8066499

00:32:43.140 --> 00:32:44.466 These are the little margins that

NOTE Confidence: 0.8066499

00:32:44.466 --> 00:32:46.151 we take out right at the area where

NOTE Confidence: 0.8066499

00:32:46.151 --> 00:32:47.795 we re attach to make sure there's no

NOTE Confidence: 0.8066499

00:32:47.795 --> 00:32:49.707 cancer and the margins are good and healthy.

NOTE Confidence: 0.8352019

00:32:52.260 --> 00:32:53.868 And sometimes you know for patients

NOTE Confidence: 0.8352019

00:32:53.868 --> 00:32:55.545 where they have no ****** left.

NOTE Confidence: 0.8352019

00:32:55.545 --> 00:32:57.585 We do this thing called the pouch so

NOTE Confidence: 0.8352019

00:32:57.585 --> 00:32:59.685 that there's some kind of a reservoir,

NOTE Confidence: 0.8352019

00:32:59.690 --> 00:33:01.304 because if you take a call

NOTE Confidence: 0.8352019

00:33:01.304 --> 00:33:03.259 and then hook it back to this,

NOTE Confidence: 0.8352019

00:33:03.260 --> 00:33:04.360 you're probably going to

NOTE Confidence: 0.8352019

00:33:04.360 --> 00:33:05.735 go about 10 times today.

NOTE Confidence: 0.8352019

00:33:05.740 --> 00:33:07.684 So what we do is we try to take

NOTE Confidence: 0.8352019

00:33:07.684 --> 00:33:09.188 make an artificial reservoir and

NOTE Confidence: 0.8352019

00:33:09.188 --> 00:33:11.510 attach it to the to the ******.

NOTE Confidence: 0.8352019

00:33:11.510 --> 00:33:12.846 And here's the sphincters.

NOTE Confidence: 0.8352019

00:33:12.846 --> 00:33:15.186 And if you notice we're trying to

NOTE Confidence: 0.8352019

00:33:15.186 --> 00:33:17.076 save as much of this thinker as

NOTE Confidence: 0.8352019

00:33:17.076 --> 00:33:18.910 possible so there's full control.

NOTE Confidence: 0.8352019

00:33:18.910 --> 00:33:20.300 Now for some patients where

NOTE Confidence: 0.8352019

00:33:20.300 --> 00:33:21.412 the muscle is involved,

NOTE Confidence: 0.8352019

00:33:21.420 --> 00:33:22.528 unfortunately there they don't.

NOTE Confidence: 0.8352019

00:33:22.528 --> 00:33:23.636 They're not candidate for

NOTE Confidence: 0.8352019

00:33:23.636 --> 00:33:24.770 this kind of operation,

NOTE Confidence: 0.8352019

00:33:24.770 --> 00:33:26.906 so for them we do a more radical

NOTE Confidence: 0.8352019

00:33:26.906 --> 00:33:28.946 operation where imagine this is the colon.

NOTE Confidence: 0.8352019

00:33:28.950 --> 00:33:30.350 The cancer is very low,

NOTE Confidence: 0.8352019

00:33:30.350 --> 00:33:31.434 we can't save it,

NOTE Confidence: 0.8352019

00:33:31.434 --> 00:33:33.420 we actually cut it off right here.

NOTE Confidence: 0.8352019

00:33:33.420 --> 00:33:35.088 Get rid of all of this,

NOTE Confidence: 0.8352019

00:33:35.090 --> 00:33:36.650 and then because we can't hook

NOTE Confidence: 0.8352019

00:33:36.650 --> 00:33:38.160 it down to the bottom,

NOTE Confidence: 0.8352019

00:33:38.160 --> 00:33:41.230 we bring it out to the skin as a bag back.

NOTE Confidence: 0.8352019

00:33:41.230 --> 00:33:43.120 Sort of looks like this when it's

NOTE Confidence: 0.8352019

00:33:43.120 --> 00:33:44.270 initially formed and because

NOTE Confidence: 0.8352019

00:33:44.270 --> 00:33:45.690 we're taking out the ****.

NOTE Confidence: 0.8352019

00:33:45.690 --> 00:33:46.298 You know,

NOTE Confidence: 0.8352019

00:33:46.298 --> 00:33:49.179 we actually cut it out and then stitch it up.

NOTE Confidence: 0.8352019

00:33:49.180 --> 00:33:50.812 So that you know there's no

NOTE Confidence: 0.8352019

00:33:50.812 --> 00:33:52.810 morinas left and we get rid of

NOTE Confidence: 0.8352019

00:33:52.810 --> 00:33:54.508 all the cancer tissue down there.

NOTE Confidence: 0.8352019

00:33:54.510 --> 00:33:56.622 And this is called an abdominal

NOTE Confidence: 0.8352019

00:33:56.622 --> 00:33:57.326 perineal resection.

NOTE Confidence: 0.8352019

00:33:57.330 --> 00:33:58.422 Usually after these operations

NOTE Confidence: 0.8352019

00:33:58.422 --> 00:34:00.362 you know most patients are in the

NOTE Confidence: 0.8352019

00:34:00.362 --> 00:34:01.844 hospital about three to four days,

NOTE Confidence: 0.8352019

00:34:01.850 --> 00:34:04.244 but sometimes you know when they get a bag,

NOTE Confidence: 0.8352019

00:34:04.250 --> 00:34:06.021 they stay in the hospital longer so

NOTE Confidence: 0.8352019

00:34:06.021 --> 00:34:08.236 that they get some training with the bag.

NOTE Confidence: 0.8352019

00:34:08.240 --> 00:34:09.300 There's definitely diet restrictions

NOTE Confidence: 0.8352019

00:34:09.300 --> 00:34:10.360 for about 2 weeks.

NOTE Confidence: 0.8352019

00:34:10.360 --> 00:34:12.050 Sometimes patients get a temporary

NOTE Confidence: 0.8352019

00:34:12.050 --> 00:34:14.269 back to allow this area to heal.

NOTE Confidence: 0.8352019

00:34:14.270 --> 00:34:16.318 And most of them are able to return

NOTE Confidence: 0.8352019

00:34:16.318 --> 00:34:18.376 to normal activity in about 6 weeks.

NOTE Confidence: 0.8352019

00:34:18.380 --> 00:34:20.396 We usually try to set you up with

NOTE Confidence: 0.8352019

00:34:20.396 --> 00:34:22.584 a nurse who can help you with the

NOTE Confidence: 0.8352019

00:34:22.584 --> 00:34:24.409 ostomy when you go home again.

NOTE Confidence: 0.8352019

00:34:24.410 --> 00:34:25.780 Just like for colon cancer,

NOTE Confidence: 0.8352019

00:34:25.780 --> 00:34:28.237 you know we do blood work every three months.

NOTE Confidence: 0.8352019

00:34:28.240 --> 00:34:29.890 CAT scans colonoscopy and in addition,

NOTE Confidence: 0.8352019

00:34:29.890 --> 00:34:31.738 because you may have a bag you

NOTE Confidence: 0.8352019

00:34:31.738 --> 00:34:33.436 know we also have, you know,

NOTE Confidence: 0.8352019

00:34:33.436 --> 00:34:35.312 have you see the ostomy nurse and

NOTE Confidence: 0.8352019

00:34:35.312 --> 00:34:37.012 teach you but bags and everything

NOTE Confidence: 0.8352019

00:34:37.012 --> 00:34:38.958 and this I'm not going to cover

NOTE Confidence: 0.8352019

00:34:38.958 --> 00:34:41.010 about **** cancer.

NOTE Confidence: 0.8352019

00:34:41.010 --> 00:34:43.562 So this is it for the column and

NOTE Confidence: 0.8352019

00:34:43.562 --> 00:34:45.829 rectal surgery for colorectal cancers.

NOTE Confidence: 0.8352019

00:34:45.830 --> 00:34:48.056 If you guys have any questions

NOTE Confidence: 0.8352019

00:34:48.056 --> 00:34:49.169 more than welcome.

NOTE Confidence: 0.891961818571429

00:34:51.720 --> 00:34:53.648 Thank you doctor Reddy.

63

NOTE Confidence: 0.891961818571429

00:34:53.648 --> 00:34:56.416 So we are. We're trying to tell

NOTE Confidence: 0.891961818571429

00:34:56.416 --> 00:34:58.840 a little bit of a story here,

NOTE Confidence: 0.891961818571429

00:34:58.840 --> 00:35:00.880 so we've learned some about diagnosis

NOTE Confidence: 0.891961818571429

00:35:00.880 --> 00:35:02.240 and screening and prevention.

NOTE Confidence: 0.891961818571429

00:35:02.240 --> 00:35:03.940 We then learned about surgery

NOTE Confidence: 0.891961818571429

00:35:03.940 --> 00:35:05.640 for colon and rectal cancer,

NOTE Confidence: 0.891961818571429

00:35:05.640 --> 00:35:07.340 and now a doctor court.

NOTE Confidence: 0.891961818571429

00:35:07.340 --> 00:35:09.482 Manske is going to build on a

NOTE Confidence: 0.891961818571429

00:35:09.482 --> 00:35:11.847 little bit of what we just learned

NOTE Confidence: 0.891961818571429

00:35:11.847 --> 00:35:14.462 from Doctor Reddy on how we start

NOTE Confidence: 0.891961818571429

00:35:14.462 --> 00:35:16.897 treating a localized rectal cancer.

NOTE Confidence: 0.891961818571429

00:35:16.900 --> 00:35:17.980 Thanks Jeremy.

NOTE Confidence: 0.88527447

00:35:32.230 --> 00:35:34.462 Alright, there we go.

NOTE Confidence: 0.88527447

00:35:34.462 --> 00:35:36.136 Alright thank you.

NOTE Confidence: 0.88527447

00:35:36.140 --> 00:35:39.388 So I will try to pick up a

NOTE Confidence: 0.88527447

00:35:39.388 --> 00:35:42.385 little bit after Anne and

NOTE Confidence: 0.88527447

00:35:42.385 --> 00:35:45.145 somewhat before Doctor Reddy.

NOTE Confidence: 0.88527447

00:35:45.150 --> 00:35:47.094 I apologize that I don't have

NOTE Confidence: 0.88527447

00:35:47.094 --> 00:35:48.979 as fancy pictures as he does.

NOTE Confidence: 0.7965677

00:35:54.520 --> 00:35:56.776 Jeremy, you somehow got muted again.

NOTE Confidence: 0.90216666

00:36:01.610 --> 00:36:03.458 Can you hear me?

NOTE Confidence: 0.90216666

00:36:03.460 --> 00:36:06.300 Yes, OK, I'll try not to.

NOTE Confidence: 0.90216666

00:36:06.300 --> 00:36:09.030 So the the important thing about

NOTE Confidence: 0.90216666

00:36:09.125 --> 00:36:12.689 treating rectal cancer is that it

NOTE Confidence: 0.90216666

00:36:12.689 --> 00:36:15.065 really requires multi modality

NOTE Confidence: 0.90216666

00:36:15.165 --> 00:36:18.413 care and what that means is that

NOTE Confidence: 0.90216666

00:36:18.413 --> 00:36:21.343 patients who have rectal cancer are

NOTE Confidence: 0.90216666

00:36:21.343 --> 00:36:24.409 treated by more than one physician.

NOTE Confidence: 0.90216666

00:36:24.410 --> 00:36:26.970 They need a medical oncologist,

NOTE Confidence: 0.90216666

00:36:26.970 --> 00:36:29.346 and surgeon, Anna gastroenterologist

NOTE Confidence: 0.90216666

00:36:29.346 --> 00:36:31.128 and radiation oncologist.

NOTE Confidence: 0.90216666

00:36:31.130 --> 00:36:34.202 Ann and all of us work closely together

NOTE Confidence: 0.90216666

00:36:34.202 --> 00:36:37.629 to really map out what is the best plan

NOTE Confidence: 0.90216666

00:36:37.629 --> 00:36:39.933 going forward and individual patients

NOTE Confidence: 0.90216666

00:36:39.933 --> 00:36:43.275 have individual needs based on their

NOTE Confidence: 0.90216666

00:36:43.275 --> 00:36:47.036 tumor location and the stage of their tumor.

NOTE Confidence: 0.90216666

00:36:47.040 --> 00:36:51.603 And so we we discussed these cases as a

NOTE Confidence: 0.90216666

00:36:51.603 --> 00:36:56.490 team to really come up with the best plan.

NOTE Confidence: 0.90216666

00:36:56.490 --> 00:36:57.759 As a background,

NOTE Confidence: 0.90216666

00:36:57.759 --> 00:37:00.297 and I'll I'm sorry if some

NOTE Confidence: 0.90216666

00:37:00.297 --> 00:37:02.569 of this is repetitive,

NOTE Confidence: 0.90216666

00:37:02.570 --> 00:37:05.564 but there are about 45,000 cases

NOTE Confidence: 0.90216666

00:37:05.564 --> 00:37:08.502 per year rectal cancer in the

NOTE Confidence: 0.90216666

00:37:08.502 --> 00:37:11.040 US and representing about 20 to

NOTE Confidence: 0.90216666

00:37:11.040 --> 00:37:13.794 30% of colorectal cases total.

NOTE Confidence: 0.90216666

00:37:13.794 --> 00:37:16.699 And patients can present when

NOTE Confidence: 0.90216666

00:37:16.699 --> 00:37:19.456 symptomatic with either rectal bleeding

NOTE Confidence: 0.90216666

00:37:19.456 --> 00:37:22.582 or changes in their bowel habits.

NOTE Confidence: 0.90216666

00:37:22.590 --> 00:37:24.790 And as Doctor Reddy mentioned,

NOTE Confidence: 0.90216666

00:37:24.790 --> 00:37:26.401 or typical staging,

NOTE Confidence: 0.90216666

00:37:26.401 --> 00:37:29.086 when somebody is first diagnosed

NOTE Confidence: 0.90216666

00:37:29.086 --> 00:37:32.905 includes a see T of the chest and

NOTE Confidence: 0.90216666

00:37:32.905 --> 00:37:34.677 abdomen to understand whether

NOTE Confidence: 0.90216666

00:37:34.766 --> 00:37:37.580 there is any spread of the tumor.

NOTE Confidence: 0.90216666

00:37:37.580 --> 00:37:40.268 Are rectal cancers are a little

NOTE Confidence: 0.90216666

00:37:40.268 --> 00:37:42.544 bit different than colon cancer

NOTE Confidence: 0.90216666

00:37:42.544 --> 00:37:44.944 in that the distribution of spread

NOTE Confidence: 0.90216666

00:37:44.944 --> 00:37:47.908 can be a little bit different,

NOTE Confidence: 0.90216666

00:37:47.910 --> 00:37:51.502 and so it really is important that we

NOTE Confidence: 0.90216666

00:37:51.502 --> 00:37:56.200 look at the whole body before we get started.

NOTE Confidence: 0.90216666

00:37:56.200 --> 00:37:59.184 The MRI of the pelvis gives us that

NOTE Confidence: 0.90216666

00:37:59.184 --> 00:38:01.711 information as well as very detailed

NOTE Confidence: 0.90216666

00:38:01.711 --> 00:38:04.261 staging information in terms of the

NOTE Confidence: 0.90216666

00:38:04.345 --> 00:38:07.166 depth of the tumor and whether there's

NOTE Confidence: 0.90216666

00:38:07.166 --> 00:38:09.622 any lymph nodes that are involved.

NOTE Confidence: 0.90216666

00:38:09.622 --> 00:38:12.520 And on occasion we we might need

NOTE Confidence: 0.90216666

00:38:12.603 --> 00:38:14.991 to do an endoscopic ultrasound or

NOTE Confidence: 0.90216666

00:38:14.991 --> 00:38:18.204 even a PET scan if we feel like

NOTE Confidence: 0.90216666

00:38:18.204 --> 00:38:19.744 there are lymph nodes,

NOTE Confidence: 0.90216666

00:38:19.750 --> 00:38:22.156 perhaps that we don't quite understand

NOTE Confidence: 0.90216666

00:38:22.156 --> 00:38:24.620 and want to learn more about.

NOTE Confidence: 0.85563594

00:38:26.990 --> 00:38:30.430 And we know that there are certain risk

NOTE Confidence: 0.85563594

00:38:30.430 --> 00:38:33.427 factors when we are treating rectal

NOTE Confidence: 0.85563594

00:38:33.427 --> 00:38:35.992 cancer that predicts patients who

NOTE Confidence: 0.85563594

00:38:35.992 --> 00:38:39.068 might have relapse of their disease,

NOTE Confidence: 0.85563594

00:38:39.070 --> 00:38:43.214 either locally or elsewhere in the body.

NOTE Confidence: 0.85563594

00:38:43.220 --> 00:38:45.600 And that includes T4 disease.

NOTE Confidence: 0.85563594

00:38:45.600 --> 00:38:48.880 And So what that means is cancers that

NOTE Confidence: 0.85563594

00:38:48.880 --> 00:38:52.012 have grown through the full thickness of

NOTE Confidence: 0.85563594

00:38:52.012 --> 00:38:55.471 the rectal wall and are involving nearby

NOTE Confidence: 0.85563594

00:38:55.471 --> 00:38:59.545 structures and sitting near the ****** is

NOTE Confidence: 0.85563594

00:38:59.545 --> 00:39:05.080 the the bones in the back and the bladder.

NOTE Confidence: 0.85563594

00:39:05.080 --> 00:39:07.565 The vaginal wall in females

NOTE Confidence: 0.85563594

00:39:07.565 --> 00:39:10.050 can be there as well,

NOTE Confidence: 0.85563594

00:39:10.050 --> 00:39:14.010 so all of those are considerations.

NOTE Confidence: 0.85563594

00:39:14.010 --> 00:39:16.194 Patients that have multiple

NOTE Confidence: 0.85563594

00:39:16.194 --> 00:39:18.924 lymph nodes that are involved.

NOTE Confidence: 0.85563594

00:39:18.930 --> 00:39:21.570 Patients that have that fatty tissue

NOTE Confidence: 0.85563594

00:39:21.570 --> 00:39:23.770 around the ****** involved and

NOTE Confidence: 0.85563594

00:39:23.770 --> 00:39:26.850 then when you look at the tumor,

NOTE Confidence: 0.85563594

00:39:26.850 --> 00:39:29.930 if there is vascular invasion as well,

NOTE Confidence: 0.85563594

00:39:29.930 --> 00:39:32.570 is also a potential risk factor.

NOTE Confidence: 0.869963167692308

00:39:34.870 --> 00:39:39.998 And so for. All patients surgery is the

NOTE Confidence: 0.869963167692308

00:39:39.998 --> 00:39:44.009 cornerstone of curative therapy that,

NOTE Confidence: 0.869963167692308

00:39:44.010 --> 00:39:46.329 without surgical resection,

NOTE Confidence: 0.869963167692308

00:39:46.329 --> 00:39:51.740 it is difficult to eradicate the disease.

NOTE Confidence: 0.869963167692308

00:39:51.740 --> 00:39:53.732 And we know that patients that

NOTE Confidence: 0.869963167692308

00:39:53.732 --> 00:39:55.776 have tumors that are the full

NOTE Confidence: 0.869963167692308

00:39:55.776 --> 00:39:58.051 thickness of the bowel wall or have

NOTE Confidence: 0.869963167692308

00:39:58.051 --> 00:40:00.289 lymph node positive disease, Sir.

NOTE Confidence: 0.869963167692308

00:40:00.289 --> 00:40:03.561 Surgery alone may not be may not be

NOTE Confidence: 0.869963167692308

00:40:03.561 --> 00:40:06.457 caritive that we may still need to do

NOTE Confidence: 0.869963167692308

00:40:06.457 --> 00:40:09.496 more to help get rid of the disease.

NOTE Confidence: 0.869963167692308

00:40:09.500 --> 00:40:12.650 An early on we would follow surgery

NOTE Confidence: 0.869963167692308

00:40:12.650 --> 00:40:15.480 with aggregate therapy in the form

NOTE Confidence: 0.869963167692308

00:40:15.480 --> 00:40:17.810 of either radiation or chemotherapy.

NOTE Confidence: 0.869963167692308

00:40:17.810 --> 00:40:19.421 But around 2004,

NOTE Confidence: 0.869963167692308

00:40:19.421 --> 00:40:23.180 an important study came from Germany with

NOTE Confidence: 0.869963167692308

00:40:23.275 --> 00:40:26.978 data that was duplicated in other sites.

NOTE Confidence: 0.869963167692308

00:40:26.980 --> 00:40:29.595 Showing that chemotherapy and radiation

NOTE Confidence: 0.869963167692308

00:40:29.595 --> 00:40:33.148 together prior to surgery was able to

NOTE Confidence: 0.869963167692308

00:40:33.148 --> 00:40:35.710 improve the outcome in many patients.

NOTE Confidence: 0.869963167692308

00:40:35.710 --> 00:40:38.082 And it did so.

NOTE Confidence: 0.869963167692308

00:40:38.082 --> 00:40:40.454 Because it could downstage

NOTE Confidence: 0.869963167692308

00:40:40.454 --> 00:40:43.808 the tumors made them smaller.

NOTE Confidence: 0.869963167692308

00:40:43.810 --> 00:40:47.150 Could increase.

NOTE Confidence: 0.869963167692308

00:40:47.150 --> 00:40:49.330 The likelihood that the sphincter

NOTE Confidence: 0.869963167692308

00:40:49.330 --> 00:40:52.057 is spared so that patients don't

NOTE Confidence: 0.869963167692308

00:40:52.057 --> 00:40:54.417 require a permanent ostomy like

NOTE Confidence: 0.869963167692308

00:40:54.417 --> 00:40:56.305 Doctor Reddy had described.

NOTE Confidence: 0.869963167692308

00:40:56.310 --> 00:40:58.275 And increase the pathologic complete

NOTE Confidence: 0.869963167692308

00:40:58.275 --> 00:41:00.947 response rate and what that means is

NOTE Confidence: 0.869963167692308

00:41:00.947 --> 00:41:03.180 that patients when their tumor is taken

NOTE Confidence: 0.869963167692308

00:41:03.180 --> 00:41:06.025 out and you look at it under the microscope,

NOTE Confidence: 0.869963167692308

00:41:06.030 --> 00:41:07.760 you don't see any cancer.

NOTE Confidence: 0.869963167692308

00:41:07.760 --> 00:41:10.874 You don't see any cancer in the bowel wall.

NOTE Confidence: 0.869963167692308

00:41:10.880 --> 00:41:14.597 You don't see any cancer in the lymph nodes.

NOTE Confidence: 0.869963167692308

00:41:14.600 --> 00:41:17.288 And that is an effect of the treatment

NOTE Confidence: 0.869963167692308

00:41:17.288 --> 00:41:19.889 because we had biopsies before we started

NOTE Confidence: 0.869963167692308

00:41:19.889 --> 00:41:22.979 that showed us that the cancer was there.

NOTE Confidence: 0.869963167692308

00:41:22.980 --> 00:41:25.038 The other thing that we learned

NOTE Confidence: 0.869963167692308

00:41:25.038 --> 00:41:27.351 from this is that giving the

NOTE Confidence: 0.869963167692308

00:41:27.351 --> 00:41:29.955 treatment prior to the surgery was

NOTE Confidence: 0.869963167692308

00:41:29.955 --> 00:41:32.613 better tolerated than trying to do

NOTE Confidence: 0.869963167692308

00:41:32.613 --> 00:41:34.329 a similar treatment afterwards.

NOTE Confidence: 0.869963167692308

00:41:34.330 --> 00:41:37.048 And so starting at about 2004,

NOTE Confidence: 0.869963167692308

00:41:37.050 --> 00:41:39.320 this became our standard approach.

NOTE Confidence: 0.9023711

00:41:41.450 --> 00:41:44.065 The pathologic complete response rate

NOTE Confidence: 0.9023711

00:41:44.065 --> 00:41:47.180 is important because it can improve

NOTE Confidence: 0.9023711

00:41:47.180 --> 00:41:50.524 how patients do and there have been a

NOTE Confidence: 0.9023711

00:41:50.524 --> 00:41:53.729 number of studies and I picked out these

NOTE Confidence: 0.9023711

00:41:53.729 --> 00:41:58.050 two which came out about a decade ago.

NOTE Confidence: 0.9023711

00:41:58.050 --> 00:42:00.725 That showed that the pathologic

NOTE Confidence: 0.9023711

00:42:00.725 --> 00:42:03.400 complete response rate with chemotherapy

NOTE Confidence: 0.9023711

00:42:03.482 --> 00:42:05.572 and radiation is somewhere between

NOTE Confidence: 0.9023711

00:42:05.572 --> 00:42:10.170 15 and 30% depending on the study.

NOTE Confidence: 0.9023711

00:42:10.170 --> 00:42:13.691 And that the patients that have a

NOTE Confidence: 0.9023711

00:42:13.691 --> 00:42:16.509 pathologic complete response rate do better.

NOTE Confidence: 0.9023711

00:42:16.510 --> 00:42:20.020 Long term, they have less incidence

NOTE Confidence: 0.9023711

00:42:20.020 --> 00:42:21.775 of disease recurrence.

NOTE Confidence: 0.9023711

00:42:21.780 --> 00:42:24.572 And we even see that there is sort

NOTE Confidence: 0.9023711

00:42:24.572 --> 00:42:27.493 of this continuum that the the

NOTE Confidence: 0.9023711

00:42:27.493 --> 00:42:29.095 better your responses.

NOTE Confidence: 0.9023711

00:42:29.100 --> 00:42:30.840 To the pre treatment,

NOTE Confidence: 0.9023711

00:42:30.840 --> 00:42:32.145 then the improved,

NOTE Confidence: 0.9023711

00:42:32.150 --> 00:42:34.185 then the better they relapse

NOTE Confidence: 0.9023711

00:42:34.185 --> 00:42:36.220 rate the incidence of distant

NOTE Confidence: 0.9023711

00:42:36.299 --> 00:42:38.689 metastasis and even local relapse.

NOTE Confidence: 0.9023711

00:42:38.690 --> 00:42:41.406 All of that improves with a better

NOTE Confidence: 0.9023711

00:42:41.406 --> 00:42:44.358 response to the pre operative therapy.

NOTE Confidence: 0.8678842

00:42:46.900 --> 00:42:50.044 For for many patients our paradigm

NOTE Confidence: 0.8678842

00:42:50.044 --> 00:42:52.920 Now then says after surgery

NOTE Confidence: 0.8678842

00:42:52.920 --> 00:42:55.636 will give you chemotherapy.

NOTE Confidence: 0.8678842

00:42:55.640 --> 00:42:58.727 And we know that for patients that

NOTE Confidence: 0.8678842

00:42:58.727 --> 00:43:01.057 have nodal involvement or patients

NOTE Confidence: 0.8678842

00:43:01.057 --> 00:43:04.305 that have tumors that involve the full

NOTE Confidence: 0.8678842

00:43:04.305 --> 00:43:06.544 thickness of their ****** chemotherapy

NOTE Confidence: 0.8678842

00:43:06.544 --> 00:43:09.748 does reduce their risks of recurrence.

NOTE Confidence: 0.8678842

00:43:09.750 --> 00:43:11.745 It's really actually more controversial

NOTE Confidence: 0.8678842

00:43:11.745 --> 00:43:14.137 in those patients that have tumors

NOTE Confidence: 0.8678842

74

00:43:14.137 --> 00:43:16.129 that are not the full thickness,

NOTE Confidence: 0.8678842

00:43:16.130 --> 00:43:19.105 even if that's the case because of

NOTE Confidence: 0.8678842

00:43:19.105 --> 00:43:21.230 the chemotherapy and radiation.

NOTE Confidence: 0.8678842

00:43:21.230 --> 00:43:23.378 And then the other challenge with

NOTE Confidence: 0.8678842

00:43:23.378 --> 00:43:25.165 chemotherapy is that it's hard

NOTE Confidence: 0.8678842

00:43:25.165 --> 00:43:26.911 to give it after somebody has

NOTE Confidence: 0.8678842

00:43:26.911 --> 00:43:28.758 already had a lot of therapy.

NOTE Confidence: 0.8678842

00:43:28.760 --> 00:43:31.672 It can be hard to give the the

NOTE Confidence: 0.8678842

00:43:31.672 --> 00:43:33.360 standard course because of.

NOTE Confidence: 0.8678842

00:43:33.360 --> 00:43:35.800 Of toxicity and delayed recovery

NOTE Confidence: 0.8678842

00:43:35.800 --> 00:43:37.752 from their prior treatments.

NOTE Confidence: 0.8678842

00:43:37.760 --> 00:43:40.400 Because blood counts are slower

NOTE Confidence: 0.8678842

00:43:40.400 --> 00:43:43.876 to recover and so only about 65

NOTE Confidence: 0.8678842

00:43:43.876 --> 00:43:47.145 to 70% of patients that we plan

NOTE Confidence: 0.8678842

00:43:47.145 --> 00:43:49.680 to give chemo agent chemotherapy

NOTE Confidence: 0.8678842

00:43:49.769 --> 00:43:52.169 to complete that treatment.

NOTE Confidence: 0.8678842

00:43:52.170 --> 00:43:52.889 Nonetheless,

NOTE Confidence: 0.8678842

00:43:52.889 --> 00:43:55.765 giving Chemoradiation prior to

NOTE Confidence: 0.8678842

00:43:55.765 --> 00:43:59.360 surgery and then agement chemotherapy

NOTE Confidence: 0.8678842

00:43:59.454 --> 00:44:02.739 afterwards is currently our standard.

NOTE Confidence: 0.8678842

00:44:02.740 --> 00:44:05.518 And So what has the question

NOTE Confidence: 0.8678842

00:44:05.518 --> 00:44:07.790 that has come up is,

NOTE Confidence: 0.8678842

00:44:07.790 --> 00:44:10.364 does reversing the order of our

NOTE Confidence: 0.8678842

00:44:10.364 --> 00:44:13.628 approach have an impact if we gave

NOTE Confidence: 0.8678842

00:44:13.628 --> 00:44:15.588 chemotherapy and chemo radiation?

NOTE Confidence: 0.8678842

00:44:15.590 --> 00:44:18.803 If you did all of that treatment

NOTE Confidence: 0.8678842

00:44:18.803 --> 00:44:21.746 prior to surgery, could we improve?

NOTE Confidence: 0.8678842

00:44:21.746 --> 00:44:23.834 How patients do an?

NOTE Confidence: 0.8678842

00:44:23.840 --> 00:44:25.945 There's a lot of potential

NOTE Confidence: 0.8678842

00:44:25.945 --> 00:44:27.629 advantages to doing that.

NOTE Confidence: 0.8678842

00:44:27.630 --> 00:44:30.066 One is that we could increase

NOTE Confidence: 0.8678842

00:44:30.066 --> 00:44:32.842 the number of patients that have

NOTE Confidence: 0.8678842

00:44:32.842 --> 00:44:34.978 a pathologic complete response.

NOTE Confidence: 0.8678842

00:44:34.980 --> 00:44:37.446 And we know that doing that

NOTE Confidence: 0.8678842

00:44:37.446 --> 00:44:39.090 can improve the outcome.

NOTE Confidence: 0.8678842

00:44:39.090 --> 00:44:41.124 We know that we can reduce

NOTE Confidence: 0.8678842

00:44:41.124 --> 00:44:43.040 the stage of the tumor,

NOTE Confidence: 0.8678842

00:44:43.040 --> 00:44:44.830 so even following that continuum,

NOTE Confidence: 0.8678842

00:44:44.830 --> 00:44:48.070 even if you can't make it go away completely,

NOTE Confidence: 0.8678842

00:44:48.070 --> 00:44:51.318 maybe you can make it less involved.

NOTE Confidence: 0.8678842

00:44:51.320 --> 00:44:55.590 It improves the potential to spare the

NOTE Confidence: 0.8678842

00:44:55.590 --> 00:45:00.150 sphincter and not have a permanent ostomy.

NOTE Confidence: 0.8678842

00:45:00.150 --> 00:45:02.822 And then a shorter time to stoma closure

NOTE Confidence: 0.8678842

00:45:02.822 --> 00:45:05.129 and this you know many patients,

NOTE Confidence: 0.8678842

00:45:05.130 --> 00:45:06.910 even if they're not destined

NOTE Confidence: 0.8678842

00:45:06.910 --> 00:45:08.690 to have a permanent ostomy.

NOTE Confidence: 0.8678842

00:45:08.690 --> 00:45:10.880 They sometimes have a temporary

NOTE Confidence: 0.8678842

00:45:10.880 --> 00:45:13.730 ostomy to allow their wounds to heal.

NOTE Confidence: 0.8678842

00:45:13.730 --> 00:45:16.341 And we tend not to let Doctor

NOTE Confidence: 0.8678842

00:45:16.341 --> 00:45:18.590 Reddy close that until after

NOTE Confidence: 0.8678842

00:45:18.590 --> 00:45:21.200 we're done with our chemotherapy.

NOTE Confidence: 0.8678842

00:45:21.200 --> 00:45:23.942 And so if we give our

NOTE Confidence: 0.8678842

00:45:23.942 --> 00:45:24.856 chemotherapy beforehand.

NOTE Confidence: 0.8678842

00:45:24.860 --> 00:45:27.793 It's a shorter period of time that

NOTE Confidence: 0.8678842

00:45:27.793 --> 00:45:30.645 someone would have that stuff by maybe

NOTE Confidence: 0.8678842

00:45:30.645 --> 00:45:33.595 only six weeks as opposed to five

NOTE Confidence: 0.8678842

00:45:33.595 --> 00:45:36.555 months with the chemotherapy beforehand.

NOTE Confidence: 0.8678842

00:45:36.560 --> 00:45:38.428 And giving the chemotherapy

NOTE Confidence: 0.8678842

00:45:38.428 --> 00:45:41.940 before is is a little bit easier.

NOTE Confidence: 0.8678842

00:45:41.940 --> 00:45:44.380 There's a higher completion rate.

NOTE Confidence: 0.8678842

00:45:44.380 --> 00:45:46.496 There's a lower toxicity.

NOTE Confidence: 0.8678842

00:45:46.496 --> 00:45:50.975 And so we can get through and take that

NOTE Confidence: 0.8678842

00:45:50.975 --> 00:45:55.145 65 to 70% and really get it closer to 92100%.

NOTE Confidence: 0.8678842

00:45:55.150 --> 00:45:57.910 Getting through their treatments.

NOTE Confidence: 0.8678842

00:45:57.910 --> 00:46:00.565 And then really turning turning

NOTE Confidence: 0.8678842

00:46:00.565 --> 00:46:02.158 things upside down,

NOTE Confidence: 0.8678842

00:46:02.160 --> 00:46:06.354 it opens up the potential for

NOTE Confidence: 0.8678842

00:46:06.354 --> 00:46:09.150 a non operative approach.

NOTE Confidence: 0.8678842

00:46:09.150 --> 00:46:12.954 And so a non operative approach

NOTE Confidence: 0.8678842

00:46:12.954 --> 00:46:16.754 or watchful waiting is an area

NOTE Confidence: 0.8678842

00:46:16.754 --> 00:46:19.604 that is still under under.

NOTE Confidence: 0.8508589

00:46:22.270 --> 00:46:25.114 Under development, I'll say that it

NOTE Confidence: 0.8508589

00:46:25.114 --> 00:46:27.760 requires a complete clinical response,

NOTE Confidence: 0.8508589

00:46:27.760 --> 00:46:30.748 so not a pathologic complete response,

NOTE Confidence: 0.8508589

00:46:30.750 --> 00:46:34.194 but now a clinical complete response

NOTE Confidence: 0.8508589

00:46:34.194 --> 00:46:37.048 which is determined through digital

NOTE Confidence: 0.8508589

00:46:37.048 --> 00:46:39.814 exams and OSCA P's and Mris.

NOTE Confidence: 0.8508589

00:46:39.820 --> 00:46:43.612 And it requires aggressive

NOTE Confidence: 0.8508589

00:46:43.612 --> 00:46:45.508 vigilant surveillance.

NOTE Confidence: 0.8508589

00:46:45.510 --> 00:46:46.653 With this screening,

NOTE Confidence: 0.8508589

00:46:46.653 --> 00:46:49.320 every three months in the first year,

NOTE Confidence: 0.8508589

00:46:49.320 --> 00:46:51.987 every four months in the second year,

NOTE Confidence: 0.8508589

00:46:51.990 --> 00:46:54.270 and then even out two years,

NOTE Confidence: 0.8508589

00:46:54.270 --> 00:46:55.419 three through 5.

NOTE Confidence: 0.9018218

00:46:57.820 --> 00:47:01.414 And there's been a fairly extensive

NOTE Confidence: 0.9018218

00:47:01.414 --> 00:47:03.810 international experience with this.

NOTE Confidence: 0.9018218

00:47:03.810 --> 00:47:07.360 The first papers actually were

NOTE Confidence: 0.9018218

00:47:07.360 --> 00:47:10.910 published back in in 2004.

NOTE Confidence: 0.9018218

00:47:10.910 --> 00:47:13.490 But really, the experience has

NOTE Confidence: 0.9018218

00:47:13.490 --> 00:47:16.070 grown over the past decade.

NOTE Confidence: 0.9018218

00:47:16.070 --> 00:47:18.415 And shows that in patients that have

NOTE Confidence: 0.9018218

00:47:18.415 --> 00:47:20.669 had a clinical complete response,

NOTE Confidence: 0.9018218

00:47:20.670 --> 00:47:22.526 the local regrowth rate.

NOTE Confidence: 0.9018218

00:47:22.526 --> 00:47:25.310 So the chances that the tumor

NOTE Confidence: 0.9018218

00:47:25.397 --> 00:47:27.887 will grow back in the ******.

NOTE Confidence: 0.9018218

00:47:27.890 --> 00:47:32.104 Is about 25% overall with 65% of those

NOTE Confidence: 0.9018218

00:47:32.104 --> 00:47:35.933 cases happening within a year of your

NOTE Confidence: 0.9018218

00:47:35.933 --> 00:47:40.718 treatments and 90% within two years.

NOTE Confidence: 0.9018218

00:47:40.720 --> 00:47:45.226 If the tumor were to return.

NOTE Confidence: 0.9018218

00:47:45.230 --> 00:47:48.380 Then those patients can go

NOTE Confidence: 0.9018218

00:47:48.380 --> 00:47:52.430 onto a surgery at that point.

NOTE Confidence: 0.9018218

00:47:52.430 --> 00:47:55.130 And So what that ultimately gives

NOTE Confidence: 0.9018218

00:47:55.130 --> 00:47:58.326 us is that about 80% of patients

NOTE Confidence: 0.9018218

00:47:58.326 --> 00:48:01.434 can have a surgery that preserves

NOTE Confidence: 0.9018218

00:48:01.434 --> 00:48:03.955 this sphincter so that they

NOTE Confidence: 0.9018218

00:48:03.955 --> 00:48:06.275 don't have a temporary ostomy.

NOTE Confidence: 0.9018218

00:48:06.280 --> 00:48:10.303 But even if we have to do a surgery,

NOTE Confidence: 0.9018218

00:48:10.310 --> 00:48:13.352 eventually we are able to control

NOTE Confidence: 0.9018218

00:48:13.352 --> 00:48:16.951 the risk of recurrence or the control

NOTE Confidence: 0.9018218

00:48:16.951 --> 00:48:19.909 that disease locally in about 90%.

NOTE Confidence: 0.9018218

00:48:19.910 --> 00:48:22.502 But we also know that about

NOTE Confidence: 0.9018218

00:48:22.502 --> 00:48:25.960 10 to 15% of patients do go on

NOTE Confidence: 0.9018218

00:48:25.960 --> 00:48:27.688 to develop metastatic disease.

NOTE Confidence: 0.9018218

00:48:27.690 --> 00:48:30.198 And what is interesting is that

NOTE Confidence: 0.9018218

00:48:30.198 --> 00:48:32.518 the majority of those patients

NOTE Confidence: 0.9018218

00:48:32.518 --> 00:48:34.790 who get metastatic disease.

NOTE Confidence: 0.9018218

00:48:34.790 --> 00:48:37.150 Also get recurrence locali.

NOTE Confidence: 0.87166685

00:48:40.150 --> 00:48:42.706 And so there are some limitations

NOTE Confidence: 0.87166685

00:48:42.706 --> 00:48:45.334 and this non operative approach is

NOTE Confidence: 0.87166685

00:48:45.334 --> 00:48:47.848 not really ready for prime time.

NOTE Confidence: 0.87166685

00:48:47.850 --> 00:48:50.954 I think that the concern is that when

NOTE Confidence: 0.87166685

00:48:50.954 --> 00:48:54.270 you look at the data that's available,

NOTE Confidence: 0.87166685

00:48:54.270 --> 00:48:57.329 the majority of the patients had a

NOTE Confidence: 0.87166685

00:48:57.329 --> 00:48:59.839 lower clinical stage to begin with.

NOTE Confidence: 0.87166685

00:48:59.840 --> 00:49:01.975 These were patients that had

NOTE Confidence: 0.87166685

00:49:01.975 --> 00:49:04.168 low nodal involvement, they had,

NOTE Confidence: 0.87166685

00:49:04.168 --> 00:49:07.346 they did not have full thickness tumors

NOTE Confidence: 0.87166685

00:49:07.346 --> 00:49:10.638 and so may already be speaking to a.

NOTE Confidence: 0.87166685

00:49:10.640 --> 00:49:13.304 A more favorable biology.

NOTE Confidence: 0.87166685

00:49:13.304 --> 00:49:15.642 Um, this approach definitely requires

NOTE Confidence: 0.87166685

00:49:15.642 --> 00:49:18.150 high vigilance in in follow up,

NOTE Confidence: 0.87166685

00:49:18.150 --> 00:49:21.110 and so you know it does have impact

NOTE Confidence: 0.87166685

00:49:21.110 --> 00:49:23.307 on patients who have difficulty

NOTE Confidence: 0.87166685

00:49:23.307 --> 00:49:26.506 getting their care on a regular basis.

NOTE Confidence: 0.87166685

00:49:26.510 --> 00:49:29.702 It has expense costs when you're getting

NOTE Confidence: 0.87166685

00:49:29.702 --> 00:49:32.970 all of these procedures and tests.

NOTE Confidence: 0.87166685

00:49:32.970 --> 00:49:35.917 And at the end of the day,

NOTE Confidence: 0.87166685

00:49:35.920 --> 00:49:38.320 our our gold standard is prospective

NOTE Confidence: 0.87166685

00:49:38.320 --> 00:49:41.786 data and there has yet to be a study that

NOTE Confidence: 0.87166685

00:49:41.786 --> 00:49:44.262 is comparing a non operative approach

NOTE Confidence: 0.87166685

00:49:44.262 --> 00:49:47.277 to an operative approach prospectively.

NOTE Confidence: 0.87166685

00:49:47.280 --> 00:49:49.268 And because we have.

NOTE Confidence: 0.87166685

00:49:49.268 --> 00:49:51.753 High concern of the risks

NOTE Confidence: 0.87166685

00:49:51.753 --> 00:49:54.689 of tumor reccuring locali.

NOTE Confidence: 0.87166685

00:49:54.690 --> 00:49:58.122 You know we haven't adopted this

NOTE Confidence: 0.87166685

00:49:58.122 --> 00:50:00.410 as an approach across.

NOTE Confidence: 0.87166685

00:50:00.410 --> 00:50:01.814 Off the board.

NOTE Confidence: 0.87166685

00:50:01.814 --> 00:50:04.154 Certainly there are patients where

NOTE Confidence: 0.87166685

00:50:04.154 --> 00:50:07.237 taking a non operative approach would

NOTE Confidence: 0.87166685

00:50:07.237 --> 00:50:10.333 be would be reasonable to consider.

NOTE Confidence: 0.87166685

00:50:10.340 --> 00:50:12.468 Based on the stage of their tumor,

NOTE Confidence: 0.87166685

00:50:12.470 --> 00:50:13.122 and again,

NOTE Confidence: 0.87166685

00:50:13.122 --> 00:50:15.404 that is the value of having multiple

NOTE Confidence: 0.87166685

00:50:15.404 --> 00:50:16.975 physicians contributing to the care

NOTE Confidence: 0.87166685

00:50:16.975 --> 00:50:19.159 to figure out the best thing to do.

NOTE Confidence: 0.88256997

00:50:21.830 --> 00:50:24.674 So just some future considerations in

NOTE Confidence: 0.88256997

00:50:24.674 --> 00:50:27.840 terms of management of multi modality,

NOTE Confidence: 0.88256997

00:50:27.840 --> 00:50:30.715 management of rectal cancer or

NOTE Confidence: 0.88256997

00:50:30.715 --> 00:50:33.590 questions like the optimal radiation

NOTE Confidence: 0.88256997

00:50:33.680 --> 00:50:36.802 or our standard approach is what we

NOTE Confidence: 0.88256997

00:50:36.802 --> 00:50:39.621 call long course with a combination

NOTE Confidence: 0.88256997

00:50:39.621 --> 00:50:42.399 of radiation over 5 weeks with

NOTE Confidence: 0.88256997

00:50:42.399 --> 00:50:44.866 five a few based chemotherapy.

NOTE Confidence: 0.88256997

00:50:44.866 --> 00:50:47.860 There is information or about short

NOTE Confidence: 0.88256997

00:50:47.945 --> 00:50:51.214 course meeting only 5 days of radiation,

NOTE Confidence: 0.88256997

00:50:51.220 --> 00:50:54.293 but at much higher doses than we

NOTE Confidence: 0.88256997

00:50:54.293 --> 00:50:57.470 might use on the longer course.

NOTE Confidence: 0.88256997

00:50:57.470 --> 00:50:59.372 And then some studies that are

NOTE Confidence: 0.88256997

00:50:59.372 --> 00:51:01.770 looking at not using radiation at all,

NOTE Confidence: 0.88256997

00:51:01.770 --> 00:51:04.770 and one example of that is

NOTE Confidence: 0.88256997

00:51:04.770 --> 00:51:06.270 the prospect trial.

NOTE Confidence: 0.88256997

00:51:06.270 --> 00:51:09.110 Which has completed enrolling patients

NOTE Confidence: 0.88256997

00:51:09.110 --> 00:51:12.490 and we're waiting for the data,

NOTE Confidence: 0.88256997

00:51:12.490 --> 00:51:16.336 but using the response to chemotherapy

NOTE Confidence: 0.88256997

00:51:16.336 --> 00:51:20.280 as a decision point of whether

NOTE Confidence: 0.88256997

00:51:20.280 --> 00:51:23.440 radiation is required or not.

NOTE Confidence: 0.88256997

00:51:23.440 --> 00:51:26.086 We're also still trying to figure out

NOTE Confidence: 0.88256997

00:51:26.086 --> 00:51:27.829 the optimal chemotherapy there is.

NOTE Confidence: 0.88256997

00:51:27.830 --> 00:51:30.320 Does giving all of that treatment

NOTE Confidence: 0.88256997

00:51:30.320 --> 00:51:32.875 upfront over treat patients who may

NOTE Confidence: 0.88256997

00:51:32.875 --> 00:51:34.920 not really need that chemotherapy?

NOTE Confidence: 0.88256997

00:51:34.920 --> 00:51:36.500 And in patients that do,

NOTE Confidence: 0.88256997

00:51:36.500 --> 00:51:38.080 what is the right chemotherapy?

NOTE Confidence: 0.88256997

00:51:38.080 --> 00:51:40.110 Should it be a standard approach like

NOTE Confidence: 0.88256997

00:51:40.110 --> 00:51:42.112 5 if you and oxaliplatin shouldn't

NOTE Confidence: 0.88256997

00:51:42.112 --> 00:51:44.943 be a 3 drug approach for which there

NOTE Confidence: 0.88256997

00:51:44.943 --> 00:51:47.263 is some data as well and we don't

NOTE Confidence: 0.88256997

00:51:47.263 --> 00:51:49.970 really know the answers to that.

NOTE Confidence: 0.88256997

00:51:49.970 --> 00:51:51.806 And then also whether there is

NOTE Confidence: 0.88256997

00:51:51.806 --> 00:51:54.031 a role for biologic therapy or

NOTE Confidence: 0.88256997

00:51:54.031 --> 00:51:55.907 immunotherapy within this paradigm.

NOTE Confidence: 0.88256997

00:51:55.910 --> 00:51:58.718 And there are studies that are

NOTE Confidence: 0.88256997

00:51:58.718 --> 00:52:01.170 looking at that as well.

NOTE Confidence: 0.88256997

00:52:01.170 --> 00:52:04.836 What is GI002 which has looked

NOTE Confidence: 0.88256997

00:52:04.836 --> 00:52:09.650 at at both of those questions?

NOTE Confidence: 0.88256997

00:52:09.650 --> 00:52:11.990 And then also the optimal surgery,

NOTE Confidence: 0.88256997

00:52:11.990 --> 00:52:14.720 not just the concept of watchful waiting,

NOTE Confidence: 0.88256997

00:52:14.720 --> 00:52:17.198 but also the optimal interval between

NOTE Confidence: 0.88256997

00:52:17.198 --> 00:52:19.342 when you finish your treatment

NOTE Confidence: 0.88256997

00:52:19.342 --> 00:52:21.820 and finish your radiation and when

NOTE Confidence: 0.88256997

00:52:21.820 --> 00:52:24.778 you should go on to surgery or our

NOTE Confidence: 0.88256997

00:52:24.778 --> 00:52:26.817 senses that the longer we wait,

NOTE Confidence: 0.88256997

00:52:26.817 --> 00:52:29.199 perhaps the better the the response

NOTE Confidence: 0.88256997

00:52:29.199 --> 00:52:31.100 in the outcome might be.

NOTE Confidence: 0.88256997

00:52:31.100 --> 00:52:33.543 And so Doctor Reddy may say to

NOTE Confidence: 0.88256997

00:52:33.543 --> 00:52:35.780 you you finished your treatment.

NOTE Confidence: 0.88256997

00:52:35.780 --> 00:52:38.741 But I want to wait eight weeks

NOTE Confidence: 0.88256997

00:52:38.741 --> 00:52:41.579 10 weeks before I do my surgery.

NOTE Confidence: 0.88256997

00:52:41.580 --> 00:52:43.953 To make sure that we are experiencing

NOTE Confidence: 0.88256997

00:52:43.953 --> 00:52:44.970 the optimal benefit.

NOTE Confidence: 0.8667352

00:52:47.540 --> 00:52:49.850 So kind of putting this all together

NOTE Confidence: 0.8667352

00:52:49.850 --> 00:52:52.561 in terms of how we think about patients

NOTE Confidence: 0.8667352

00:52:52.561 --> 00:52:55.588 when they come to us with rectal cancer,

NOTE Confidence: 0.8667352

00:52:55.590 --> 00:52:58.350 the first step is our staging.

NOTE Confidence: 0.8667352

00:52:58.350 --> 00:53:02.150 And if it looks like it's a stage one cancer,

NOTE Confidence: 0.8667352

00:53:02.150 --> 00:53:05.426 we would recommend going right to surgery.

NOTE Confidence: 0.8667352

00:53:05.430 --> 00:53:09.318 And then seeing what happens afterwards

NOTE Confidence: 0.8667352

00:53:09.318 --> 00:53:12.687 and deciding whether patients need

NOTE Confidence: 0.8667352

00:53:12.687 --> 00:53:16.067 chemotherapy alone or whether they

NOTE Confidence: 0.8667352

00:53:16.067 --> 00:53:18.771 need chemotherapy and radiation.

NOTE Confidence: 0.8667352

00:53:18.780 --> 00:53:24.468 If patients have stage two or higher disease.

NOTE Confidence: 0.8667352

00:53:24.470 --> 00:53:28.292 Then we do consider a neoadjuvant

NOTE Confidence: 0.8667352

00:53:28.292 --> 00:53:30.840 approach giving chemotherapy followed

NOTE Confidence: 0.8667352

00:53:30.936 --> 00:53:33.628 by chemotherapy and radiation,

NOTE Confidence: 0.8667352

00:53:33.630 --> 00:53:36.238 and then surgery afterwards.

NOTE Confidence: 0.8667352

00:53:36.238 --> 00:53:40.150 And so this is really our.

NOTE Confidence: 0.8667352

00:53:40.150 --> 00:53:42.240 General paradigm that we are

NOTE Confidence: 0.8667352

00:53:42.240 --> 00:53:43.912 thinking about patients now,

NOTE Confidence: 0.8667352

00:53:43.920 --> 00:53:46.853 but there's clearly a lot of information

NOTE Confidence: 0.8667352

00:53:46.853 --> 00:53:49.415 that we're waiting to come through

NOTE Confidence: 0.8667352

00:53:49.415 --> 00:53:51.460 to really refine our approach.

NOTE Confidence: 0.89228165

00:53:55.030 --> 00:53:56.710 That's all I got, thank you.

NOTE Confidence: 0.84875154

00:53:57.540 --> 00:53:59.085 Thanks Doctor Krzeminski,

NOTE Confidence: 0.84875154

00:53:59.085 --> 00:54:01.660 that's great so we have

NOTE Confidence: 0.84875154

00:54:01.660 --> 00:54:03.920 one final presentation.

NOTE Confidence: 0.84875154

00:54:03.920 --> 00:54:06.572 And Jeremy, if you can stop

NOTE Confidence: 0.84875154

00:54:06.572 --> 00:54:09.110 share on your side, that's great.

NOTE Confidence: 0.84875154

00:54:09.110 --> 00:54:11.805 We are going to have a doctor

NOTE Confidence: 0.84875154

00:54:11.805 --> 00:54:13.932 Cicchini help finish things up

NOTE Confidence: 0.84875154

00:54:13.932 --> 00:54:16.422 here and talk some about treatment

NOTE Confidence: 0.84875154

00:54:16.502 --> 00:54:18.950 for metastatic colorectal cancer.

NOTE Confidence: 0.7908063

00:54:27.350 --> 00:54:33.281 At the stop shared a. Unmute, hold on.

NOTE Confidence: 0.7908063

00:54:33.281 --> 00:54:35.368 Alright. OK, thank you.

NOTE Confidence: 0.7908063

00:54:35.368 --> 00:54:37.098 Thank you for the opportunity.

NOTE Confidence: 0.7908063

00:54:37.100 --> 00:54:39.428 So I'm going to talk as doctors just

NOTE Confidence: 0.7908063

00:54:39.428 --> 00:54:41.173 mentioned about treatment for metastatic

NOTE Confidence: 0.7908063

00:54:41.173 --> 00:54:43.387 colorectal and how we personalize some

NOTE Confidence: 0.7908063

00:54:43.387 --> 00:54:46.021 of those treatments for patients living

NOTE Confidence: 0.7908063

00:54:46.021 --> 00:54:47.785 with metastatic colorectal cancer.

NOTE Confidence: 0.7908063

00:54:47.790 --> 00:54:50.298 These are my disclosures.

NOTE Confidence: 0.7908063

00:54:50.300 --> 00:54:52.310 So first I'll talk about the

NOTE Confidence: 0.7908063

00:54:52.310 --> 00:54:53.968 standard of care, cytotoxic chemo,

NOTE Confidence: 0.7908063

00:54:53.968 --> 00:54:55.912 the standard type of chemotherapy that

NOTE Confidence: 0.7908063

00:54:55.912 --> 00:54:58.029 we use to treat colorectal cancer.

NOTE Confidence: 0.7908063

00:54:58.030 --> 00:54:59.705 Then I'll talk about personalized

NOTE Confidence: 0.7908063

00:54:59.705 --> 00:55:01.045 medicine for colorectal cancer.

NOTE Confidence: 0.7908063

00:55:01.050 --> 00:55:02.730 Some of the targeted treatments,

NOTE Confidence: 0.7908063

00:55:02.730 --> 00:55:04.405 and I'll close pop talking

NOTE Confidence: 0.7908063

00:55:04.405 --> 00:55:05.075 about immunotherapy,

NOTE Confidence: 0.7908063

00:55:05.080 --> 00:55:08.314 which is of course a hot topic.

NOTE Confidence: 0.7908063

00:55:08.320 --> 00:55:11.968 So we talked a little bit about this,

NOTE Confidence: 0.7908063

00:55:11.970 --> 00:55:15.602 but if we think about a normal epithelium

NOTE Confidence: 0.7908063

00:55:15.602 --> 00:55:18.350 and normal lining of the colon,

NOTE Confidence: 0.7908063

00:55:18.350 --> 00:55:20.755 polyps develop small adenomas at

NOTE Confidence: 0.7908063

00:55:20.755 --> 00:55:24.432 the top of these polyps and they

NOTE Confidence: 0.7908063

00:55:24.432 --> 00:55:27.392 progress along become larger and

NOTE Confidence: 0.7908063

00:55:27.392 --> 00:55:29.520 potentially become invasive in.

NOTE Confidence: 0.7908063

00:55:29.520 --> 00:55:31.660 Become cancer at that point.

NOTE Confidence: 0.7908063

00:55:31.660 --> 00:55:32.996 I can potentially spread,

NOTE Confidence: 0.7908063

00:55:32.996 --> 00:55:34.666 but really there's two main

NOTE Confidence: 0.7908063

00:55:34.666 --> 00:55:35.700 pathways highlighted.

NOTE Confidence: 0.7908063

00:55:35.700 --> 00:55:37.807 These Red Arrows that cancer sort of

NOTE Confidence: 0.7908063

00:55:37.807 --> 00:55:39.863 kicks off for colorectal cancer either

NOTE Confidence: 0.7908063

00:55:39.863 --> 00:55:42.397 goes down this pathway that we call

NOTE Confidence: 0.7908063

00:55:42.458 --> 00:55:44.510 microsatellite instability or MSI,

NOTE Confidence: 0.7908063

00:55:44.510 --> 00:55:47.247 or it goes down this other pathway

NOTE Confidence: 0.7908063

00:55:47.247 --> 00:55:49.174 with specific genes mutated and

NOTE Confidence: 0.7908063

00:55:49.174 --> 00:55:51.554 will just say the APC pathway so

NOTE Confidence: 0.7908063

00:55:51.554 --> 00:55:54.095 it really starts in one of these

NOTE Confidence: 0.7908063

00:55:54.095 --> 00:55:56.290 two pathways and as as significant

NOTE Confidence: 0.7908063

00:55:56.290 --> 00:55:58.215 treatment ramifications later on for

NOTE Confidence: 0.7908063

00:55:58.215 --> 00:56:00.720 for what kind of systemic chemo or

NOTE Confidence: 0.7908063

00:56:00.720 --> 00:56:03.730 immunotherapy is we can give our patients?

NOTE Confidence: 0.7908063

00:56:03.730 --> 00:56:05.786 So it starts off along one of these

NOTE Confidence: 0.7908063

00:56:05.786 --> 00:56:07.394 pathways and then additional mutations

NOTE Confidence: 0.7908063

00:56:07.394 --> 00:56:09.464 come are required along the way,

NOTE Confidence: 0.7908063

00:56:09.470 --> 00:56:11.878 which I'll talk about in the coming slides.

NOTE Confidence: 0.7908063

00:56:11.880 --> 00:56:14.296 I'll highlight a couple K Rasen B rap.

NOTE Confidence: 0.8563128

00:56:18.070 --> 00:56:19.380 There's also a big difference

NOTE Confidence: 0.8563128

00:56:19.380 --> 00:56:21.191 between the left side of the colon

NOTE Confidence: 0.8563128

00:56:21.191 --> 00:56:22.752 and the right side of the colon

NOTE Confidence: 0.8563128

00:56:22.752 --> 00:56:24.351 that we've only relatively, well.

NOTE Confidence: 0.8563128

00:56:24.351 --> 00:56:26.359 We've known there's quite a quite a bit

NOTE Confidence: 0.8563128

00:56:26.359 --> 00:56:28.260 of a difference between the left and

NOTE Confidence: 0.8563128

00:56:28.260 --> 00:56:30.378 the right side of home for some time,

NOTE Confidence: 0.8563128

00:56:30.380 --> 00:56:32.756 but we've only realized it has

NOTE Confidence: 0.8563128

00:56:32.756 --> 00:56:33.944 significant treatment ramifications

NOTE Confidence: 0.8563128

00:56:33.944 --> 00:56:36.380 for maybe the last three to five years.

NOTE Confidence: 0.8563128

00:56:36.380 --> 00:56:38.746 We've known for some time that right

NOTE Confidence: 0.8563128

00:56:38.746 --> 00:56:40.912 side of right sided colon cancer

NOTE Confidence: 0.8563128

00:56:40.912 --> 00:56:43.857 tends to be more aggressive and it has

NOTE Confidence: 0.8563128

00:56:43.857 --> 00:56:46.412 certain and we've now realized that it

NOTE Confidence: 0.8563128

00:56:46.412 --> 00:56:48.353 has certain molecular differences of

NOTE Confidence: 0.8563128

00:56:48.353 --> 00:56:50.358 certain mutations that are different

NOTE Confidence: 0.8563128

00:56:50.358 --> 00:56:52.536 than the left side of the colon.

NOTE Confidence: 0.8563128

00:56:52.540 --> 00:56:55.150 Certain epigenetic changes which mean

NOTE Confidence: 0.8563128

00:56:55.150 --> 00:56:58.380 methylations or changes on top of DNA.

NOTE Confidence: 0.8563128

00:56:58.380 --> 00:57:00.382 Then there are differences like it's more

NOTE Confidence: 0.8563128

00:57:00.382 --> 00:57:02.182 common in women and there's different

NOTE Confidence: 0.8563128

00:57:02.182 --> 00:57:04.660 types of polyps in different types of tumors.

NOTE Confidence: 0.8563128

00:57:04.660 --> 00:57:07.044 When we look at them under the microscope,

NOTE Confidence: 0.8563128

00:57:07.050 --> 00:57:07.944 they behave differently.

NOTE Confidence: 0.8563128

00:57:07.944 --> 00:57:08.242 Why?

NOTE Confidence: 0.8563128

00:57:08.242 --> 00:57:09.434 Why would that be?

NOTE Confidence: 0.8563128

00:57:09.440 --> 00:57:10.516 It's all one colon.

NOTE Confidence: 0.8563128

00:57:10.516 --> 00:57:11.861 It actually went during development

NOTE Confidence: 0.8563128

00:57:11.861 --> 00:57:13.503 comes from 2/2 completely different

NOTE Confidence: 0.8563128

00:57:13.503 --> 00:57:14.827 types of embryological tissue,

NOTE Confidence: 0.8563128

00:57:14.830 --> 00:57:15.512 developmental tissue.

NOTE Confidence: 0.8563128

00:57:15.512 --> 00:57:18.240 The midgut is what we call the tissue

NOTE Confidence: 0.8563128

00:57:18.302 --> 00:57:20.614 that the left the right side of the

NOTE Confidence: 0.8563128

00:57:20.614 --> 00:57:22.270 column derives from in the hindgut

NOTE Confidence: 0.8563128

00:57:22.270 --> 00:57:24.071 for the left side of the colon,

NOTE Confidence: 0.8563128

00:57:24.071 --> 00:57:25.697 so that that explains the differences

NOTE Confidence: 0.8563128

00:57:25.697 --> 00:57:27.570 that we think rise to these

NOTE Confidence: 0.8563128

00:57:27.570 --> 00:57:28.575 different molecular features,

NOTE Confidence: 0.8563128

00:57:28.580 --> 00:57:30.230 meaning different DNA based features.

NOTE Confidence: 0.8563128

00:57:30.230 --> 00:57:32.130 It ultimately leads to different

NOTE Confidence: 0.8563128

00:57:32.130 --> 00:57:33.650 behaviors of the cancer.

NOTE Confidence: 0.8129981

00:57:35.760 --> 00:57:38.937 So what what do I think or or what?

NOTE Confidence: 0.8129981

00:57:38.940 --> 00:57:41.019 What do we think is medical oncologist

NOTE Confidence: 0.8129981

00:57:41.019 --> 00:57:42.814 are most important characteristics to

NOTE Confidence: 0.8129981

00:57:42.814 --> 00:57:44.934 know about patients colorectal cancer.

NOTE Confidence: 0.8129981

00:57:44.940 --> 00:57:47.411 So I encourage all my patients to

NOTE Confidence: 0.8129981

00:57:47.411 --> 00:57:49.885 know really, the at least these four

NOTE Confidence: 0.8129981

00:57:49.885 --> 00:57:51.650 things about their cancer because

NOTE Confidence: 0.8129981

00:57:51.715 --> 00:57:53.755 they are so significant in there.

NOTE Confidence: 0.8129981

00:57:53.760 --> 00:57:56.696 Really, some of the reasons about why we're

NOTE Confidence: 0.8129981

00:57:56.696 --> 00:57:59.056 delivering some of the treatments we are.

NOTE Confidence: 0.8129981

00:57:59.060 --> 00:58:01.140 So if if I were to in one

NOTE Confidence: 0.8129981

00:58:01.140 --> 00:58:03.290 or two sentence statement,

NOTE Confidence: 0.8129981

00:58:03.290 --> 00:58:06.034 communicate with one of my colleagues about.

NOTE Confidence: 0.8129981

00:58:06.040 --> 00:58:07.856 Why I'm treating a patient a certain way

NOTE Confidence: 0.8129981

00:58:07.856 --> 00:58:10.057 or the characteristics about their cancer,

NOTE Confidence: 0.8129981

00:58:10.060 --> 00:58:11.776 I would include these four aspects,

NOTE Confidence: 0.8129981

00:58:11.780 --> 00:58:12.590 and so again,

NOTE Confidence: 0.8129981

00:58:12.590 --> 00:58:14.210 I encourage patients to know these

NOTE Confidence: 0.8129981

00:58:14.210 --> 00:58:15.909 these these aspects about their cancers

NOTE Confidence: 0.8129981

00:58:15.909 --> 00:58:18.089 that so that they can understand why.

NOTE Confidence: 0.8129981

00:58:18.090 --> 00:58:19.530 Maybe we're not doing something,

NOTE Confidence: 0.8129981

00:58:19.530 --> 00:58:21.539 or maybe why we are doing a

NOTE Confidence: 0.8129981

00:58:21.539 --> 00:58:22.400 treatment for them.

NOTE Confidence: 0.8129981

00:58:22.400 --> 00:58:23.830 So the first is the

NOTE Confidence: 0.8129981

00:58:23.830 --> 00:58:24.974 microsatellite status at MSI.

NOTE Confidence: 0.8129981

00:58:24.980 --> 00:58:26.583 I talked about on the second or

NOTE Confidence: 0.8129981

00:58:26.583 --> 00:58:28.380 third slide and patients can be

NOTE Confidence: 0.8129981

00:58:28.380 --> 00:58:30.145 microsatellite stable or instability high.

00:58:30.150 --> 00:58:31.984 And it sounds like a bit of

00:58:31.984 --> 00:58:33.590 jargon and should certainly is.

00:58:33.590 --> 00:58:35.366 But most patients that we see

00:58:35.366 --> 00:58:36.550 will be microsatellites table.

00:58:36.550 --> 00:58:38.506 Meaning, immunotherapy may not be helpful,

00:58:38.510 --> 00:58:40.460 but for these for these patients,

00:58:40.460 --> 00:58:42.090 that might that are microsatellite

00:58:42.090 --> 00:58:42.416 instability.

00:58:42.420 --> 00:58:43.724 High immunotherapy is highly,

00:58:43.724 --> 00:58:45.350 highly, highly effective for them.

00:58:45.350 --> 00:58:46.975 So that's something even rare.

00:58:46.980 --> 00:58:49.588 You never want to miss in a patient,

00:58:49.590 --> 00:58:51.220 because very see significant implications.

00:58:51.220 --> 00:58:53.176 And then we look for mutations.

00:58:53.180 --> 00:58:54.810 Kay Rasen beer at mutations

00:58:54.810 --> 00:58:56.440 you're either mutated or not,

NOTE Confidence: 0.8129981

00:58:56.440 --> 00:58:58.300 and so these are DNA based

NOTE Confidence: 0.8129981

00:58:58.300 --> 00:59:00.020 changes just in the tumor.

NOTE Confidence: 0.8129981

00:59:00.020 --> 00:59:01.650 Though they are not inherited

NOTE Confidence: 0.8129981

00:59:01.650 --> 00:59:02.954 changes that people have.

NOTE Confidence: 0.8129981

00:59:02.960 --> 00:59:04.805 These are mutations that somebody's

NOTE Confidence: 0.8129981

00:59:04.805 --> 00:59:06.650 tumor acquires and it changes

NOTE Confidence: 0.8129981

00:59:06.712 --> 00:59:08.187 the behavior of the tumor.

NOTE Confidence: 0.8129981

00:59:08.190 --> 00:59:09.405 Change the treatments that we

NOTE Confidence: 0.8129981

00:59:09.405 --> 00:59:11.313 we use and I'll get to that in

NOTE Confidence: 0.8129981

00:59:11.313 --> 00:59:12.804 a slider to then as I mentioned,

NOTE Confidence: 0.8129981

00:59:12.810 --> 00:59:13.754 where the tumor started,

NOTE Confidence: 0.8129981

00:59:13.754 --> 00:59:15.883 is it on the left side of the colon

NOTE Confidence: 0.8129981

00:59:15.883 --> 00:59:17.430 or the right side of the colon?

NOTE Confidence: 0.8129981

00:59:17.430 --> 00:59:19.094 We used to just think that told us

NOTE Confidence: 0.8129981

00:59:19.094 --> 00:59:20.897 how the cancer was going to behave,

99

NOTE Confidence: 0.8129981

00:59:20.900 --> 00:59:23.612 but now we also realize it tells us

NOTE Confidence: 0.8129981

00:59:23.612 --> 00:59:25.958 what treatments may or not may not work.

NOTE Confidence: 0.8129981

00:59:25.960 --> 00:59:28.936 So what kind of chemo do we use?

NOTE Confidence: 0.8129981

00:59:28.940 --> 00:59:31.178 So Doctor Manske in his last

NOTE Confidence: 0.8129981

00:59:31.178 --> 00:59:32.670 presentation mentioned Folfox Folfiri.

NOTE Confidence: 0.8129981

00:59:32.670 --> 00:59:34.540 There's also treatment folfox theory,

NOTE Confidence: 0.8129981

00:59:34.540 --> 00:59:36.778 so we use three main drugs.

NOTE Confidence: 0.8129981

00:59:36.780 --> 00:59:38.272 Initially 5FU05 four years,

NOTE Confidence: 0.8129981

00:59:38.272 --> 00:59:40.510 so which some people might know.

NOTE Confidence: 0.8129981

00:59:40.510 --> 00:59:43.114 This is this infusion pump with oxaliplatin.

NOTE Confidence: 0.8129981

00:59:43.120 --> 00:59:45.752 Some people might know that is a drug

NOTE Confidence: 0.8129981

00:59:45.752 --> 00:59:48.338 that makes create sensitivity to cold.

NOTE Confidence: 0.8129981

00:59:48.340 --> 00:59:51.769 We user entity can a drug that can create

NOTE Confidence: 0.8129981

00:59:51.769 --> 00:59:54.679 diarrhea nickname is that run to the can.

NOTE Confidence: 0.85000443

00:59:56.790 --> 00:59:58.687 And we use these in different combinations

NOTE Confidence: 0.85000443

00:59:58.687 --> 01:00:00.586 and our goal is to get as much my.

NOTE Confidence: 0.85000443

01:00:00.590 --> 01:00:02.774 Out of these three drugs is possible.

NOTE Confidence: 0.85000443

01:00:02.780 --> 01:00:04.032 There are most effective

NOTE Confidence: 0.85000443

01:00:04.032 --> 01:00:05.284 drugs in this disease.

NOTE Confidence: 0.85000443

01:00:05.290 --> 01:00:07.078 Sometimes again will put all three

NOTE Confidence: 0.85000443

01:00:07.078 --> 01:00:09.349 together in a very young fit patient.

NOTE Confidence: 0.85000443

01:00:09.350 --> 01:00:12.356 Otherwise it will use them sequentially.

NOTE Confidence: 0.85000443

01:00:12.360 --> 01:00:14.028 You can imagine it's more toxic

NOTE Confidence: 0.85000443

01:00:14.028 --> 01:00:16.207 to do all three at the same time,

NOTE Confidence: 0.85000443

01:00:16.210 --> 01:00:17.790 but also potentially more

NOTE Confidence: 0.85000443

01:00:17.790 --> 01:00:19.765 efficacious in the right patients.

NOTE Confidence: 0.85000443

01:00:19.770 --> 01:00:23.018 We also add on drugs to these these

NOTE Confidence: 0.85000443

01:00:23.018 --> 01:00:24.740 chemotherapy backbones if you will.

NOTE Confidence: 0.85000443

01:00:24.740 --> 01:00:26.264 We call them Anna.

NOTE Confidence: 0.85000443

01:00:26.264 --> 01:00:27.788 We called them biologics,

NOTE Confidence: 0.85000443

01:00:27.790 --> 01:00:28.858 which are antibodies.

NOTE Confidence: 0.85000443

01:00:28.858 --> 01:00:31.350 So we have these chemo drugs that

NOTE Confidence: 0.85000443

01:00:31.416 --> 01:00:33.421 kill rapidly dividing cells that

NOTE Confidence: 0.85000443

01:00:33.421 --> 01:00:35.426 your folfox your full theory.

NOTE Confidence: 0.85000443

01:00:35.430 --> 01:00:36.986 They don't discriminate rapidly

NOTE Confidence: 0.85000443

01:00:36.986 --> 01:00:38.542 dividing cancer cell are

NOTE Confidence: 0.85000443

01:00:38.542 --> 01:00:40.020 rapidly dividing normal cell.

NOTE Confidence: 0.85000443

01:00:40.020 --> 01:00:41.544 That's why they're potentially

NOTE Confidence: 0.85000443

01:00:41.544 --> 01:00:42.687 associated with toxicities,

NOTE Confidence: 0.85000443

01:00:42.690 --> 01:00:44.600 but these antibodies are largely

NOTE Confidence: 0.85000443

01:00:44.600 --> 01:00:46.128 more targeted to whatever,

NOTE Confidence: 0.85000443

01:00:46.130 --> 01:00:48.018 whatever the antibodies programmed

NOTE Confidence: 0.85000443

01:00:48.018 --> 01:00:49.434 to bind to.

NOTE Confidence: 0.85000443

01:00:49.440 --> 01:00:51.528 And things that tell us what antibody to

NOTE Confidence: 0.85000443

01:00:51.528 --> 01:00:53.781 add on to the chemo K rasby reputations

NOTE Confidence: 0.85000443

01:00:53.781 --> 01:00:55.898 and what side the tumor started on.

NOTE Confidence: 0.85000443

01:00:55.900 --> 01:00:57.275 So that's so critical because

NOTE Confidence: 0.85000443

01:00:57.275 --> 01:00:58.974 I can't even tell somebody with

NOTE Confidence: 0.85000443

01:00:58.974 --> 01:01:00.324 their first treatment should truly

NOTE Confidence: 0.85000443

01:01:00.324 --> 01:01:02.614 be until I know if they have a

NOTE Confidence: 0.85000443

01:01:02.614 --> 01:01:03.770 reputation or be recommendation,

NOTE Confidence: 0.85000443

01:01:03.770 --> 01:01:06.633 or if it's a left or right

NOTE Confidence: 0.85000443

01:01:06.633 --> 01:01:07.860 sided colorectal cancer.

NOTE Confidence: 0.85000443

01:01:07.860 --> 01:01:09.512 So now I get into a few

NOTE Confidence: 0.85000443

01:01:09.512 --> 01:01:10.580 pathways in this part.

NOTE Confidence: 0.85000443

01:01:10.580 --> 01:01:12.794 Might be a little technical for a few slides,

NOTE Confidence: 0.85000443

01:01:12.800 --> 01:01:14.776 but so if we think of a cell,

NOTE Confidence: 0.85000443

01:01:14.780 --> 01:01:16.670 so this sets with this Gray is

NOTE Confidence: 0.85000443

01:01:16.670 --> 01:01:18.804 is the outer rim of a cell and

NOTE Confidence: 0.85000443

01:01:18.804 --> 01:01:20.774 we have a nucleus that brain of

NOTE Confidence: 0.85000443

01:01:20.774 --> 01:01:22.706 the cell is this integrate area.

NOTE Confidence: 0.85000443

01:01:22.710 --> 01:01:24.456 There's a lot of signaling that

NOTE Confidence: 0.85000443

01:01:24.456 --> 01:01:26.127 goes from the outside of the

NOTE Confidence: 0.85000443

01:01:26.127 --> 01:01:27.702 cell to the brain of the cell,

NOTE Confidence: 0.85000443

01:01:27.710 --> 01:01:29.544 and the end result of that signaling,

NOTE Confidence: 0.85000443

01:01:29.550 --> 01:01:30.336 largely in cancer,

NOTE Confidence: 0.85000443

01:01:30.336 --> 01:01:31.646 is to grow and divide,

NOTE Confidence: 0.85000443

01:01:31.650 --> 01:01:34.017 and that's why cancer grows in the 1st place,

NOTE Confidence: 0.85000443

01:01:34.020 --> 01:01:36.116 and so there's a lot of pathways there,

NOTE Confidence: 0.85000443

01:01:36.120 --> 01:01:38.224 like light switches that are just turned on,

NOTE Confidence: 0.85000443

01:01:38.230 --> 01:01:40.454 and so it's a big problem because that's

NOTE Confidence: 0.85000443

01:01:40.454 --> 01:01:42.459 why cancer just grows and grows and

NOTE Confidence: 0.85000443

01:01:42.459 --> 01:01:44.888 grows and it grows without ace optic signals.

NOTE Confidence: 0.85000443

01:01:44.890 --> 01:01:47.515 And this is a real critical pathway

NOTE Confidence: 0.85000443

01:01:47.515 --> 01:01:50.099 in cancer and colorectal cancer,

NOTE Confidence: 0.85000443

01:01:50.100 --> 01:01:52.265 and that there's a couple

NOTE Confidence: 0.85000443

01:01:52.265 --> 01:01:53.997 of these proteins here.

NOTE Confidence: 0.85000443

01:01:54.000 --> 01:01:57.038 Which are the machinery in the cell?

NOTE Confidence: 0.85000443

01:01:57.040 --> 01:01:59.488 DNA makes proteins ultimately,

NOTE Confidence: 0.85000443

01:01:59.488 --> 01:02:02.548 and proteins are made by

NOTE Confidence: 0.85000443

01:02:02.548 --> 01:02:03.880 transcription of DNA.

NOTE Confidence: 0.85000443

01:02:03.880 --> 01:02:05.565 And inhibiting these proteins can

NOTE Confidence: 0.85000443

01:02:05.565 --> 01:02:07.970 slow down the growth of the cancer.

NOTE Confidence: 0.85000443

01:02:07.970 --> 01:02:10.742 So if we so we look for Icarax mutation

NOTE Confidence: 0.85000443

01:02:10.742 --> 01:02:13.651 1st and if we don't see it we can use

NOTE Confidence: 0.85000443

01:02:13.651 --> 01:02:16.157 drugs like cetuximab or panitumumab.

NOTE Confidence: 0.85000443

01:02:16.160 --> 01:02:18.799 These are antibodies we add on to

NOTE Confidence: 0.85000443

01:02:18.799 --> 01:02:20.928 chemotherapy and if we do see it,

NOTE Confidence: 0.85000443

01:02:20.930 --> 01:02:23.072 we add on better system at this

NOTE Confidence: 0.85000443

01:02:23.072 --> 01:02:25.098 side also plays a role in whether

NOTE Confidence: 0.85000443

01:02:25.098 --> 01:02:27.172 or not we truly add on September

NOTE Confidence: 0.85000443

01:02:27.172 --> 01:02:28.944 panitumumab right sided cancers

NOTE Confidence: 0.85000443

01:02:28.944 --> 01:02:31.502 we typically don't even if they

NOTE Confidence: 0.85000443

01:02:31.502 --> 01:02:32.870 don't have this mutation.

NOTE Confidence: 0.85000443

01:02:32.870 --> 01:02:35.376 So right away just this simple tests.

NOTE Confidence: 0.85000443

01:02:35.380 --> 01:02:37.552 Whether or not you have a

NOTE Confidence: 0.85000443

01:02:37.552 --> 01:02:39.427 recommendation tells us what we

NOTE Confidence: 0.85000443

01:02:39.427 --> 01:02:41.947 should be adding on to the chemotherapy.

NOTE Confidence: 0.85000443

01:02:41.950 --> 01:02:43.710 So these these drugs attachment

NOTE Confidence: 0.85000443

01:02:43.710 --> 01:02:45.470 panitumumab bind to the very

NOTE Confidence: 0.7345603

01:02:45.531 --> 01:02:47.406 start of this signaling pathway.

NOTE Confidence: 0.7345603

01:02:47.410 --> 01:02:49.594 So you can imagine if you're

NOTE Confidence: 0.7345603

01:02:49.594 --> 01:02:51.050 mutated down here below,

NOTE Confidence: 0.7345603

01:02:51.050 --> 01:02:53.246 where these drugs are binding the

NOTE Confidence: 0.7345603

01:02:53.246 --> 01:02:55.050 pathways already activated below hand.

NOTE Confidence: 0.7345603

01:02:55.050 --> 01:02:58.080 So that's why they don't work.

NOTE Confidence: 0.7345603

01:02:58.080 --> 01:03:00.285 What about lower down so B RAF?

NOTE Confidence: 0.7345603

01:03:00.290 --> 01:03:02.484 So beware is mutating about 10% of

NOTE Confidence: 0.7345603

01:03:02.484 --> 01:03:03.660 metastatic colorectal cancer and

NOTE Confidence: 0.7345603

01:03:03.660 --> 01:03:05.861 we've known for a long time that

NOTE Confidence: 0.7345603

01:03:05.861 --> 01:03:07.217 unfortunately it's associated with

NOTE Confidence: 0.7345603

01:03:07.217 --> 01:03:09.139 a more aggressive type of cancer.

NOTE Confidence: 0.7345603

01:03:09.140 --> 01:03:11.135 But now in the last couple of

NOTE Confidence: 0.7345603

01:03:11.135 --> 01:03:12.720 years we've also realized that

NOTE Confidence: 0.7345603

01:03:12.720 --> 01:03:14.724 we can actually stop the pathway

NOTE Confidence: 0.7345603

01:03:14.724 --> 01:03:17.040 at that level by using these new

NOTE Confidence: 0.7345603

01:03:17.040 --> 01:03:18.896 drugs and grafted into tux map.

NOTE Confidence: 0.7345603

01:03:18.896 --> 01:03:20.552 So using these two drugs in

NOTE Confidence: 0.7345603

01:03:20.552 --> 01:03:21.805 combination is highly effective

NOTE Confidence: 0.7345603

01:03:21.805 --> 01:03:23.675 for these be recommending cancers,

NOTE Confidence: 0.7345603

01:03:23.680 --> 01:03:24.300 apps again,

NOTE Confidence: 0.7345603

01:03:24.300 --> 01:03:25.850 absolutely critical to know that

NOTE Confidence: 0.7345603

01:03:25.850 --> 01:03:27.615 somebody has to be reputation

NOTE Confidence: 0.7345603

01:03:27.615 --> 01:03:29.167 otherwise you're not delivered.

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NOTE Confidence: 0.7345603

01:03:29.170 --> 01:03:31.156 You're not going to be delivering

NOTE Confidence: 0.7345603

01:03:31.156 --> 01:03:32.480 them the proper therapy.

NOTE Confidence: 0.7345603

01:03:32.480 --> 01:03:34.466 What about K Ras mutations there?

NOTE Confidence: 0.7345603

01:03:34.470 --> 01:03:36.456 About 40 to 50% of colorectal

NOTE Confidence: 0.7345603

01:03:36.456 --> 01:03:37.780 cancer in their common.

NOTE Confidence: 0.7345603

01:03:37.780 --> 01:03:38.103 Unfortunately,

NOTE Confidence: 0.7345603

01:03:38.103 --> 01:03:40.364 we have not yet developed a drug

NOTE Confidence: 0.7345603

01:03:40.364 --> 01:03:42.080 that works to inhibit Kehres.

NOTE Confidence: 0.7345603

01:03:42.080 --> 01:03:44.728 Again, it tells me not to use that.

NOTE Confidence: 0.7345603

01:03:44.730 --> 01:03:46.054 Those medications I showed

NOTE Confidence: 0.7345603

01:03:46.054 --> 01:03:47.378 a couple slides ago,

NOTE Confidence: 0.7345603

01:03:47.380 --> 01:03:50.158 but we don't yet have it.

NOTE Confidence: 0.7345603

01:03:50.160 --> 01:03:52.036 A therapy that stops care as we

NOTE Confidence: 0.7345603

01:03:52.036 --> 01:03:54.673 do have a few drugs in the clinic

NOTE Confidence: 0.7345603

01:03:54.673 --> 01:03:56.085 that are being investigated

NOTE Confidence: 0.7345603

01:03:56.085 --> 01:03:58.347 to stop care as they seem to

NOTE Confidence: 0.7345603

01:03:58.347 --> 01:04:00.208 be very effective for a very,

NOTE Confidence: 0.7345603

01:04:00.208 --> 01:04:01.778 very rare subtype of care.

NOTE Confidence: 0.7345603

01:04:01.780 --> 01:04:03.350 Asking colorectal cancer that represents

NOTE Confidence: 0.7345603

01:04:03.350 --> 01:04:04.919 maybe 1% of colorectal cancer,

NOTE Confidence: 0.7345603

01:04:04.919 --> 01:04:06.484 but that's how this starts.

NOTE Confidence: 0.7345603

01:04:06.490 --> 01:04:08.506 We develop 11 inhibitor for a low

NOTE Confidence: 0.7345603

01:04:08.506 --> 01:04:10.050 percentage and then we develop

NOTE Confidence: 0.7345603

01:04:10.050 --> 01:04:11.910 another and another and then pretty

NOTE Confidence: 0.7345603

01:04:11.910 --> 01:04:13.584 soon we're covering the majority

NOTE Confidence: 0.7345603

01:04:13.584 --> 01:04:15.244 of these these patients lung

NOTE Confidence: 0.7345603

01:04:15.244 --> 01:04:17.510 cancer has been a great example

NOTE Confidence: 0.7345603

01:04:17.510 --> 01:04:19.910 of that over the last decade.

NOTE Confidence: 0.7345603

01:04:19.910 --> 01:04:22.675 And there are new or newer drugs

NOTE Confidence: 0.7345603

01:04:22.675 --> 01:04:25.069 coming every day in the clinic.

NOTE Confidence: 0.7345603

01:04:25.070 --> 01:04:26.750 So what about immune therapy?

NOTE Confidence: 0.7345603

01:04:26.750 --> 01:04:29.910 This is this is the.

NOTE Confidence: 0.7345603

01:04:29.910 --> 01:04:31.394 The most urgent need,

NOTE Confidence: 0.7345603

01:04:31.394 --> 01:04:32.136 I think,

NOTE Confidence: 0.7345603

01:04:32.140 --> 01:04:34.195 in colorectal cancer or most

NOTE Confidence: 0.7345603

01:04:34.195 --> 01:04:35.428 gastrointestinal cancers is

NOTE Confidence: 0.7345603

01:04:35.428 --> 01:04:36.893 making immunotherapy work for

NOTE Confidence: 0.7345603

01:04:36.893 --> 01:04:38.065 the majority of cancers.

NOTE Confidence: 0.7345603

01:04:38.070 --> 01:04:40.266 So what is immune therapy is

NOTE Confidence: 0.7345603

01:04:40.266 --> 01:04:42.559 therapy that takes the breaks off

NOTE Confidence: 0.7345603

01:04:42.559 --> 01:04:44.803 of the patients own immune system

NOTE Confidence: 0.7345603

01:04:44.803 --> 01:04:47.348 so that it will attack and kill.

NOTE Confidence: 0.7345603

01:04:47.350 --> 01:04:49.200 The cancer is incredibly complicated,

NOTE Confidence: 0.7345603

01:04:49.200 --> 01:04:51.426 but in over and over simplistic.

NOTE Confidence: 0.8473

01:04:53.870 --> 01:04:55.949 Visual of it would be an immune

NOTE Confidence: 0.8473

01:04:55.949 --> 01:04:57.830 cell which we call a T cell,

NOTE Confidence: 0.8473

01:04:57.830 --> 01:05:00.170 in this case AT cell and the tumor cell

NOTE Confidence: 0.8473

01:05:00.170 --> 01:05:02.619 and the tumor cell has this this marker

NOTE Confidence: 0.8473

01:05:02.619 --> 01:05:04.951 called PDL one and it's almost like a

NOTE Confidence: 0.8473

01:05:04.951 --> 01:05:07.205 hand that it sticks up when an immune

NOTE Confidence: 0.8473

01:05:07.205 --> 01:05:09.719 cell gets close to it and tells it no.

NOTE Confidence: 0.8473

01:05:09.720 --> 01:05:11.445 Thank you and it shuts

NOTE Confidence: 0.8473

01:05:11.445 --> 01:05:13.170 down the white blood cell.

NOTE Confidence: 0.8473

01:05:13.170 --> 01:05:15.820 So if we can put a drug in in the

NOTE Confidence: 0.8473

01:05:15.900 --> 01:05:18.390 in the pocket of that receptor,

NOTE Confidence: 0.8473

01:05:18.390 --> 01:05:20.364 anhand interaction and block the talk

NOTE Confidence: 0.8473

01:05:20.364 --> 01:05:22.620 between the tumor cell and immune cell,

NOTE Confidence: 0.8473

01:05:22.620 --> 01:05:24.581 at least block the negative, talk.

NOTE Confidence: 0.8473

01:05:24.581 --> 01:05:26.567 The immune cells won't get shut

NOTE Confidence: 0.8473

01:05:26.567 --> 01:05:28.819 down again next to the tumor cells.

NOTE Confidence: 0.8473

01:05:28.820 --> 01:05:30.801 The problem is it doesn't work for

NOTE Confidence: 0.8473

01:05:30.801 --> 01:05:32.730 the majority of colorectal cancer.

NOTE Confidence: 0.8473

01:05:32.730 --> 01:05:35.012 It works for that very rare subtype

NOTE Confidence: 0.8473

01:05:35.012 --> 01:05:35.990 that microsatellite instability,

NOTE Confidence: 0.8473

01:05:35.990 --> 01:05:36.965 high colorectal cancer,

NOTE Confidence: 0.8473

01:05:36.965 --> 01:05:38.915 so it's approved as initial therapy.

NOTE Confidence: 0.8473

01:05:38.920 --> 01:05:40.550 But again, this only represents

NOTE Confidence: 0.8473

01:05:40.550 --> 01:05:42.512 about 2 to 4% of patients.

NOTE Confidence: 0.8473

01:05:42.512 --> 01:05:44.468 But for these two to 4%,

NOTE Confidence: 0.8473

01:05:44.470 --> 01:05:45.559 patient is incredibly

NOTE Confidence: 0.8473

01:05:45.559 --> 01:05:47.374 important to know this because.

NOTE Confidence: 0.8473

01:05:47.380 --> 01:05:49.347 If we look at a curve of

NOTE Confidence: 0.8473

01:05:49.347 --> 01:05:50.190 chemotherapy for this,

NOTE Confidence: 0.8473

01:05:50.190 --> 01:05:51.876 this is again this rare subtype.

NOTE Confidence: 0.8473

01:05:51.880 --> 01:05:52.705 Every patient here.

NOTE Confidence: 0.8473

01:05:52.705 --> 01:05:55.529 But if we just take a look at this curve,

NOTE Confidence: 0.8473

01:05:55.530 --> 01:05:57.162 and I realize most people are

NOTE Confidence: 0.8473

01:05:57.162 --> 01:05:58.590 not very familiar with looking

NOTE Confidence: 0.8473

01:05:58.590 --> 01:06:00.025 at these types of curves,

NOTE Confidence: 0.8473

01:06:00.030 --> 01:06:01.710 but we pick a time here.

NOTE Confidence: 0.8473

01:06:01.710 --> 01:06:03.434 This is 24 months,

NOTE Confidence: 0.8473

01:06:03.434 --> 01:06:04.727 so two years.

NOTE Confidence: 0.8473

01:06:04.730 --> 01:06:06.046 With pembrolizumab immune therapy

NOTE Confidence: 0.8473

01:06:06.046 --> 01:06:08.345 in this case about only half of

NOTE Confidence: 0.8473

01:06:08.345 --> 01:06:09.965 patients have had their cancer grow

NOTE Confidence: 0.8473

01:06:09.965 --> 01:06:11.947 at all after two years of therapy,

NOTE Confidence: 0.8473

01:06:11.950 --> 01:06:13.460 we compare that with chemo.

NOTE Confidence: 0.8473

01:06:13.460 --> 01:06:15.868 About 20% have not had their cancer growth.

NOTE Confidence: 0.8473

01:06:15.870 --> 01:06:17.634 That plane and roughly once you

NOTE Confidence: 0.8473

01:06:17.634 --> 01:06:19.780 make it to the two year mark,

NOTE Confidence: 0.8473

01:06:19.780 --> 01:06:22.188 it's rare that the cancer grows beyond that.

NOTE Confidence: 0.8473

01:06:22.190 --> 01:06:23.610 So we're seeing these responses

NOTE Confidence: 0.8473

01:06:23.610 --> 01:06:25.030 for these patients with this

NOTE Confidence: 0.8473

01:06:25.086 --> 01:06:26.696 treatment is relatively non toxic.

NOTE Confidence: 0.8473

01:06:26.700 --> 01:06:29.710 That just seemed to go on and on and on.

NOTE Confidence: 0.8473

01:06:29.710 --> 01:06:31.516 Unfortunately it doesn't work for everybody,

NOTE Confidence: 0.8473

01:06:31.520 --> 01:06:33.627 but for the patients it does work.

NOTE Confidence: 0.8473

01:06:33.630 --> 01:06:35.890 Is some of the most.

NOTE Confidence: 0.8473

01:06:35.890 --> 01:06:39.334 Dramatic responses that we'll

NOTE Confidence: 0.8473

01:06:39.334 --> 01:06:41.917 see as oncologists.

NOTE Confidence: 0.8473

01:06:41.920 --> 01:06:42.660 So in conclusion,

NOTE Confidence: 0.8473

01:06:42.660 --> 01:06:44.540 the main the main treatments we use are

NOTE Confidence: 0.8473

01:06:44.586 --> 01:06:46.458 these treatments called folfox and folfiri.

NOTE Confidence: 0.8473

01:06:46.460 --> 01:06:48.854 It's certainly a bit of a world word salad.

NOTE Confidence: 0.8473

01:06:48.860 --> 01:06:50.729 There we use a lot of abbreviations,

NOTE Confidence: 0.8473

01:06:50.730 --> 01:06:52.365 which doesn't make things easy

NOTE Confidence: 0.8473

01:06:52.365 --> 01:06:54.360 to keep straight in one's mind.

NOTE Confidence: 0.8473

01:06:54.360 --> 01:06:56.004 All tumors should absolutely be set

NOTE Confidence: 0.8473

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01:06:56.004 --> 01:06:58.159 to be tested for these three things.

01:06:58.160 --> 01:07:00.197 In the fourth thing would be again,

01:07:00.200 --> 01:07:02.237 what side is the tumor come from,

01:07:02.240 --> 01:07:04.576 and so it is absolutely standard of care,

01:07:04.580 --> 01:07:06.362 and you should always ask your

01:07:06.362 --> 01:07:08.452 oncologist if it's not clear if any

01:07:08.452 --> 01:07:10.412 of these things have been looked for,

01:07:10.420 --> 01:07:11.004 it should.

01:07:11.004 --> 01:07:13.340 It should be looked for in every patient.

01:07:13.340 --> 01:07:15.015 The microsatellite status to test

01:07:15.015 --> 01:07:16.977 for immune therapy essentially in the

01:07:16.977 --> 01:07:18.594 K Ras status in the draft status,

01:07:18.600 --> 01:07:20.060 which also dictates initial chemotherapy.

01:07:20.060 --> 01:07:20.352 Frankly,

01:07:20.352 --> 01:07:21.812 and immunotherapy is standard of

01:07:21.812 --> 01:07:22.980 care for microsatellite instability.

NOTE Confidence: 0.8473

01:07:22.980 --> 01:07:23.880 High colorectal cancer.

NOTE Confidence: 0.8473

01:07:23.880 --> 01:07:25.080 We have numerous trials.

NOTE Confidence: 0.8473

01:07:25.080 --> 01:07:26.991 I'm going to yell trying to make

NOTE Confidence: 0.8473

01:07:26.991 --> 01:07:28.294 immunotherapy work for the other

NOTE Confidence: 0.8473

01:07:28.294 --> 01:07:29.052 96% of patients.

NOTE Confidence: 0.8473

01:07:29.052 --> 01:07:30.407 And sometimes we've had some

NOTE Confidence: 0.8473

01:07:30.407 --> 01:07:31.220 successes and we're

NOTE Confidence: 0.83916354

01:07:31.271 --> 01:07:33.260 learning more and more every day. Thank you.

NOTE Confidence: 0.841588

01:07:36.240 --> 01:07:38.886 Thank you Doctor Shakini so we have

NOTE Confidence: 0.841588

01:07:38.886 --> 01:07:41.583 some time for from some questions so

NOTE Confidence: 0.841588

01:07:41.583 --> 01:07:45.139 I will ask some both from the Q&A and

NOTE Confidence: 0.841588

01:07:45.139 --> 01:07:47.641 I encourage our audience members to

NOTE Confidence: 0.841588

01:07:47.641 --> 01:07:49.344 please continue submitting questions.

NOTE Confidence: 0.841588

01:07:49.344 --> 01:07:52.790 We've been answering some of those as we go.

NOTE Confidence: 0.841588

01:07:52.790 --> 01:07:55.148 I'll also start just by asking

NOTE Confidence: 0.841588

01:07:55.148 --> 01:07:57.512 some questions, so I'm going to

NOTE Confidence: 0.841588

01:07:57.512 --> 01:07:59.084 start with Doctor Your.

NOTE Confidence: 0.841588

01:07:59.090 --> 01:08:01.080 You mentioned that we're starting

NOTE Confidence: 0.841588

01:08:01.080 --> 01:08:04.029 to see or we've seen an increase.

NOTE Confidence: 0.841588

01:08:04.030 --> 01:08:06.711 In colorectal cancer in young adults and

NOTE Confidence: 0.841588

01:08:06.711 --> 01:08:10.388 in in our patients of the black community.

NOTE Confidence: 0.841588

01:08:10.390 --> 01:08:13.057 And I'm wondering if you can speak

NOTE Confidence: 0.841588

01:08:13.057 --> 01:08:16.329 to why you think we're seeing that.

NOTE Confidence: 0.8410276

01:08:19.070 --> 01:08:20.238 And you're on mute.

NOTE Confidence: 0.8782207575

01:08:23.370 --> 01:08:26.050 So. The changes have are

NOTE Confidence: 0.8782207575

01:08:26.050 --> 01:08:27.658 happening relatively fast,

NOTE Confidence: 0.8782207575

01:08:27.660 --> 01:08:30.090 and when changes happen that fast,

NOTE Confidence: 0.8782207575

01:08:30.090 --> 01:08:31.458 certainly it has to.

NOTE Confidence: 0.8782207575

01:08:31.458 --> 01:08:34.044 It can have much to do with

NOTE Confidence: 0.8782207575

01:08:34.044 --> 01:08:36.309 genetic changes which happened for

NOTE Confidence: 0.8782207575

01:08:36.309 --> 01:08:39.400 which take a long time to happen.

NOTE Confidence: 0.8782207575

01:08:39.400 --> 01:08:41.768 It has to be to have much more

NOTE Confidence: 0.8782207575

01:08:41.768 --> 01:08:44.670 to do with environmental factors,

NOTE Confidence: 0.8782207575

01:08:44.670 --> 01:08:45.885 nutritional factors, whatever.

NOTE Confidence: 0.8782207575

01:08:45.885 --> 01:08:47.910 We do an an unfortunately

NOTE Confidence: 0.8782207575

01:08:47.910 --> 01:08:48.720 environmental nutritional.

NOTE Confidence: 0.8782207575

01:08:48.720 --> 01:08:51.728 All those things are a bunch of things

NOTE Confidence: 0.8782207575

01:08:51.728 --> 01:08:55.200 that are like coming together in a person.

NOTE Confidence: 0.8782207575

01:08:55.200 --> 01:08:56.772 It's very hard to.

NOTE Confidence: 0.8782207575

01:08:56.772 --> 01:08:59.130 Separate out the effects and as

NOTE Confidence: 0.8782207575

01:08:59.216 --> 01:09:01.911 as I should before some of them

NOTE Confidence: 0.8782207575

01:09:01.911 --> 01:09:04.020 have been clearly associated,

NOTE Confidence: 0.8782207575

01:09:04.020 --> 01:09:06.862 but I'm sure there are other things

NOTE Confidence: 0.8782207575

01:09:06.862 --> 01:09:09.880 that were totally missing in terms of

NOTE Confidence: 0.8782207575

01:09:09.880 --> 01:09:12.454 that the where the interesting thing

NOTE Confidence: 0.8782207575

01:09:12.539 --> 01:09:15.731 is that we saw this increase in the

NOTE Confidence: 0.8782207575

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01:09:15.731 --> 01:09:17.962 African American Community 25 years ago,

NOTE Confidence: 0.8782207575

01:09:17.962 --> 01:09:20.110 and that's why some societies have

NOTE Confidence: 0.8782207575

01:09:20.181 --> 01:09:22.077 been recommending screening African

NOTE Confidence: 0.8782207575

01:09:22.077 --> 01:09:24.447 Americans earlier starting at 45.

NOTE Confidence: 0.8782207575

01:09:24.450 --> 01:09:27.108 And it's not until the last.

NOTE Confidence: 0.8782207575

01:09:27.110 --> 01:09:29.315 Few years that the other

NOTE Confidence: 0.8782207575

01:09:29.315 --> 01:09:31.079 communities are catching up.

NOTE Confidence: 0.8782207575

01:09:31.080 --> 01:09:31.513 Unfortunately,

NOTE Confidence: 0.8782207575

01:09:31.513 --> 01:09:34.111 catching up with the African Americans

NOTE Confidence: 0.8782207575

01:09:34.111 --> 01:09:36.809 in terms of that increased risk,

NOTE Confidence: 0.8782207575

01:09:36.810 --> 01:09:39.954 something that must have to do with again

NOTE Confidence: 0.8782207575

01:09:39.954 --> 01:09:42.100 those environmental nutritional factors.

NOTE Confidence: 0.8782207575

01:09:42.100 --> 01:09:45.628 Whatever we do, whatever we are exposed to,

NOTE Confidence: 0.8782207575

01:09:45.630 --> 01:09:49.162 that's not sitting well with us, and it's

NOTE Confidence: 0.8782207575

01:09:49.162 --> 01:09:52.690 equalizing us right now in a bad way.

NOTE Confidence: 0.8782207575

01:09:52.690 --> 01:09:54.450 But we have not.

NOTE Confidence: 0.8782207575

01:09:54.450 --> 01:09:55.330 I mean,

NOTE Confidence: 0.8782207575

01:09:55.330 --> 01:09:58.557 besides the factors that we were sharing.

NOTE Confidence: 0.8782207575

01:09:58.560 --> 01:10:00.522 With you, I think there's a lot of them.

NOTE Confidence: 0.8782207575

01:10:00.530 --> 01:10:01.694 I've not explained because

NOTE Confidence: 0.8782207575

01:10:01.694 --> 01:10:03.149 we put it all together.

NOTE Confidence: 0.8782207575

01:10:03.150 --> 01:10:04.896 It still does not add up,

NOTE Confidence: 0.8782207575

01:10:04.900 --> 01:10:06.532 so we're still missing someone we

NOTE Confidence: 0.8782207575

01:10:06.532 --> 01:10:08.678 need to do more research for that.

NOTE Confidence: 0.88364506

01:10:09.630 --> 01:10:11.718 Great, thank you.

NOTE Confidence: 0.88364506

01:10:11.720 --> 01:10:14.254 Doctor Reddy I have a question for

NOTE Confidence: 0.88364506

01:10:14.254 --> 01:10:17.124 you so something that I know a lot of

NOTE Confidence: 0.88364506

01:10:17.124 --> 01:10:19.757 my patients ask and worry about is this.

NOTE Confidence: 0.88364506

01:10:19.760 --> 01:10:21.440 You know having a bag?

NOTE Confidence: 0.88364506

01:10:21.440 --> 01:10:24.104 Are they going to need to have a bag

NOTE Confidence: 0.88364506

01:10:24.104 --> 01:10:26.795 after a you know rectal cancer surgery?

NOTE Confidence: 0.88364506

01:10:26.800 --> 01:10:29.040 Can you speak to what that is

NOTE Confidence: 0.88364506

01:10:29.040 --> 01:10:31.488 like in terms of quality of life?

NOTE Confidence: 0.88364506

01:10:31.490 --> 01:10:33.500 How do you coach your patience

NOTE Confidence: 0.86668868

01:10:33.500 --> 01:10:35.740 through that so? For us,

NOTE Confidence: 0.86668868

01:10:35.740 --> 01:10:37.672 you know one of the best things

NOTE Confidence: 0.86668868

01:10:37.672 --> 01:10:39.924 that we have are the ostomy nurses

NOTE Confidence: 0.86668868

01:10:39.924 --> 01:10:42.283 and they give patients a preview of

NOTE Confidence: 0.86668868

01:10:42.283 --> 01:10:44.347 what life is to live with the bag.

NOTE Confidence: 0.86668868

01:10:44.350 --> 01:10:46.330 So there's two kinds of backs.

NOTE Confidence: 0.86668868

01:10:46.330 --> 01:10:47.650 There's a temporary bag,

NOTE Confidence: 0.86668868

01:10:47.650 --> 01:10:49.300 and there's a permanent bag.

NOTE Confidence: 0.86668868

01:10:49.300 --> 01:10:51.310 The permanent bag quality of life

NOTE Confidence: 0.86668868

01:10:51.310 --> 01:10:53.907 is good when we have looked at

NOTE Confidence: 0.86668868

01:10:53.907 --> 01:10:56.277 patients who have had permanent bags.

NOTE Confidence: 0.86668868

01:10:56.280 --> 01:10:57.835 There's only one negative thing

NOTE Confidence: 0.86668868

01:10:57.835 --> 01:10:59.079 that patients complain about,

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NOTE Confidence: 0.86668868

01:10:59.080 --> 01:11:00.324 and it's usually males,

NOTE Confidence: 0.86668868

01:11:00.324 --> 01:11:02.182 and that's negative ****** body image.

NOTE Confidence: 0.86668868

01:11:02.182 --> 01:11:04.324 So when we looked at all patients

NOTE Confidence: 0.86668868

01:11:04.324 --> 01:11:05.919 five years down the road,

NOTE Confidence: 0.86668868

01:11:05.920 --> 01:11:07.480 6 years down the road,

NOTE Confidence: 0.86668868

01:11:07.480 --> 01:11:09.960 that was the biggest complaint that we saw.

NOTE Confidence: 0.86668868

01:11:09.960 --> 01:11:11.801 The temporary bag is a little bit

NOTE Confidence: 0.86668868

01:11:11.801 --> 01:11:13.983 more of a problem because it's kind

NOTE Confidence: 0.86668868

01:11:13.983 --> 01:11:16.690 of watery diarrhea and a lot of times

NOTE Confidence: 0.86668868

01:11:16.690 --> 01:11:18.664 have to have to reassure patients.

NOTE Confidence: 0.86668868

01:11:18.670 --> 01:11:21.158 It's only for a temporary period of time.

NOTE Confidence: 0.86668868

01:11:21.160 --> 01:11:22.720 Just bear with it finished.

NOTE Confidence: 0.86668868

01:11:22.720 --> 01:11:25.606 The chemo will close it up.

NOTE Confidence: 0.86668868

01:11:25.610 --> 01:11:27.524 But it can still be, you know,

NOTE Confidence: 0.86668868

01:11:27.524 --> 01:11:28.088 emotionally distressing,

NOTE Confidence: 0.86668868

01:11:28.088 --> 01:11:29.498 because you know you get

NOTE Confidence: 0.86668868

01:11:29.498 --> 01:11:30.469 irritation around the skin.

NOTE Confidence: 0.86668868

01:11:30.470 --> 01:11:31.526 Now you're getting chemotherapy.

NOTE Confidence: 0.86668868

01:11:31.526 --> 01:11:33.978 The skin cells fall off a little bit easier.

NOTE Confidence: 0.86668868

01:11:33.980 --> 01:11:35.464 That bag doesn't stick,

NOTE Confidence: 0.86668868

01:11:35.464 --> 01:11:37.319 so there's lots of leaks.

NOTE Confidence: 0.86668868

01:11:37.320 --> 01:11:38.668 You know the ostomy

NOTE Confidence: 0.86668868

01:11:38.668 --> 01:11:40.016 program really helps them,

NOTE Confidence: 0.86668868

01:11:40.020 --> 01:11:41.946 their guides them through this and

NOTE Confidence: 0.86668868

01:11:41.946 --> 01:11:45.037 you know it is a hard time for them

NOTE Confidence: 0.86668868

01:11:45.037 --> 01:11:46.772 when they're going through this,

NOTE Confidence: 0.86668868

01:11:46.780 --> 01:11:49.070 and I think I think.

NOTE Confidence: 0.86668868

01:11:49.070 --> 01:11:50.570 You know when those patients

NOTE Confidence: 0.86668868

01:11:50.570 --> 01:11:51.770 complain about those bags?

NOTE Confidence: 0.86668868

01:11:51.770 --> 01:11:54.470 I think it is real and it is tough.

NOTE Confidence: 0.8679206

01:11:55.540 --> 01:11:56.528 Great thank you for

NOTE Confidence: 0.8679206

01:11:56.530 --> 01:11:57.518 answering the best thing

NOTE Confidence: 0.8679206

01:11:57.518 --> 01:11:59.000 that we used to have is.

NOTE Confidence: 0.8679206

01:11:59.000 --> 01:12:00.614 We used to actually have a

NOTE Confidence: 0.8679206

01:12:00.614 --> 01:12:02.334 program where we used to have

NOTE Confidence: 0.8679206

01:12:02.334 --> 01:12:03.779 them talk to other patients.

NOTE Confidence: 0.8679206

01:12:03.780 --> 01:12:06.003 To say that you know things do get better,

NOTE Confidence: 0.8679206

01:12:06.010 --> 01:12:07.250 I think now with HIPAA,

NOTE Confidence: 0.8679206

01:12:07.250 --> 01:12:08.490 and especially now with covid,

NOTE Confidence: 0.8679206

01:12:08.490 --> 01:12:09.978 I mean that's completely shut down.

NOTE Confidence: 0.85379165

01:12:11.780 --> 01:12:14.828 Yes, hopefully we'll get back to that so.

NOTE Confidence: 0.85379165

01:12:14.830 --> 01:12:17.000 So thank you Doctor Cartman see I

NOTE Confidence: 0.85379165

01:12:17.000 --> 01:12:19.377 want to ask you a question here.

NOTE Confidence: 0.85379165

01:12:19.380 --> 01:12:21.652 So, um, you talk you and Doctor Cicchini

NOTE Confidence: 0.85379165

01:12:21.652 --> 01:12:23.371 both talked about chemotherapy and

NOTE Confidence: 0.85379165

01:12:23.371 --> 01:12:25.555 you also talked some about radiation.

NOTE Confidence: 0.85379165

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01:12:25.560 --> 01:12:28.016 Can you speak a little bit more about

NOTE Confidence: 0.85379165

01:12:28.016 --> 01:12:30.759 some of the side effects and you know,

NOTE Confidence: 0.85379165

01:12:30.760 --> 01:12:33.063 I think when we use the word

NOTE Confidence: 0.85379165

01:12:33.063 --> 01:12:34.972 chemotherapy you know it generates a

NOTE Confidence: 0.85379165

01:12:34.972 --> 01:12:38.086 lot of fear and I think that a lot of

NOTE Confidence: 0.85379165

01:12:38.086 --> 01:12:39.856 our treatments have gotten better.

NOTE Confidence: 0.82425094

01:12:41.410 --> 01:12:42.834 I think that's true.

NOTE Confidence: 0.82425094

01:12:42.834 --> 01:12:45.442 I think when we talk about chemotherapy

NOTE Confidence: 0.82425094

01:12:45.442 --> 01:12:48.594 and I at one of the main regiments

NOTE Confidence: 0.82425094

01:12:48.594 --> 01:12:51.340 that we use is this folfox regimen,

NOTE Confidence: 0.82425094

01:12:51.340 --> 01:12:54.015 at least in the neoadjuvant

NOTE Confidence: 0.82425094

01:12:54.015 --> 01:12:55.620 or agement setting.

NOTE Confidence: 0.82425094

01:12:55.620 --> 01:12:57.615 The generally it's well tolerated

NOTE Confidence: 0.82425094

01:12:57.615 --> 01:13:00.580 in that there can be some nausha.

NOTE Confidence: 0.82425094

01:13:00.580 --> 01:13:03.046 We do give medicines before treatment.

NOTE Confidence: 0.82425094

01:13:03.050 --> 01:13:04.702 We give medicines for

125

01:13:04.702 --> 01:13:06.767 patients to have at home,

01:13:06.770 --> 01:13:10.095 and if that doesn't work then we

01:13:10.095 --> 01:13:12.768 have other medicines that we can

01:13:12.768 --> 01:13:15.463 add to to the regimen to really

01:13:15.559 --> 01:13:18.247 try to get that under control.

01:13:18.250 --> 01:13:20.716 It can affect sense of taste.

01:13:20.720 --> 01:13:24.698 It can affect the blood counts.

01:13:24.700 --> 01:13:25.849 Can cause diarrhea?

01:13:25.849 --> 01:13:28.530 And and a lot of those side

01:13:28.617 --> 01:13:31.267 effects are temporary side effects

01:13:31.267 --> 01:13:33.917 that people have during during

01:13:34.002 --> 01:13:36.447 the course of their treatment.

01:13:36.450 --> 01:13:39.450 I think the the side effect that we

01:13:39.450 --> 01:13:42.806 worry about the most is really that

01:13:42.806 --> 01:13:44.826 oxaliplatin can cause neuropathy.

01:13:44.830 --> 01:13:48.270 It can cause nerve damage.

NOTE Confidence: 0.82425094

01:13:48.270 --> 01:13:49.820 That initially starts as just

NOTE Confidence: 0.82425094

01:13:49.820 --> 01:13:50.440 cold sensitivity.

NOTE Confidence: 0.82425094

01:13:50.440 --> 01:13:52.610 If you put your hands in the

NOTE Confidence: 0.82425094

01:13:52.610 --> 01:13:55.140 freezer or you drink something cold.

NOTE Confidence: 0.82425094

01:13:55.140 --> 01:13:56.905 It's going to be uncomfortable

NOTE Confidence: 0.82425094

01:13:56.905 --> 01:13:59.010 and that you know might last

NOTE Confidence: 0.82425094

01:13:59.010 --> 01:14:00.900 for a few days at the start,

NOTE Confidence: 0.82425094

01:14:00.900 --> 01:14:03.780 but by the end of your treatment may happen.

NOTE Confidence: 0.82425094

01:14:03.780 --> 01:14:06.618 You know, 1011 days into it.

NOTE Confidence: 0.82425094

01:14:06.620 --> 01:14:09.626 But it can also be cumulative,

NOTE Confidence: 0.82425094

01:14:09.630 --> 01:14:14.270 and it can last for a long time.

NOTE Confidence: 0.82425094

01:14:14.270 --> 01:14:16.838 After the treatment is done and

NOTE Confidence: 0.82425094

01:14:16.838 --> 01:14:19.970 So what I have found in terms

NOTE Confidence: 0.82425094

01:14:19.970 --> 01:14:22.180 of of a semi permanent.

NOTE Confidence: 0.82425094

01:14:22.180 --> 01:14:23.401 Toxicity of chemotherapy.

01:14:23.401 --> 01:14:25.436 It is that numbness and

01:14:25.436 --> 01:14:27.119 tingling to some degree.

01:14:29.190 --> 01:14:32.067 The nerves take along time to heal.

01:14:32.070 --> 01:14:36.048 They can take years to heal and some patients

01:14:36.048 --> 01:14:39.406 they have a little bit of discomfort.

01:14:39.410 --> 01:14:41.354 Afterwards, some patients they have more

01:14:41.354 --> 01:14:43.910 and we need to have them on medications

01:14:43.910 --> 01:14:46.599 to really help to get that under control.

01:14:46.600 --> 01:14:49.737 But you know, we really do give it a lot of

01:14:49.737 --> 01:14:52.488 attention and make adjustments in the dough.

01:14:52.490 --> 01:14:54.410 Sing, make adjustments in the duration

01:14:54.410 --> 01:14:56.957 and some of our research is also looking

01:14:56.957 --> 01:14:59.874 at whether we can cut back on the amount

01:14:59.874 --> 01:15:01.962 of oxaliplatin that people really need,

01:15:01.970 --> 01:15:03.610 because it is, you know,

01:15:03.610 --> 01:15:05.240 the most bothersome side effect.

NOTE Confidence: 0.85234743

01:15:08.220 --> 01:15:10.165 Great thank you and I think

NOTE Confidence: 0.85234743

01:15:10.165 --> 01:15:11.770 there have been some questions

NOTE Confidence: 0.85234743

01:15:11.836 --> 01:15:13.686 answered directly in the chat.

NOTE Confidence: 0.85234743

01:15:13.690 --> 01:15:15.772 I'm trying to incorporate some of

NOTE Confidence: 0.85234743

01:15:15.772 --> 01:15:18.281 those in the questions I'm going to

NOTE Confidence: 0.85234743

01:15:18.281 --> 01:15:20.399 ask Doctor Cicchini a question and

NOTE Confidence: 0.85234743

01:15:20.399 --> 01:15:22.240 something that's come up came up.

NOTE Confidence: 0.85234743

01:15:22.240 --> 01:15:23.950 I think during both your

NOTE Confidence: 0.85234743

01:15:23.950 --> 01:15:25.660 talk and doctor yours talk.

NOTE Confidence: 0.85234743

01:15:25.660 --> 01:15:27.935 Can you comment some on the differences

NOTE Confidence: 0.85234743

01:15:27.935 --> 01:15:30.448 we talk about sort of genetic testing.

NOTE Confidence: 0.85234743

01:15:30.450 --> 01:15:32.986 I think that can be a confusing topic

NOTE Confidence: 0.85234743

01:15:32.986 --> 01:15:35.677 in terms of are we testing the jeans

NOTE Confidence: 0.85234743

01:15:35.677 --> 01:15:38.196 that are passed from parent to child

NOTE Confidence: 0.85234743

01:15:38.196 --> 01:15:40.446 or retesting the tumor genes and?

NOTE Confidence: 0.85234743

01:15:40.450 --> 01:15:41.890 You just kind of define that

NOTE Confidence: 0.85234743

01:15:41.890 --> 01:15:43.440 a little bit for everybody.

NOTE Confidence: 0.8041017

01:15:44.770 --> 01:15:47.290 Certainly so as a as a medical oncologist

NOTE Confidence: 0.8041017

01:15:47.290 --> 01:15:50.238 and for the treatments that I talked about,

NOTE Confidence: 0.8041017

01:15:50.240 --> 01:15:52.976 I do a lot a of somatic testing.

NOTE Confidence: 0.8041017

01:15:52.980 --> 01:15:54.690 So what does that mean?

NOTE Confidence: 0.8041017

01:15:54.690 --> 01:15:56.400 That means I'm actually testing

NOTE Confidence: 0.8041017

01:15:56.400 --> 01:15:57.768 the tumor for mutations.

NOTE Confidence: 0.8041017

01:15:57.770 --> 01:16:00.498 I'm not testing the normal cells to see.

NOTE Confidence: 0.8041017

01:16:00.500 --> 01:16:02.384 Was there something that that I

NOTE Confidence: 0.8041017

01:16:02.384 --> 01:16:04.378 could have that somebody could have

NOTE Confidence: 0.8041017

01:16:04.378 --> 01:16:06.400 identified early on that would have

NOTE Confidence: 0.8041017

01:16:06.400 --> 01:16:08.369 predicted the development of cancer?

NOTE Confidence: 0.8041017

01:16:08.370 --> 01:16:10.596 That's what Doctor Lord's and I'm

NOTE Confidence: 0.8041017

01:16:10.596 --> 01:16:12.470 sure he'll comment after I do,

NOTE Confidence: 0.8041017

01:16:12.470 --> 01:16:15.006 but so we're sequencing the tumor and we're

NOTE Confidence: 0.8041017

01:16:15.006 --> 01:16:17.598 looking for those mutations that I mentioned.

NOTE Confidence: 0.8041017

01:16:17.600 --> 01:16:18.923 K rasby raff.

NOTE Confidence: 0.8041017

01:16:18.923 --> 01:16:22.010 We actually do much more than that.

NOTE Confidence: 0.8041017

01:16:22.010 --> 01:16:23.990 The ones that I mentioned

NOTE Confidence: 0.8041017

01:16:23.990 --> 01:16:25.574 are the bare minimum.

NOTE Confidence: 0.8041017

01:16:25.580 --> 01:16:27.560 I guess I would say,

NOTE Confidence: 0.8041017

01:16:27.560 --> 01:16:30.768 but at Yale and at other major centers

NOTE Confidence: 0.8041017

01:16:30.768 --> 01:16:33.497 will actually probably sequence around 160

NOTE Confidence: 0.8041017

01:16:33.497 --> 01:16:37.278 sometimes up to 400 other genes to see if

NOTE Confidence: 0.8041017

01:16:37.278 --> 01:16:40.254 we in the tumor itself only in the tumor,

NOTE Confidence: 0.8041017

01:16:40.254 --> 01:16:42.696 and see if we can identify

NOTE Confidence: 0.8041017

01:16:42.696 --> 01:16:44.580 a target for a drug.

NOTE Confidence: 0.8041017

01:16:44.580 --> 01:16:47.250 So we have drugs that sometimes

NOTE Confidence: 0.8041017

01:16:47.250 --> 01:16:49.030 target very obscur jeans.

NOTE Confidence: 0.8041017

01:16:49.030 --> 01:16:51.454 That we find in point 1% of colorectal

NOTE Confidence: 0.8041017

01:16:51.454 --> 01:16:52.964 cancer, 1% something very rare.

NOTE Confidence: 0.8041017

01:16:52.970 --> 01:16:54.480 That could be very meaningful

NOTE Confidence: 0.8041017

01:16:54.480 --> 01:16:56.299 for that 1% that has it.

NOTE Confidence: 0.8041017

01:16:56.299 --> 01:16:57.208 And you know,

NOTE Confidence: 0.8041017

01:16:57.210 --> 01:16:59.250 there's a lot of jeans and a lot

NOTE Confidence: 0.8041017

01:16:59.250 --> 01:17:01.449 of drugs being developed every day,

NOTE Confidence: 0.8041017

01:17:01.450 --> 01:17:03.268 so it all does add up,

NOTE Confidence: 0.8041017

01:17:03.270 --> 01:17:05.076 but the testing that we do

NOTE Confidence: 0.8041017

01:17:05.076 --> 01:17:06.942 standard of care on every patient

NOTE Confidence: 0.8041017

01:17:06.942 --> 01:17:09.028 is to is to test the tumor.

NOTE Confidence: 0.8041017

01:17:09.030 --> 01:17:09.366 Only.

NOTE Confidence: 0.8041017

01:17:09.366 --> 01:17:11.382 We sometimes do a brief comparison

NOTE Confidence: 0.8041017

01:17:11.382 --> 01:17:13.230 with the normal cells as part

NOTE Confidence: 0.8041017

01:17:13.230 --> 01:17:14.790 of our test here at Yale,

NOTE Confidence: 0.8041017

01:17:14.790 --> 01:17:16.578 but some patients may be familiar

NOTE Confidence: 0.8041017

01:17:16.578 --> 01:17:18.430 with their test being sent out

NOTE Confidence: 0.8041017

01:17:18.430 --> 01:17:19.940 to accompany by their doctors,

NOTE Confidence: 0.8041017

01:17:19.940 --> 01:17:21.536 such as foundation.

NOTE Confidence: 0.8041017

01:17:21.536 --> 01:17:24.196 Medicine Garden these are companies

NOTE Confidence: 0.8041017

01:17:24.196 --> 01:17:27.030 that that are that sequence

NOTE Confidence: 0.8041017

01:17:27.030 --> 01:17:28.710 tumors for oncologists.

NOTE Confidence: 0.8041017

01:17:28.710 --> 01:17:31.094 And those are just doing the tumor itself.

NOTE Confidence: 0.8041017

01:17:31.100 --> 01:17:32.920 We can even now sequence the blood

NOTE Confidence: 0.8041017

01:17:32.920 --> 01:17:35.177 and see if we can detect tiny amounts

NOTE Confidence: 0.8041017

01:17:35.177 --> 01:17:37.679 of cancer in the blood and look for

NOTE Confidence: 0.8041017

01:17:37.679 --> 01:17:39.384 mutations where we can sometimes

NOTE Confidence: 0.8041017

01:17:39.384 --> 01:17:41.262 identify some of those same mutations.

NOTE Confidence: 0.8041017

01:17:41.262 --> 01:17:42.454 As you can imagine,

NOTE Confidence: 0.8041017

01:17:42.460 --> 01:17:44.228 it's not quite as good as we when

NOTE Confidence: 0.8041017

01:17:44.228 --> 01:17:46.154 we do that because we're not going

NOTE Confidence: 0.8041017

01:17:46.154 --> 01:17:48.202 to the source and and really

NOTE Confidence: 0.8041017

01:17:48.202 --> 01:17:49.338 pinpointing everything,

NOTE Confidence: 0.8041017

01:17:49.340 --> 01:17:51.321 but it's it's pretty good in the

NOTE Confidence: 0.8041017

01:17:51.321 --> 01:17:52.630 technology is advancing quickly.

NOTE Confidence: 0.8041017

01:17:52.630 --> 01:17:54.835 I'll let Doctor Laura comment on the

NOTE Confidence: 0.8041017

01:17:54.835 --> 01:17:56.518 the germline sequencing that he does.

NOTE Confidence: 0.8504207

01:17:57.710 --> 01:17:59.858 Alright, we'll take on that so,

NOTE Confidence: 0.8504207

01:17:59.860 --> 01:18:02.014 so yeah, so we're more interested

NOTE Confidence: 0.8504207

01:18:02.014 --> 01:18:03.450 in that other Saturday.

NOTE Confidence: 0.8504207

01:18:03.450 --> 01:18:05.448 The side where we're looking at

NOTE Confidence: 0.8504207

01:18:05.448 --> 01:18:07.760 the jeans in the normal cells.

NOTE Confidence: 0.8504207

01:18:07.760 --> 01:18:10.280 Those are the ones that we inherit.

NOTE Confidence: 0.8504207

01:18:10.280 --> 01:18:11.712 One copy from Mom.

NOTE Confidence: 0.8504207

01:18:11.712 --> 01:18:13.144 One copy from that.

NOTE Confidence: 0.8504207

01:18:13.150 --> 01:18:15.593 And that's the one that most of

NOTE Confidence: 0.8504207

01:18:15.593 --> 01:18:17.438 the genetic diseases that get

NOTE Confidence: 0.8504207

01:18:17.438 --> 01:18:19.604 passed along where we detect them.

NOTE Confidence: 0.8504207

01:18:19.610 --> 01:18:21.710 And usually we do it with

NOTE Confidence: 0.8504207

01:18:21.710 --> 01:18:23.560 saliva tests or blood test.

NOTE Confidence: 0.8504207

01:18:23.560 --> 01:18:26.638 And that's how we can detect some of the

NOTE Confidence: 0.8504207

01:18:26.638 --> 01:18:28.797 underlying genetic disease that cost.

NOTE Confidence: 0.8504207

01:18:28.800 --> 01:18:30.408 Little cancer, for instance,

NOTE Confidence: 0.8504207

01:18:30.408 --> 01:18:33.550 machine drum or the public buses cases too.

NOTE Confidence: 0.8504207

01:18:33.550 --> 01:18:35.932 So those are the ones that

NOTE Confidence: 0.8504207

01:18:35.932 --> 01:18:38.800 when we have any suspicion that

NOTE Confidence: 0.8504207

01:18:38.800 --> 01:18:41.765 something may have been again.

NOTE Confidence: 0.8504207

01:18:41.770 --> 01:18:42.986 Have some genetic background

NOTE Confidence: 0.8504207

01:18:42.986 --> 01:18:44.506 in terms of developing cancer.

NOTE Confidence: 0.8504207

01:18:44.510 --> 01:18:46.330 That's what we were testing for.

NOTE Confidence: 0.82728946

01:18:48.650 --> 01:18:49.794 Great, thank you.

NOTE Confidence: 0.82728946

01:18:49.794 --> 01:18:52.086 I'm going to ask a question.

NOTE Confidence: 0.82728946

01:18:52.090 --> 01:18:54.690 It's just come up in the chat and

NOTE Confidence: 0.82728946

01:18:54.690 --> 01:18:57.137 I think Doctor Cicchini you maybe

NOTE Confidence: 0.82728946

01:18:57.137 --> 01:19:00.110 and typing an answer to this now,

NOTE Confidence: 0.82728946

01:19:00.110 --> 01:19:02.502 but it's a question on you know the

NOTE Confidence: 0.82728946

01:19:02.502 --> 01:19:04.599 duration of chemotherapy for stage

NOTE Confidence: 0.82728946

01:19:04.599 --> 01:19:06.984 four or metastatic colorectal cancer.

NOTE Confidence: 0.82728946

01:19:06.990 --> 01:19:09.517 And you know, is it given indefinitely

NOTE Confidence: 0.82728946

01:19:09.517 --> 01:19:12.191 are breaks part of the plan and

NOTE Confidence: 0.82728946

01:19:12.191 --> 01:19:14.096 maybe both Doctor Cicchini inductor

NOTE Confidence: 0.82728946

01:19:14.096 --> 01:19:16.149 court Manske can address that.

NOTE Confidence: 0.85984665

01:19:19.070 --> 01:19:22.268 Sure, yes. I was halfway through my response,

NOTE Confidence: 0.85984665

01:19:22.268 --> 01:19:26.197 but I'll just say that. So in general,

NOTE Confidence: 0.85984665

01:19:26.197 --> 01:19:27.994 we don't necessarily have a planned a

NOTE Confidence: 0.85984665

01:19:27.994 --> 01:19:29.978 plan from day one that we're taking a

NOTE Confidence: 0.85984665

01:19:29.978 --> 01:19:31.906 break at six months or one year when

NOTE Confidence: 0.85984665

01:19:31.961 --> 01:19:33.729 we're treating metastatic cancer.

NOTE Confidence: 0.85984665

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01:19:33.730 --> 01:19:35.398 We're trying to control the disease.

NOTE Confidence: 0.85984665

01:19:35.400 --> 01:19:39.332 As long as we can, and we want to keep the

NOTE Confidence: 0.85984665

01:19:39.332 --> 01:19:42.767 pressure on the cancer as long as we can.

NOTE Confidence: 0.85984665

01:19:42.770 --> 01:19:44.970 So we don't have a plan that we're

NOTE Confidence: 0.85984665

01:19:44.970 --> 01:19:46.983 only doing so much, but this is.

NOTE Confidence: 0.85984665

01:19:46.983 --> 01:19:48.488 This is something we continually

NOTE Confidence: 0.85984665

01:19:48.488 --> 01:19:49.876 reassess every time we're seeing

NOTE Confidence: 0.85984665

01:19:49.876 --> 01:19:51.591 somebody is is a blood work OK?

NOTE Confidence: 0.85984665

01:19:51.600 --> 01:19:53.256 How do people feel is it?

NOTE Confidence: 0.85984665

01:19:53.260 --> 01:19:55.468 Is it the right time to do treatment?

NOTE Confidence: 0.85984665

01:19:55.470 --> 01:19:58.230 Do we need a break?

NOTE Confidence: 0.85984665

01:19:58.230 --> 01:20:00.666 And that's that's a case by case.

NOTE Confidence: 0.85984665

01:20:00.670 --> 01:20:02.038 Decission certainly between somebody's

NOTE Confidence: 0.85984665

01:20:02.038 --> 01:20:03.406 patients in their oncologists.

NOTE Confidence: 0.85984665

01:20:03.410 --> 01:20:06.050 I think other part of the question was

NOTE Confidence: 0.85984665

01:20:06.050 --> 01:20:09.217 how you know how long can the organs take?

137

NOTE Confidence: 0.85984665

01:20:09.220 --> 01:20:10.243 Indefinite chemotherapy and

NOTE Confidence: 0.85984665

01:20:10.243 --> 01:20:11.266 there's there's no.

NOTE Confidence: 0.85984665

01:20:11.270 --> 01:20:12.638 Again, it's very individualized,

NOTE Confidence: 0.85984665

01:20:12.638 --> 01:20:13.664 but certainly overtime.

NOTE Confidence: 0.85984665

01:20:13.670 --> 01:20:16.267 Certain toxicities build up and there are

NOTE Confidence: 0.85984665

01:20:16.267 --> 01:20:18.799 modifications that we make all along the way,

NOTE Confidence: 0.85984665

01:20:18.800 --> 01:20:21.187 and that's what that's what we're doing.

NOTE Confidence: 0.85984665

01:20:21.190 --> 01:20:23.368 Every time is medical oncologist were

NOTE Confidence: 0.85984665

01:20:23.368 --> 01:20:25.194 comparing blood work and symptoms

NOTE Confidence: 0.85984665

01:20:25.194 --> 01:20:27.350 and seen should the dose be this?

NOTE Confidence: 0.85984665

01:20:27.350 --> 01:20:29.940 Should we really be doing both drugs

NOTE Confidence: 0.85984665

01:20:29.940 --> 01:20:32.304 together this week or should we be

NOTE Confidence: 0.85984665

01:20:32.304 --> 01:20:34.620 lowering one of the doses or remove?

NOTE Confidence: 0.85984665

01:20:34.620 --> 01:20:36.937 Moving on into drugs after Manske management,

NOTE Confidence: 0.85984665

01:20:36.940 --> 01:20:37.606 drug oxide,

NOTE Confidence: 0.85984665

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01:20:37.606 --> 01:20:38.938 platinum defects and nerves.

NOTE Confidence: 0.85984665

01:20:38.940 --> 01:20:40.926 Nobody ever gets that drug indefinitely.

NOTE Confidence: 0.85984665

01:20:40.930 --> 01:20:42.590 It causes neuropathy and everybody,

NOTE Confidence: 0.85984665

01:20:42.590 --> 01:20:44.526 and so usually around the 6th or the

NOTE Confidence: 0.85984665

01:20:44.526 --> 01:20:46.099 8th dose were significantly reducing

NOTE Confidence: 0.85984665

01:20:46.099 --> 01:20:48.507 it or or eliminate it completely and

NOTE Confidence: 0.85984665

01:20:48.566 --> 01:20:50.954 switching to a maintenance type of

NOTE Confidence: 0.85984665

01:20:50.954 --> 01:20:52.546 chemotherapy that's preferred actually.

NOTE Confidence: 0.85984665

01:20:52.550 --> 01:20:52.881 Then,

NOTE Confidence: 0.85984665

01:20:52.881 --> 01:20:54.867 taking a break switching to maintenance,

NOTE Confidence: 0.85984665

01:20:54.870 --> 01:20:56.530 we actually know that's better

NOTE Confidence: 0.85984665

01:20:56.530 --> 01:20:57.858 than taking a break.

NOTE Confidence: 0.85984665

01:20:57.860 --> 01:21:01.010 Even if you were started when

NOTE Confidence: 0.85984665

01:21:01.010 --> 01:21:03.110 the cancer grows again.

NOTE Confidence: 0.85984665

01:21:03.110 --> 01:21:05.470 And we take a break and we lowered.

NOTE Confidence: 0.85984665

01:21:05.470 --> 01:21:07.711 The dose is down or an we switch to

01:21:07.711 --> 01:21:10.186 a maintenance of user that 5F you.

01:21:10.190 --> 01:21:12.262 Sometimes we use a pill form of it

01:21:12.262 --> 01:21:14.028 called Xeloda with Avastin together.

01:21:14.030 --> 01:21:15.500 And usually that's pretty tolerable.

01:21:15.500 --> 01:21:17.270 That's the goal of maintenance to

01:21:17.270 --> 01:21:19.339 keep the cancer and check you know,

01:21:19.340 --> 01:21:21.110 hit it hard initially with those

01:21:21.110 --> 01:21:21.700 multiple drugs,

01:21:21.700 --> 01:21:24.260 keep it in check with a lower dose

01:21:24.260 --> 01:21:26.117 maintenance for as long as we can,

01:21:26.120 --> 01:21:27.890 and then when necessary escalate again.

01:21:27.890 --> 01:21:29.370 But if patients cannot tolerate,

01:21:29.370 --> 01:21:30.840 tolerate that along the way.

01:21:30.840 --> 01:21:32.068 Absolutely breaks are incorporated,

01:21:32.068 --> 01:21:33.603 and there's certainly people that

01:21:33.603 --> 01:21:34.459 have a different.

NOTE Confidence: 0.85984665

01:21:34.460 --> 01:21:34.735 Biology,

NOTE Confidence: 0.85984665

01:21:34.735 --> 01:21:36.385 their cancer is not reading the

NOTE Confidence: 0.85984665

01:21:36.385 --> 01:21:38.083 textbooks and isn't it behaving as

NOTE Confidence: 0.85984665

01:21:38.083 --> 01:21:39.458 aggressively at certain at certain

NOTE Confidence: 0.85984665

01:21:39.458 --> 01:21:41.245 times when we might expect it to

NOTE Confidence: 0.85984665

01:21:41.245 --> 01:21:42.435 be in those patients certainly

NOTE Confidence: 0.85984665

01:21:42.440 --> 01:21:44.260 can get breaks and do really well

NOTE Confidence: 0.85984665

01:21:44.260 --> 01:21:45.370 with breaks of time,

NOTE Confidence: 0.85984665

01:21:45.370 --> 01:21:46.430 so it's very individualized.

NOTE Confidence: 0.78094506

01:21:48.710 --> 01:21:51.260 Great thank you Jeremy. Anything to add.

NOTE Confidence: 0.87868595

01:21:52.580 --> 01:21:56.009 Yeah I would just add a couple of points,

NOTE Confidence: 0.87868595

01:21:56.010 --> 01:21:58.296 I think also along the way,

NOTE Confidence: 0.87868595

01:21:58.300 --> 01:21:59.820 depending on the extent

NOTE Confidence: 0.87868595

01:21:59.820 --> 01:22:00.960 of somebody's disease,

NOTE Confidence: 0.87868595

01:22:00.960 --> 01:22:03.368 you know we make you know we get

01:22:03.368 --> 01:22:06.170 together as a group and we make a

01:22:06.170 --> 01:22:08.139 decision about whether there's an

01:22:08.139 --> 01:22:10.027 opportunity to treat individual

01:22:10.027 --> 01:22:12.387 sites of disease more aggressively

01:22:12.390 --> 01:22:14.300 with either surgery or radiation,

01:22:14.300 --> 01:22:17.348 which may then afford a break from treatment.

01:22:17.350 --> 01:22:20.360 And then even although at the beginning

01:22:20.360 --> 01:22:22.988 there are patients where it's clear.

01:22:22.990 --> 01:22:25.348 That their disease is growing very,

01:22:25.350 --> 01:22:26.158 very slowly,

01:22:26.158 --> 01:22:29.390 and if we know that our chemotherapy is

01:22:29.468 --> 01:22:32.420 not going to get rid of it completely,

01:22:32.420 --> 01:22:34.758 we could also take some time to

01:22:34.758 --> 01:22:37.469 figure out the right time to start

01:22:37.469 --> 01:22:39.911 the treatment and follow the disease

01:22:39.989 --> 01:22:42.943 closely with scans so that we don't

NOTE Confidence: 0.87868595

01:22:42.943 --> 01:22:45.341 introduce side effects too early while

NOTE Confidence: 0.87868595

01:22:45.341 --> 01:22:47.980 knowing that we're not going to impact

NOTE Confidence: 0.87868595

01:22:48.054 --> 01:22:50.496 the overall outcome of the disease.

NOTE Confidence: 0.86115235

01:22:52.700 --> 01:22:54.260 Great, thank you, so I'd

NOTE Confidence: 0.86115235

01:22:54.260 --> 01:22:56.060 like to kind of end on

NOTE Confidence: 0.86115235

01:22:56.142 --> 01:22:58.846 a positive note and I'm going to kind

NOTE Confidence: 0.86115235

01:22:58.846 --> 01:23:01.930 of push the same question to everybody.

NOTE Confidence: 0.86115235

01:23:01.930 --> 01:23:04.774 I'd like to know either what

NOTE Confidence: 0.86115235

01:23:04.774 --> 01:23:06.670 you're most hopeful for.

NOTE Confidence: 0.86115235

01:23:06.670 --> 01:23:08.315 Kind of advances what you're

NOTE Confidence: 0.86115235

01:23:08.315 --> 01:23:10.390 most excited about in the field,

NOTE Confidence: 0.86115235

01:23:10.390 --> 01:23:12.749 and I'm going to sorry Doctor Reddy.

NOTE Confidence: 0.86115235

01:23:12.750 --> 01:23:15.116 I'm going to pick on you first.

NOTE Confidence: 0.7971056

01:23:17.520 --> 01:23:18.988 You're on mute still.

NOTE Confidence: 0.85709035

01:23:22.060 --> 01:23:23.950 So for us you know the

01:23:23.950 --> 01:23:25.510 biggest thing is you know

01:23:25.582 --> 01:23:27.966 if we operate some way of doing it

01:23:27.966 --> 01:23:30.506 with the least impact on their life.

01:23:30.510 --> 01:23:32.823 I think we have made a lot of achievements

01:23:32.823 --> 01:23:35.178 by doing them laparoscopically, Lee.

01:23:35.178 --> 01:23:39.120 We have progressed so much and being able to

01:23:39.213 --> 01:23:42.969 reattach patients without a permanent bag.

01:23:42.970 --> 01:23:46.659 Even 10 years I've seen that evolve.

01:23:46.660 --> 01:23:49.084 And if we can somehow make

01:23:49.084 --> 01:23:50.700 it even slightly better.

01:23:50.700 --> 01:23:52.219 One crazy type that we have and

01:23:52.219 --> 01:23:53.937 we've always tried to work on is an

01:23:53.937 --> 01:23:55.264 artificial center so that even for

01:23:55.264 --> 01:23:56.824 patients where the muscle is involved,

01:23:56.830 --> 01:23:58.419 we can get out of the bag.

01:24:00.310 --> 01:24:05.120 Great, thank you. That's great doctor your.

NOTE Confidence: 0.8641332

01:24:06.230 --> 01:24:09.686 So I guess my my dream would be get

NOTE Confidence: 0.8641332

01:24:09.686 --> 01:24:13.065 getting all the oncologist out of business,

NOTE Confidence: 0.8641332

01:24:13.065 --> 01:24:14.340 not preventing patients

NOTE Confidence: 0.8641332

01:24:14.340 --> 01:24:15.615 from developing cancers,

NOTE Confidence: 0.8641332

01:24:15.620 --> 01:24:18.188 and that that we may dream.

NOTE Confidence: 0.8641332

01:24:18.190 --> 01:24:20.746 That's so I think that's so,

NOTE Confidence: 0.8641332

01:24:20.750 --> 01:24:24.150 as we've seen with colon cancer, there's a.

NOTE Confidence: 0.8641332

01:24:24.150 --> 01:24:26.250 There's a huge opportunity because

NOTE Confidence: 0.8641332

01:24:26.250 --> 01:24:29.288 we are able to see big differences,

NOTE Confidence: 0.8641332

01:24:29.290 --> 01:24:31.684 and therefore that means that there's

NOTE Confidence: 0.8641332

01:24:31.684 --> 01:24:34.519 a big chunk that is preventable

NOTE Confidence: 0.8641332

01:24:34.519 --> 01:24:36.835 from from different standpoints.

NOTE Confidence: 0.8641332

01:24:36.840 --> 01:24:39.138 One of them also including diagnosing

NOTE Confidence: 0.8641332

01:24:39.138 --> 01:24:41.067 earlier the genetic ones that

NOTE Confidence: 0.8641332

01:24:41.067 --> 01:24:43.029 even though they are a minority,

NOTE Confidence: 0.8641332

01:24:43.030 --> 01:24:45.606 they are a big part of what causes

NOTE Confidence: 0.8641332

01:24:45.606 --> 01:24:48.120 cancer and problems related to that,

NOTE Confidence: 0.8641332

01:24:48.120 --> 01:24:50.792 so that we may dream to really see

NOTE Confidence: 0.8641332

01:24:50.792 --> 01:24:53.578 how we can prevent it even more.

NOTE Confidence: 0.8641332

01:24:53.580 --> 01:24:55.770 And I'm very optimistic about that.

NOTE Confidence: 0.8641332

01:24:55.770 --> 01:24:58.218 There will be more probably blood

NOTE Confidence: 0.8641332

01:24:58.218 --> 01:25:00.554 based test that would allow us

NOTE Confidence: 0.8641332

01:25:00.554 --> 01:25:03.050 to do that in a much simpler way.

NOTE Confidence: 0.8641332

01:25:03.050 --> 01:25:04.076 Ann and again,

NOTE Confidence: 0.8641332

01:25:04.076 --> 01:25:05.786 hopefully not getting to the

NOTE Confidence: 0.8641332

01:25:05.786 --> 01:25:07.780 stages that we're talking about.

NOTE Confidence: 0.6924708

01:25:09.260 --> 01:25:12.030 Thank you Doctor Kurt manske.

NOTE Confidence: 0.8869095

01:25:13.130 --> 01:25:16.766 So I am so the the

NOTE Confidence: 0.8869095

01:25:16.766 --> 01:25:19.760 breakthrough of the year in.

NOTE Confidence: 0.8869095

01:25:19.760 --> 01:25:23.528 In our disease was all of the molecular

NOTE Confidence: 0.8869095

01:25:23.528 --> 01:25:26.710 developments in in GI cancers in general,

NOTE Confidence: 0.8869095

01:25:26.710 --> 01:25:29.020 so not just colorectal cancer,

NOTE Confidence: 0.8869095

01:25:29.020 --> 01:25:33.976 but across the board. Anne Anne.

NOTE Confidence: 0.8869095

01:25:33.980 --> 01:25:37.277 We already saw examples over that tonight,

NOTE Confidence: 0.8869095

01:25:37.280 --> 01:25:40.312 and I think that there is so much

NOTE Confidence: 0.8869095

01:25:40.312 --> 01:25:43.316 research that is going on really

NOTE Confidence: 0.8869095

01:25:43.316 --> 01:25:46.016 targeting these pathways and still

NOTE Confidence: 0.8869095

01:25:46.016 --> 01:25:47.598 investigating immunotherapy that

NOTE Confidence: 0.8869095

01:25:47.598 --> 01:25:50.930 I am optimistic of a future that

NOTE Confidence: 0.8869095

01:25:50.930 --> 01:25:52.350 doesn't include chemotherapy.

NOTE Confidence: 0.55371666

01:25:54.360 --> 01:25:56.370 Great doctor cicchini

NOTE Confidence: 0.7603436

01:25:57.270 --> 01:25:59.490 I'm pretty much echo with with

NOTE Confidence: 0.7603436

01:25:59.490 --> 01:26:00.928 Doctor Karman, Skeates said.

NOTE Confidence: 0.7603436

01:26:00.928 --> 01:26:03.022 I think the most exciting and

NOTE Confidence: 0.7603436

01:26:03.022 --> 01:26:05.066 hopefully the most promising approach

NOTE Confidence: 0.7603436

01:26:05.066 --> 01:26:07.634 for colorectal cancer is to make

NOTE Confidence: 0.7603436

01:26:07.634 --> 01:26:09.480 immunotherapy work for the 96% of

NOTE Confidence: 0.7603436

01:26:09.480 --> 01:26:10.960 patients that have microsatellite

NOTE Confidence: 0.7603436

01:26:10.960 --> 01:26:12.440 stable chlorophyll cancer metastatic,

NOTE Confidence: 0.7603436

01:26:12.440 --> 01:26:15.710 Microsoft and stable colorectal cancer.

NOTE Confidence: 0.7603436

01:26:15.710 --> 01:26:18.070 Numerous clinical trials investigating

NOTE Confidence: 0.7603436

01:26:18.070 --> 01:26:21.610 this this this paradigm through many

NOTE Confidence: 0.7603436

01:26:21.689 --> 01:26:23.825 different mechanisms and investigators

NOTE Confidence: 0.7603436

01:26:23.825 --> 01:26:27.510 all over the world working on this.

NOTE Confidence: 0.7603436

01:26:27.510 --> 01:26:33.760 So I think the future is bright. Great,

NOTE Confidence: 0.8516004

01:26:33.760 --> 01:26:36.133 well I I share in that optimism

NOTE Confidence: 0.8516004

01:26:36.133 --> 01:26:38.529 and I want to really thank.

NOTE Confidence: 0.8516004

01:26:38.530 --> 01:26:40.732 Our participants are both our panelists

NOTE Confidence: 0.8516004

01:26:40.732 --> 01:26:43.140 tonight, but also those of you in

NOTE Confidence: 0.8516004

01:26:43.140 --> 01:26:45.130 the audience who've been listing.

NOTE Confidence: 0.8516004

01:26:45.130 --> 01:26:47.517 And I think many of you have

NOTE Confidence: 0.8516004

01:26:47.517 --> 01:26:49.170 shared your personal stories,

NOTE Confidence: 0.8516004

01:26:49.170 --> 01:26:50.638 whether it's personally or

NOTE Confidence: 0.8516004

01:26:50.638 --> 01:26:52.106 with family and friends.

NOTE Confidence: 0.8516004

01:26:52.110 --> 01:26:55.014 We thank you for getting screened and getting

NOTE Confidence: 0.8516004

01:26:55.014 --> 01:26:57.250 colonoscopies and also really sharing that.

NOTE Confidence: 0.8516004

01:26:57.250 --> 01:26:59.791 I think that I'll maybe agree with

NOTE Confidence: 0.8516004

01:26:59.791 --> 01:27:02.379 Doctor your that I think that really,

NOTE Confidence: 0.8516004

01:27:02.380 --> 01:27:04.560 if we can prevent it.

NOTE Confidence: 0.8516004

01:27:04.560 --> 01:27:05.538 Um, you know,

NOTE Confidence: 0.8516004

01:27:05.538 --> 01:27:07.820 that's really a huge mission and I

NOTE Confidence: 0.8516004

01:27:07.888 --> 01:27:10.688 think one of the goals of colorectal

NOTE Confidence: 0.8516004

01:27:10.688 --> 01:27:12.934 Cancer Awareness Month is really

NOTE Confidence: 0.8516004

01:27:12.934 --> 01:27:15.359 spreading that message around screening.

NOTE Confidence: 0.8516004

01:27:15.360 --> 01:27:17.360 So please share that with

NOTE Confidence: 0.8516004

01:27:17.360 --> 01:27:18.960 your friends and family.

NOTE Confidence: 0.8516004

01:27:18.960 --> 01:27:21.760 Any screening is better than no screening,

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NOTE Confidence: 0.8516004

01:27:21.760 --> 01:27:23.760 so thank you everyone for

NOTE Confidence: 0.8516004

01:27:23.760 --> 01:27:25.760 sharing your evening with us.

NOTE Confidence: 0.8516004

01:27:25.760 --> 01:27:28.160 We are very grateful and please,

NOTE Confidence: 0.8516004

01:27:28.160 --> 01:27:29.018 you know,

NOTE Confidence: 0.8516004

01:27:29.018 --> 01:27:32.021 come to our Cancer Center website and

NOTE Confidence: 0.8516004

01:27:32.021 --> 01:27:35.057 let us know if you have any needs.