0:00:00 –> 0:00:02.46 Support for Yale Cancer Answers

0:00:02.46 –> 0:00:04.92 comes from AstraZeneca, dedicated

0:00:04.999 –> 0:00:07.344 to advancing options and providing

0:00:07.344 –> 0:00:10.3 hope for people living with cancer.

0:00:10.3 –> 0:00:13.94 More information at astrazeneca-us.com.

0:00:13.94 –> 0:00:15.86 Welcome to Yale Cancer Answers with

0:00:15.86 –> 0:00:18.316 your host doctor Anees Chagpar.

0:00:18.316 –> 0:00:20.176 Yale Cancer Answers features the

0:00:20.176 –> 0:00:22.447 latest information on cancer care by

0:00:22.447 –> 0:00:23.911 welcoming oncologists and specialists

0:00:23.911 –> 0:00:26.405 who are on the forefront of the

0:00:26.405 –> 0:00:28.58 battle to fight cancer. This week,

0:00:28.58 –> 0:00:30.365 it's a conversation about colorectal

0:00:30.365 –> 0:00:32.15 cancer with Doctor Michael Cecchini.

0:00:32.15 –> 0:00:34.045 Doctor Cecchini is an assistant

0:00:34.045 –> 0:00:35.94 professor of medicine and medical

0:00:36.006 –> 0:00:37.968 oncology at the Yale School of

0:00:37.968 –> 0:00:40.036 Medicine where Doctor Chagpar is

0:00:40.036 –> 0:00:41.786 a professor of surgical oncology.

0:00:43.14 –> 0:00:45.21 So Mike, maybe we can start

0:00:45.21 –> 0:00:47.952 off by you telling us a little

0:00:47.952 –> 0:00:49.664 bit about colorectal cancer.

0:00:49.67 –> 0:00:51.968 A little bit about the epidemiology.

0:00:51.97 –> 0:00:54.658 Who gets it? How common is it?

0:00:54.66 –> 0:00:55.972 How lethal is it?

0:00:55.972 –> 0:00:57.94 And then we'll get into some

0:00:58.012 –> 0:01:00.364 of the more recent updates with

0:01:00.364 –> 0:01:02.72 regards to screening of colorectal cancer.

0:01:02.72 –> 0:01:05.03 I am a gastrointestinal

0:01:05.03 –> 0:01:07.815 medical oncologist, and I see a variety

0:01:07.815 –> 0:01:10.319 of GI cancers, colorectal cancers and it is where

1

0:01:10.319 –> 0:01:13.168 I focus the majority of my research.

0:01:15.84 –> 0:01:17.031 It's quite common.

0:01:17.031 –> 0:01:19.413 There are about 150,000 cases diagnosed

0:01:19.413 –> 0:01:21.551 annually in the United States and

0:01:21.551 –> 0:01:23.231 more than 50,000 annual deaths.

0:01:24.756 –> 0:01:28.087 And I do think it needs to be stated

0:01:28.087 –> 0:01:30.832 that there is also a rise in incidence

0:01:30.832 –> 0:01:33.597 in adults less than age of 50.

0:01:33.6 –> 0:01:35.682 Although it is like many cancers,

0:01:35.682 –> 0:01:37.07 predominantly a cancer of older

0:01:37.132 –> 0:01:39.147 individuals, for some unclear reason,

0:01:39.15 –> 0:01:41.12 the incidence is actually rising

0:01:41.12 –> 0:01:43.589 in adults less than age of 50,

0:01:44.769 –> 0:01:47.127 while it is going down overall,

0:01:47.13 –> 0:01:50.315 due to effective screening by

0:01:50.315 –> 0:01:53.5 colonoscopy for adults over the

0:01:53.612 –> 0:01:57.464 age of 50.

0:02:03.23 –> 0:02:05.778 Patients with a personal history or

0:02:05.778 –> 0:02:08.295 family history of colorectal cancer are at

0:02:08.295 –> 0:02:11.019 increased risk for developing the disease.

0:02:11.02 –> 0:02:13.678 Personal history for large polyps etc.,

0:02:13.68 –> 0:02:15.895 certain polyps with certain characteristics

0:02:15.895 –> 0:02:18.57 increase the risk for colorectal cancer,

0:02:18.57 –> 0:02:20.342 but it is mostly sporadic,

0:02:20.342 –> 0:02:21.228 not familial.

0:02:21.23 –> 0:02:23.006 There are conditions like

0:02:23.006 –> 0:02:24.338 inflammatory bowel disease,

0:02:24.34 –> 0:02:27.112 prior radiation and then in rare

0:02:27.112 –> 0:02:29.435 circumstances inherited syndromes such as

0:02:29.435 –> 0:02:31.889 Lynch syndrome and something called FAP.

0:02:31.89 –> 0:02:33.222 Familial adenomatous polyposis syndrome.

0:02:34.11 –> 0:02:35.882 And other polyp syndromes.

0:02:35.882 –> 0:02:37.654 So when thinking about

0:02:37.66 –> 0:02:39.945 the fact that the majority

0:02:39.945 –> 0:02:41.773 of these are sporadic,

0:02:41.78 –> 0:02:44.174 are there any risk factors

0:02:44.174 –> 0:02:47.177 that people who don't have a family

0:02:47.177 –> 0:02:49.835 history should really be cognizant of?

0:02:49.84 –> 0:02:51.955 So I'm thinking here about

0:02:51.955 –> 0:02:53.647 things like you know,

0:02:53.65 –> 0:02:56.618 people often ask about smoking or alcohol,

0:02:56.62 –> 0:02:59.364 or smoked meats or other

0:02:59.364 –> 0:03:02.129 things that might increase their risk.

0:03:02.13 –> 0:03:02.98 So there

0:03:02.98 –> 0:03:04.676 isn't this clear association

0:03:04.676 –> 0:03:05.948 with some carcinogen,

0:03:05.95 –> 0:03:07.634 some cancer predisposing factor,

0:03:07.634 –> 0:03:11.04 like there is with lung cancer and smoking,

0:03:11.04 –> 0:03:12.596 for example.

0:03:12.596 –> 0:03:16.809 I'd say that the data is a bit mixed on

0:03:16.809 –> 0:03:19.491 how important certain risk factors are.

0:03:19.5 –> 0:03:21.016 Certainly things like obesity,

0:03:21.016 –> 0:03:23.29 diabetes and red or processed meats

0:03:23.353 –> 0:03:25.248 increase risk and

0:03:25.25 –> 0:03:28.306 they may affect the rate to some degree,

0:03:28.31 –> 0:03:31.165 but the data again isn't

0:03:31.165 –> 0:03:32.878 always consistent.

0:03:32.88 –> 0:03:34.95 The smoked meats issue is

0:03:34.95 –> 0:03:37.16 more thought to be related to

0:03:37.16 –> 0:03:39.06 gastric cancer or certainly seems

0:03:39.06 –> 0:03:41.607 to play a bit more of a role.

0:03:41.61 –> 0:03:43.35 Race also plays a role.

0:03:43.35 –> 0:03:45.145 African Americans have the highest

0:03:45.145 –> 0:03:46.94 colorectal cancer rates in the

0:03:46.997 –> 0:03:48.321 United States and mortality

0:03:48.321 –> 0:03:49.976 is also higher compared to

0:03:49.98 –> 0:03:50.853 other ethnic groups.

0:03:50.853 –> 0:03:53.408 So do we know why we see some

0:03:53.408 –> 0:03:55.216 of these epidemiologic trends?

0:03:55.22 –> 0:03:57.314 Why is it that more African

0:03:57.314 –> 0:03:58.71 Americans get colorectal cancer?

0:03:58.71 –> 0:04:01.09 Why is it that we're now seeing

0:04:01.09 –> 0:04:03 more colorectal cancer occurring in

0:04:03 –> 0:04:05.184 adults younger than the age of 50?

0:04:05.19 –> 0:04:06.795 What are the factors in

0:04:06.795 –> 0:04:07.758 these particular populations

0:04:07.758 –> 0:04:08.95 that's increasing their risk?

0:04:08.95 –> 0:04:09.57 The short

0:04:09.57 –> 0:04:11.448 answer would be we don't know,

0:04:11.45 –> 0:04:13.604 and where there's a tremendous

0:04:13.604 –> 0:04:15.954 effort in trying to understand some of

0:04:15.954 –> 0:04:18.568 the risk factor and some of

0:04:18.568 –> 0:04:20.556 the reasons for the increased risk in

0:04:20.556 –> 0:04:23.9 the groups that you just articulated.

0:04:23.9 –> 0:04:25.52 Interesting and to get back

0:04:25.52 –> 0:04:27.14 to the younger age group.

0:04:27.14 –> 0:04:29.436 It's not just that the incidence

0:04:29.436 –> 0:04:31.35 has been static in that group,

0:04:31.35 –> 0:04:33.078 it's increasing and so we do

0:04:33.078 –> 0:04:35.239 think that it has some lifestyle factors,

0:04:35.24 –> 0:04:36.86 perhaps diet is a factor that is

0:04:36.86 –> 0:04:38.156 playing a role here,

0:04:38.16 –> 0:04:39.78 but we really don't know,

0:04:39.78 –> 0:04:41.646 and there's a tremendous area of

0:04:43.986 –> 0:04:45.706 research to try and understand why these incidences

0:04:45.706 –> 0:04:47.548 are increasing in the young adults.

0:04:47.55 –> 0:04:48.85 But we don't know.

0:04:49.68 –> 0:04:52.298 And so as we see more incidence

0:04:52.298 –> 0:04:55.293 in younger people, one of the

0:04:55.293 –> 0:04:58.1 questions that might come up is,

0:04:58.1 –> 0:04:59.24 you know historically,

0:04:59.24 –> 0:05:01.9 and I know that the screening guidelines

0:05:01.967 –> 0:05:03.747 have recently changed to include

0:05:03.747 –> 0:05:06.099 younger people in terms of routine

0:05:06.099 –> 0:05:08.127 screening for asymptomatic people.

0:05:08.13 –> 0:05:10.914 But when we think about the fact that

0:05:10.914 –> 0:05:13.737 over the last several several years,

0:05:13.74 –> 0:05:15.745 we're starting to see more

0:05:15.745 –> 0:05:17.75 colon cancer in younger people,

0:05:17.75 –> 0:05:20.816 how is it that they present because

0:05:20.82 –> 0:05:23.298 they wouldn't have presented on a

0:05:23.298 –> 0:05:24.537 routine asymptomatic colonoscopy,

0:05:24.54 –> 0:05:26.608 presumably because historically the

0:05:26.608 –> 0:05:28.676 guidelines had recommended starting

0:05:28.676 –> 0:05:30.728 colorectal screening at the age of 50.

0:05:30.73 –> 0:05:34.447 So how are we picking up these cancers in

0:05:34.45 –> 0:05:35.605 younger people?

0:05:35.605 –> 0:05:37.53 Unfortunately, it's the last thing

0:05:37.53 –> 0:05:39.409 on many caregivers minds,

0:05:39.41 –> 0:05:41.82 medical professionals minds that

0:05:41.82 –> 0:05:44.629 somebody symptoms would be related to

0:05:44.629 –> 0:05:47.245 colon cancer if they are a younger adult.

0:05:47.25 –> 0:05:49.77 But the majority of patients, about

0:05:49.77 –> 0:05:52.299 3/4 of patients ,will have some

0:05:52.3 –> 0:05:54.496 nonspecific change in their bowel habits.

0:05:57.614 –> 0:05:59.27 Half will have bleeding.

0:05:59.27 –> 0:06:01.105 There's a palpable rectal mass

0:06:01.105 –> 0:06:02.94 in about 1/4 of patients,

0:06:02.94 –> 0:06:05.1 and iron deficency, or anemia isn't actually

0:06:05.1 –> 0:06:07.349 a sensitive as you might think.

0:06:07.35 –> 0:06:10.242 It's fewer than 20% of patients,

0:06:10.242 –> 0:06:11.972 especially young adults that

0:06:11.972 –> 0:06:14.318 would present with iron deficiency anemia.

0:06:14.32 –> 0:06:15.076 So unfortunately,

0:06:15.076 –> 0:06:17.344 I have numerous patients in my

0:06:17.344 –> 0:06:19.658 practice that had some lower GI

0:06:19.658 –> 0:06:21.518 bleeding that was attributed to

0:06:21.518 –> 0:06:23.12 hemorrhoids and incidence wise.

0:06:28.56 –> 0:06:29.58 Individuals should also

0:06:29.58 –> 0:06:30.94 listen to their bodies,

0:06:30.94 –> 0:06:32.64 and if something's not right,

0:06:32.64 –> 0:06:34 change in bowel habits,

0:06:34 –> 0:06:34.34 bleeding,

0:06:34.34 –> 0:06:35.36 they should take

0:06:35.36 –> 0:06:36.38 those very seriously,

0:06:36.38 –> 0:06:37.74 even if they're younger.

0:06:37.74 –> 0:06:39.44 Is it the case that,

0:06:39.44 –> 0:06:41.095 as we've seen this increasing

0:06:41.095 –> 0:06:42.75 incidence in younger people because

0:06:42.806 –> 0:06:44.536 they are presenting with symptoms?

0:06:44.54 –> 0:06:46.048 Presumably because screening was

0:06:46.048 –> 0:06:47.556 not recommended for

0:06:47.556 –> 0:06:49.64 people who were younger than age 50?

0:06:49.64 –> 0:06:51.47 Is it the case that these

0:06:51.47 –> 0:06:53.196 younger people that we were

0:06:53.196 –> 0:06:54.928 seeing colorectal cancers in

0:06:54.93 –> 0:06:56.205 were actually presenting

0:06:56.205 –> 0:06:57.905 with a higher stage,

0:06:57.91 –> 0:06:59.61 and what implications does

0:06:59.61 –> 0:07:01.31 that have for prognosis?

0:07:01.99 –> 0:07:04.426 Yeah, that's completely correct.

0:07:04.43 –> 0:07:06.887 Unfortunately, when you have a disease

0:07:06.887 –> 0:07:08.959 that is presenting because symptoms

0:07:08.959 –> 0:07:11.349 develop instead of asymptomatic screening,

0:07:11.35 –> 0:07:13.39 generally this stage is higher,

0:07:13.39 –> 0:07:15.185 so these younger adults generally

0:07:15.185 –> 0:07:17.498 are diagnosed at a more advanced

0:07:17.498 –> 0:07:19.738 stage and sometimes have even

0:07:19.738 –> 0:07:21.53 more aggressive biology overall.

0:07:21.53 –> 0:07:25.184 So again, the stage is going to be higher.

0:07:25.19 –> 0:07:27.075 The younger adult population tends

0:07:27.075 –> 0:07:29.927 to do better than the older adult

0:07:29.927 –> 0:07:32.603 population for when you're matching them

0:07:32.61 –> 0:07:35.298 by stage, because they can probably

0:07:35.298 –> 0:07:37.866 withstand treatment better but they

0:07:37.866 –> 0:07:40.337 are diagnosed at a more advanced stage

0:07:40.337 –> 0:07:43.446 then the patients that are

0:07:43.446 –> 0:07:45.66 diagnosed by asymptomatic screening and

0:07:45.66 –> 0:07:48.453 so now the American Cancer Society has

0:07:48.453 –> 0:07:51.508 come out and said that they recommend

0:07:51.508 –> 0:07:54.5 starting screening at the age of 45.

0:07:54.5 –> 0:07:57.026 Can you tell us more about

0:07:57.026 –> 0:07:58.289 their recommendations?

0:07:59.41 –> 0:08:00.871 Absolutely.

0:08:00.871 –> 0:08:03.306 The American College of Gastroenterology

0:08:03.306 –> 0:08:05.177 initially recommended

0:08:05.177 –> 0:08:07.257 dropping the screening age to

0:08:07.257 –> 0:08:09.598 45 for adults at average risk,

0:08:09.6 –> 0:08:12.042 but the most widely followed

0:08:12.042 –> 0:08:14.241 guidelines are actually the US

0:08:14.241 –> 0:08:16.237 preventative Task Force guidelines,

0:08:16.24 –> 0:08:18.455 which the majority of primary

0:08:18.455 –> 0:08:19.784 care physicians follow,

0:08:19.79 –> 0:08:22.18 and they did change their

0:08:22.18 –> 0:08:25.581 recommendation about a year or two ago

0:08:25.581 –> 0:08:28.347 to propose a Grade B recommendation

0:08:28.347 –> 0:08:30.977 for adults over the age of 45.

0:08:30.98 –> 0:08:33.796 But they still kept the greater

0:08:33.796 –> 0:08:36.066 recommendation for adults over the age of 50.

0:08:36.07 –> 0:08:37.58 But just yesterday this was

0:08:37.58 –> 0:08:39.57 updated and now for all adults,

0:08:39.57 –> 0:08:41.28 they've listed a strong recommendation

0:08:41.28 –> 0:08:43.379 for adults over the age of 45,

0:08:43.38 –> 0:08:45.972 so I think now going forward that's really

0:08:45.972 –> 0:08:48.79 going to be the age we start screening

0:08:48.79 –> 0:08:50.698 almost all asymptomatic adults.

0:08:56.53 –> 0:08:58.28 Colonoscopy is a very powerful screening procedure,

0:08:58.28 –> 0:09:00.5 not only because they can diagnose

0:09:00.5 –> 0:09:02.962 a cancer that's there and then we

0:09:02.962 –> 0:09:04.786 can deal with surgery

0:09:04.786 –> 0:09:06.679 or chemo as necessary,

0:09:06.68 –> 0:09:08.78 but they also remove

0:09:08.78 –> 0:09:09.48 premalignant conditions.

0:09:09.48 –> 0:09:11.712 So they are helping prevent

0:09:11.712 –> 0:09:13.2 the development of colorectal

0:09:13.262 –> 0:09:14.727 cancer even down the road.

0:09:15.35 –> 0:09:17.632 And there are

0:09:17.632 –> 0:09:19.655 so many screening tests now

0:09:19.655 –> 0:09:21.611 are recommended or that at

0:09:21.611 –> 0:09:23.7 least individuals could consider.

0:09:23.7 –> 0:09:25.515 So colonoscopy is often thought

0:09:25.515 –> 0:09:27.33 of as the gold standard,

0:09:27.33 –> 0:09:29.412 but some of these other tests

0:09:29.412 –> 0:09:31.689 seem to be really quite easy.

0:09:31.69 –> 0:09:33.895 Tell us a little bit about the

0:09:33.895 –> 0:09:35.765 different tests and the advantages

0:09:35.765 –> 0:09:37.485 and disadvantages of each.

0:09:37.49 –> 0:09:39.704 What do you recommend for patients

0:09:39.704 –> 0:09:42.574 who come to you and say,

0:09:42.574 –> 0:09:44.746 I heard about the updated guidelines,

0:09:44.75 –> 0:09:47.526 I'm now 45. What test should I have?

0:09:48.78 –> 0:09:50.957 I can comment a little bit there.

0:09:50.96 –> 0:09:52.51 It's not exactly my area.

0:09:52.51 –> 0:09:52.806 Unfortunately,

0:09:52.806 –> 0:09:54.878 the majority of patients I see have

0:09:54.878 –> 0:09:56.559 already been diagnosed with cancer,

0:09:56.56 –> 0:09:57.49 but absolutely colonoscopy is

0:09:57.49 –> 0:09:58.73 still the gold standard,

0:09:58.73 –> 0:10:00.949 so that would be my kind of

0:10:00.949 –> 0:10:02.256 blanket recommendation. For those

0:10:02.256 –> 0:10:04.014 that aren't ready to do that,

0:10:04.02 –> 0:10:06.197 but are interested in doing some screening,

0:10:08.25 –> 0:10:10.56 there are test for fecal occult blood,

0:10:10.56 –> 0:10:12.354 so for small amounts of undetectable

0:10:12.354 –> 0:10:14.497 blood and

0:10:14.497 –> 0:10:16.261 that's an imperfect way to

0:10:16.261 –> 0:10:18.563 assess whether or not there's a

0:10:18.563 –> 0:10:20.123 cancerous or precancerous condition.

0:10:20.13 –> 0:10:21.78 Again, the colonoscopy offers the

0:10:21.78 –> 0:10:23.43 power to remove precancerous lesions,

0:10:23.43 –> 0:10:25.05 which probably are not doing

0:10:25.05 –> 0:10:27.06 much at that point in time,

0:10:27.06 –> 0:10:29.42 but maybe missed by a test

0:10:29.42 –> 0:10:31.169 we're trying to detect small

0:10:31.169 –> 0:10:33.329 amounts of blood in the stool.

0:10:33.33 –> 0:10:35.794 There are also tests that actually try

0:10:35.794 –> 0:10:38.4 to detect DNA in in the stool, and

0:10:38.4 –> 0:10:41.55 that may be a more sensitive way,

0:10:41.55 –> 0:10:43.884 but also we're not removing anything

0:10:43.884 –> 0:10:45.815 premalignant with that we have

0:10:45.815 –> 0:10:47.957 yet to develop a blood based test

0:10:47.96 –> 0:10:49.735 that's diagnosing cancer before

0:10:49.735 –> 0:10:52.23 it develops, or at an early stage.

0:10:52.23 –> 0:10:54.01 So there are companies that

0:10:54.01 –> 0:10:55.434 are working on that,

0:10:55.44 –> 0:10:57.925 but we have a ways to go,

0:10:57.93 –> 0:11:00.499 but most of these patients are seen

0:11:00.499 –> 0:11:03.188 by my colleagues in Gastroenterology

0:11:03.188 –> 0:11:05.703 for their screening discussions and

0:11:07.84 –> 0:11:10.163 they are able to give some more eloquent answers

0:11:10.163 –> 0:11:10.997 on that

0:11:11 –> 0:11:12.89 than I am.

0:11:12.89 –> 0:11:15.224 Mike, the other question, and this might

0:11:15.224 –> 0:11:17.429 be a tough question as well,

0:11:17.43 –> 0:11:20.069 is why the magic number of 45?

0:11:20.07 –> 0:11:22.716 I mean, if we're seeing patients with

0:11:22.716 –> 0:11:25.334 younger colon cancers, why is it 45?

0:11:25.334 –> 0:11:28.361 Why not 40 or 42 or 38?

0:11:28.361 –> 0:11:30.467 How do people come up with

0:11:30.467 –> 0:11:33.206 these numbers as to at what age

0:11:33.206 –> 0:11:34.818 people should start screening?

0:11:35.83 –> 0:11:37.325 That's a great question and

0:11:37.325 –> 0:11:38.82 somebody asked the same question just last night.

0:11:45.1 –> 0:11:47.172 And I feel

0:11:47.172 –> 0:11:48.989 that same sentiment as well.

0:11:50.78 –> 0:11:53.5 I think that this is a first step and we

0:11:53.572 –> 0:11:56.156 may be recommending 40 in a few years,

0:11:56.16 –> 0:11:58.221 but we'll have to see how the data and

0:11:58.221 –> 0:12:00.546 the number needed to treat the

0:12:00.546 –> 0:12:02.592 number of colonoscopies done to really

0:12:02.592 –> 0:12:04.494 prevent one colorectal cancer holds up

0:12:04.494 –> 0:12:07.46 over time at these younger age groups.

0:12:07.46 –> 0:12:08.63 There's also

0:12:08.63 –> 0:12:10.173 as you know,

0:12:10.173 –> 0:12:12.411 I think different opinions on

0:12:12.411 –> 0:12:15.26 the age of of mammography as well.

0:12:15.26 –> 0:12:16.066 But again,

0:12:16.066 –> 0:12:19.29 getting back to the time it takes

0:12:19.383 –> 0:12:22.407 for colorectal cancer to develop in

0:12:22.407 –> 0:12:26.027 general somewhere on the order of a decade,

0:12:26.03 –> 0:12:28.214 I think by lowering the age to 40

0:12:28.214 –> 0:12:30.099 we're really capturing that group.

0:12:30.1 –> 0:12:32.431 If we were to lower the age of 40

0:12:32.431 –> 0:12:34.099 we're really capturing that group

0:12:34.099 –> 0:12:36.842 in the 45 to 50 range versus right

0:12:36.842 –> 0:12:39.173 now with this age of 45.

0:12:39.18 –> 0:12:41.046 Or probably

0:12:41.05 –> 0:12:42.274 we're helping prevent higher

0:12:42.274 –> 0:12:44.5 incidence in that 50 to 45 range.

0:12:44.5 –> 0:12:46.663 But as we started out the discussion

0:12:46.663 –> 0:12:49.103 really less than 50 is still seeing

0:12:49.103 –> 0:12:51.38 an increased incidence of colon cancer.

0:12:51.38 –> 0:12:53.837 So I think this is a moving target and

0:12:53.837 –> 0:12:56.518 we will benefit over time

0:12:56.52 –> 0:12:58.34 lowering the age,

0:12:58.34 –> 0:12:59.924 and I certainly, unfortunately,

0:12:59.924 –> 0:13:02.3 see patients in my practice below the

0:13:02.364 –> 0:13:04.158 age of 40 and 30 sometimes.

0:13:05.26 –> 0:13:07.731 Certainly it's going to be a

0:13:07.731 –> 0:13:09.988 moving target that we will follow,

0:13:09.99 –> 0:13:12.678 but for right now we're going to take

0:13:12.678 –> 0:13:15.446 a short break for a medical minute.

0:13:15.45 –> 0:13:17.27 Please stay tuned to learn

0:13:17.27 –> 0:13:19.09 more about the treatment of

0:13:19.09 –> 0:13:21.268 colorectal cancer with my guest doctor

0:13:21.27 –> 0:13:23.09 Michael Cecchini.

0:13:23.09 –> 0:13:25.16 Support for Yale Cancer Answers comes from Astrazeneca,

0:13:25.16 –> 0:13:26.816 working to eliminate

0:13:26.816 –> 0:13:28.55 cancer as a cause of death.

0:13:28.55 –> 0:13:31.85 Learn more at astrazeneca-u.com.

0:13:31.85 –> 0:13:35.098 This is a medical minute about lung cancer.

0:13:35.1 –> 0:13:37.648 More than 85% of lung cancer diagnosis

0:13:37.648 –> 0:13:40.576 are related to smoking and quitting even

0:13:40.576 –> 0:13:43.216 after decades of use can significantly

0:13:43.289 –> 0:13:45.683 reduce your risk of developing lung

0:13:45.683 –> 0:13:47.661 cancer for lung cancer patients.

0:13:47.661 –> 0:13:49.566 Clinical trials are currently underway

0:13:49.566 –> 0:13:51.74 to test innovative new treatments.

0:13:51.74 –> 0:13:54.746 Advances are being made by utilizing

0:13:54.746 –> 0:13:56.75 targeted therapies and immunotherapy.

0:13:56.826 –> 0:13:58.884 The battle two trial aims to learn

0:13:58.884 –> 0:14:01.47 if a drug or combination of drugs

0:14:01.47 –> 0:14:03.918 based on personal biomarkers can help

0:14:03.92 –> 0:14:06.846 to control non small cell lung cancer.

0:14:06.85 –> 0:14:09.65 More information is available

0:14:09.65 –> 0:14:10.77 at yalecancercenter.org.

0:14:10.77 –> 0:14:15.45 You're listening to Connecticut public radio.

0:14:15.45 –> 0:14:15.83 Welcome

0:14:15.83 –> 0:14:17.72 back to Yale Cancer Answers.

0:14:17.72 –> 0:14:19.988 This is doctor Anees Chagpar

0:14:19.988 –> 0:14:22.365 and I'm joined tonight by my

0:14:22.365 –> 0:14:24.137 guest doctor Michael Cecchini.

0:14:24.14 –> 0:14:26.015 We're talking about the treatment

0:14:26.015 –> 0:14:28.263 of colorectal cancer and Mike right

0:14:28.263 –> 0:14:30.426 before the break we were talking about

0:14:30.426 –> 0:14:32.84 the new updated screening guidelines,

0:14:32.84 –> 0:14:34.348 which now are recommending

0:14:34.348 –> 0:14:35.856 screening for colorectal cancer

0:14:35.86 –> 0:14:38.506 going back to the age of 45.

0:14:38.51 –> 0:14:40.4 One last question with regards

0:14:40.4 –> 0:14:42.29 to screening, before the break,

0:14:42.29 –> 0:14:44.175 you had mentioned that there

0:14:44.175 –> 0:14:45.683 are certain racial groups,

0:14:45.69 –> 0:14:48.67 for example, African Americans

0:14:48.67 –> 0:14:52.086 that tend to be diagnosed at a higher frequency,

0:14:52.09 –> 0:14:54.658 tend to have a worse prognosis

0:14:54.658 –> 0:14:56.37 than their Caucasian counterparts.

0:14:56.37 –> 0:14:58.83 So are the screening guidelines any

0:14:58.83 –> 0:15:00.47 different for African Americans

0:15:00.531 –> 0:15:01.509 versus Caucasian

0:15:01.51 –> 0:15:03.222 patients?

0:15:03.222 –> 0:15:04.078 There are slightly different recommendations

0:15:12.98 –> 0:15:14.936 Just as of yesterday the

0:15:14.936 –> 0:15:16.57 US preventive taskforce has

0:15:16.57 –> 0:15:18.453 changed it 45 and above for all

0:15:18.453 –> 0:15:20.394 adults and so I think there

0:15:20.394 –> 0:15:22.012 were some high risk groups

0:15:22.012 –> 0:15:23.372 including African Americans that were

0:15:23.372 –> 0:15:24.95 recommended 45 and above previously.

0:15:24.95 –> 0:15:27.35 But now it's just everybody 45.

0:15:27.73 –> 0:15:29.65 One wonders whether they will,

0:15:29.65 –> 0:15:32.184 as we were talking about before the

0:15:32.184 –> 0:15:35.008 break and edging even earlier,

0:15:35.01 –> 0:15:37.509 whether they would make that now

0:15:37.509 –> 0:15:40.757 a new age for higher risk groups.

0:15:40.76 –> 0:15:43.032 But I want to switch gears now and

0:15:43.032 –> 0:15:45.648 talk a little bit about what happens

0:15:45.648 –> 0:15:48.222 to patients after they have been

0:15:48.222 –> 0:15:50.33 diagnosed with colorectal cancer.

0:15:50.33 –> 0:15:52.604 So somebody goes and they get

0:15:52.604 –> 0:15:54.54 their colonoscopy and you know,

0:15:54.54 –> 0:15:56.754 we talked about colonoscopy being a

0:15:56.754 –> 0:15:58.86 great modality that can actually

0:15:58.86 –> 0:16:01.326 find premalignant lesions and remove them.

0:16:01.33 –> 0:16:03.225 But let's suppose on colonoscopy

0:16:03.225 –> 0:16:05.655 a patient is found to actually

0:16:05.655 –> 0:16:07.507 have an invasive cancer.

0:16:07.51 –> 0:16:09.96 Tell us a little bit more about

0:16:09.96 –> 0:16:11.984 how the treatment really works

0:16:11.984 –> 0:16:14.234 in terms of managing patients

0:16:14.234 –> 0:16:16.16 with colorectal cancer.

0:16:16.16 –> 0:16:18.22 Absolutely so it's a very

0:16:18.22 –> 0:16:19.044 multidisciplinary effort,

0:16:19.05 –> 0:16:20.678 meaning there's numerous care

0:16:20.678 –> 0:16:22.713 providers that are involved in

0:16:22.713 –> 0:16:24.408 navigating somebody through a

0:16:24.408 –> 0:16:26.044 diagnosis of colorectal cancer.

0:16:26.05 –> 0:16:28.516 There's myself as a medical oncologist,

0:16:28.52 –> 0:16:30.58 there are our surgical colleagues.

0:16:30.58 –> 0:16:33.26 There's our pathologists, radiologists,

0:16:33.26 –> 0:16:35.27 our radiation oncologists.

0:16:35.27 –> 0:16:36.94 Our nutritionists, social workers,

0:16:36.94 –> 0:16:38.3 everybody really involved here,

0:16:38.3 –> 0:16:40.34 so the first step to really

0:16:40.406 –> 0:16:42.278 know how we're going to treat

0:16:42.278 –> 0:16:43.93 somebody's cancer is the stage.

0:16:43.93 –> 0:16:45.928 So that's not unique to colorectal

0:16:45.928 –> 0:16:47.92 cancer, it is very common in cancer.

0:16:47.92 –> 0:16:50.496 The stage will help dictate

0:16:50.496 –> 0:16:53.518 what the care is going to be.

0:16:53.518 –> 0:16:56.37 Stage 1,2,3 and four is how we stage

0:16:56.37 –> 0:16:58.576 the cancer and I could probably spend

0:16:58.576 –> 0:17:00.574 hours talking about all of this.

0:17:00.58 –> 0:17:03.037 But stage one is basically a small

0:17:03.037 –> 0:17:04.481 cancer that's barely invaded

0:17:04.481 –> 0:17:06.395 into the wall of the colon.

0:17:06.4 –> 0:17:09.127 If we think of the colon as a tube,

0:17:09.13 –> 0:17:10.006 it's barely in.

0:17:10.006 –> 0:17:12.759 It starts on the inner part of that tube.

0:17:12.76 –> 0:17:14.578 It's barely invaded through the wall,

0:17:16.7 –> 0:17:19.427 and a tumor like that is just excised by surgery.

0:17:19.43 –> 0:17:21.638 They may never even see me as a

0:17:21.638 –> 0:17:22.907 medical oncologist because surgery

0:17:22.907 –> 0:17:25.189 is curative in the majority of cases.

0:17:25.19 –> 0:17:27.255 A stage two cancer has gone a

0:17:27.255 –> 0:17:29.128 little bit further into that wall,

0:17:29.13 –> 0:17:30.936 but hasn't spread to any lymph nodes.

0:17:30.94 –> 0:17:32.962 Those patients will see a medical

0:17:32.962 –> 0:17:34.915 oncologist and it

0:17:34.915 –> 0:17:36.547 will be discussed whether or not

0:17:36.55 –> 0:17:38.77 they get chemotherapy after surgery to

0:17:38.77 –> 0:17:40.645 increase their cure rate and eradicate small

0:17:40.645 –> 0:17:42.315 amounts of possible residual disease

0:17:42.315 –> 0:17:44.278 based on risk factors.

0:17:44.28 –> 0:17:45.955 Stage three cancer means it's gone

0:17:45.955 –> 0:17:47.295 to the lymph nodes,

0:17:47.3 –> 0:17:49.908 so it's behaving a bit

0:17:49.908 –> 0:17:51.33 more aggressively so a patient

0:17:51.33 –> 0:17:53.346 with an invasive mass, a colonoscopy is done.

0:17:53.35 –> 0:17:54.646 A surgery is done,

0:17:54.646 –> 0:17:56.266 lymph nodes are removed at

0:17:56.266 –> 0:17:57.72 the time of surgery

0:17:57.72 –> 0:17:59.628 in addition to the tumor if

0:17:59.628 –> 0:18:01.75 there's cancer in the lymph nodes.

0:18:01.75 –> 0:18:03.766 So if it's a stage three cancer,

0:18:03.77 –> 0:18:05.594 all of those patients are going

0:18:05.594 –> 0:18:07.57 to see a medical oncologist.

0:18:07.57 –> 0:18:08.581 And almost universally,

0:18:08.581 –> 0:18:10.603 as long as they're healthy afterwards,

0:18:10.61 –> 0:18:12.602 will get chemotherapy to hopefully increase

0:18:12.602 –> 0:18:15.01 their care.

0:18:15.01 –> 0:18:16.358 Like with many other cancers,

0:18:16.358 –> 0:18:18.043 stage 4 means it's spread more distantly,

0:18:18.05 –> 0:18:20.325 so cancer that started in the colon

0:18:20.325 –> 0:18:22.444 spread to the liver, the lung,

0:18:22.444 –> 0:18:24.129 the lining of the abdomen,

0:18:24.13 –> 0:18:25.82 which we call the peritoneum,

0:18:25.82 –> 0:18:28.524 would make a cancer stage four.

0:18:28.53 –> 0:18:30.558 One of those spots would make

0:18:30.558 –> 0:18:31.91 a cancer stage four,

0:18:31.91 –> 0:18:34.943 and there still may be a role for surgery.

0:18:36.98 –> 0:18:38.356 But chemotherapy is generally.

0:18:38.356 –> 0:18:39.732 Generally, where we will start,

0:18:39.732 –> 0:18:42.51 we think of it as a systemic disease

0:18:42.51 –> 0:18:43.782 throughout the body,

0:18:43.782 –> 0:18:45.69 and chemotherapy works throughout the body.

0:18:45.69 –> 0:18:47.598 When it's working in those stage

0:18:47.598 –> 0:18:49.412 four cancers, though, there's

0:18:49.412 –> 0:18:52.244 a lot that we need to know to

0:18:52.244 –> 0:18:54.272 personalize the therapy for the cancers.

0:18:54.28 –> 0:18:56.503 We do a lot of tests in the lab

0:18:56.503 –> 0:18:58.727 and to characterize the cancer,

0:18:58.73 –> 0:19:00.956 is it mismatch, repair, deficient or not?

0:19:00.96 –> 0:19:02.555 Are there mutations in genes

0:19:02.555 –> 0:19:04.46 called RAFS or not?

0:19:04.46 –> 0:19:07.313 And they tell us how we tweak the chemo,

0:19:07.32 –> 0:19:09.07 or maybe even offer immunotherapy

0:19:09.07 –> 0:19:11.446 to the patients, and then again,

0:19:11.45 –> 0:19:13.808 we will sometimes consider surgery to

0:19:13.808 –> 0:19:16.219 remove distant metastases in select cases,

0:19:16.22 –> 0:19:18.266 and that's why it's so important

0:19:18.266 –> 0:19:20.979 to have a multi disciplinary team.

0:19:20.98 –> 0:19:23.116 So a true team involved in

0:19:23.116 –> 0:19:25.35 the care of these patients,

0:19:25.35 –> 0:19:28.045 even with stage four disease and all

0:19:28.045 –> 0:19:30.882 of these cases are reviewed at our

0:19:30.882 –> 0:19:33.282 tumor board with that whole team,

0:19:33.29 –> 0:19:36.069 I articulate how best

0:19:36.07 –> 0:19:38.055 to approach somebody's care in

0:19:38.055 –> 0:19:40.04 terms of these molecular genetics.

0:19:40.04 –> 0:19:42.02 The RAF mutations,

0:19:42.02 –> 0:19:43.127 the mismatch repair

0:19:43.127 –> 0:19:45.341 mutations you mentioned those in terms

0:19:45.341 –> 0:19:47.98 of tweaking chemotherapy for stage four,

0:19:47.98 –> 0:19:50.314 are those also used in

0:19:50.314 –> 0:19:51.87 kind of tailoring therapy

0:19:51.87 –> 0:19:54.98 for people with earlier stage disease?

0:19:54.98 –> 0:19:56.925 If I could only know a couple

0:19:56.925 –> 0:19:58.481 things about the molecular

0:19:58.481 –> 0:20:00.038 characteristics of somebody's tumor,

0:20:00.04 –> 0:20:02.756 it would be the mismatch repair status,

0:20:02.76 –> 0:20:05.286 which is also sometimes called the

0:20:05.286 –> 0:20:06.97 microsatellite status or their

0:20:07.042 –> 0:20:09.372 RAF status.

0:20:09.372 –> 0:20:10.924 So in localized disease,

0:20:10.93 –> 0:20:13.919 the mismatch repair status is very important.

0:20:13.92 –> 0:20:16.2 The RAF and the RAF status

0:20:16.2 –> 0:20:17.72 is not so important,

0:20:17.72 –> 0:20:20.247 so we often only send the latter

0:20:20.247 –> 0:20:21.9 component for metastatic disease.

0:20:21.9 –> 0:20:24.18 But for localized cancer mismatch repair,

0:20:24.18 –> 0:20:25.684 deficient, or microsatellite instability

0:20:25.684 –> 0:20:27.564 high cancers generally have

0:20:27.564 –> 0:20:29.498 a more favorable prognosis,

0:20:29.5 –> 0:20:31.39 and sometimes we will take that

0:20:31.39 –> 0:20:33.44 information and say you don't even

0:20:33.44 –> 0:20:34.904 need chemotherapy after surgery

0:20:34.904 –> 0:20:37.324 because of this

0:20:37.324 –> 0:20:39.554 finding of mismatch repair deficiency

0:20:39.554 –> 0:20:40.892 or microsatellite instability

0:20:40.9 –> 0:20:43.684 and it's less likely to come back

0:20:43.684 –> 0:20:46.329 and therefore you don't need chemotherapy.

0:20:46.33 –> 0:20:48.106 There's a lot of other factors

0:20:48.106 –> 0:20:49.71 that come into play there,

0:20:49.71 –> 0:20:51.717 so I don't want to say that all mismatch

0:20:51.717 –> 0:20:53.7 repair division microsatellite instability

0:20:53.7 –> 0:20:54.928 high tumors don't need

0:20:54.928 –> 0:20:55.849 chemotherapy after surgery,

0:20:55.85 –> 0:20:57.38 but it's generally thought to

0:20:57.38 –> 0:20:58.604 be a good prognosis.

0:20:58.61 –> 0:21:00.446 And we know from metastatic disease,

0:21:00.45 –> 0:21:01.985 those tumors are much more

0:21:01.985 –> 0:21:02.906 sensitive to immunotherapy.

0:21:02.91 –> 0:21:04.542 Some of the most sensitive cancers

0:21:04.542 –> 0:21:06.589 that there are in fact to immunotherapy,

0:21:06.59 –> 0:21:08.16 and it's being investigated whether

0:21:08.16 –> 0:21:10.07 or not immunotherapy is going to

0:21:10.07 –> 0:21:11.81 increase cure rates in that population.

0:21:11.81 –> 0:21:13.652 And we have some of those

0:21:13.652 –> 0:21:14.88 clinical trials going on.

0:21:15.19 –> 0:21:17.026 That brings me to the next question,

0:21:17.03 –> 0:21:19.38 which is about clinical trials.

0:21:19.38 –> 0:21:21.405 Colorectal cancer has been around

0:21:21.405 –> 0:21:24.187 for a long time and is one of

0:21:24.19 –> 0:21:26.801 the leading cancers

0:21:26.801 –> 0:21:28.669 affecting both men and women,

0:21:28.67 –> 0:21:30.824 and so presumably there are some

19

0:21:30.824 –> 0:21:33.087 pretty standard regimens in terms of

0:21:33.087 –> 0:21:35.373 chemotherapy that we offer these patients.

0:21:35.38 –> 0:21:37.964 So tell us a little bit about when

0:21:37.964 –> 0:21:40.6 you offer people a standard regimen,

0:21:40.6 –> 0:21:42.838 and when you offer them a

0:21:42.84 –> 0:21:44.935 clinical trial?

0:21:44.935 –> 0:21:47.819 Clinical trials play a tremendous role in the management

0:21:47.819 –> 0:21:50.367 of a disease like colorectal cancer.

0:21:50.37 –> 0:21:52.69 And are really how we move the field

0:21:52.69 –> 0:21:55.126 forward and we've doubled and tripled the

0:21:55.126 –> 0:21:57.361 survival rate especially for metastatic

0:21:57.361 –> 0:21:59.599 disease over the last few decades.

0:21:59.6 –> 0:22:01.26 And that's because clinical trials

0:22:01.26 –> 0:22:03.662 brought new agents and drugs and

0:22:03.662 –> 0:22:06.063 treatment approaches into the fold and the

0:22:06.063 –> 0:22:08.147 treatments we have for metastatic disease,

0:22:08.15 –> 0:22:10.112 we use some of them again

0:22:10.112 –> 0:22:11.92 after surgery we use drugs, and

0:22:11.92 –> 0:22:14.736 we like our acronyms or abbreviations so we

0:22:14.736 –> 0:22:18.065 we have a regimen we call folfox which is 5FU,

0:22:18.07 –> 0:22:19.86 and oxaliplatin and a

0:22:19.86 –> 0:22:20.934 vitamin called leucovorin.

0:22:20.94 –> 0:22:23.39 It's really two chemo drugs together and we have

0:22:23.39 –> 0:22:25.499 another chemo regimen called FOLFIRI.

0:22:27.772 –> 0:22:30.197 so again two chemo drugs together just a

0:22:30.197 –> 0:22:32.87 second one instead of the oxaliplatin,

0:22:32.87 –> 0:22:35.678 and that's really the backbone of our care,

0:22:35.68 –> 0:22:38.179 and we can usually control a metastatic

0:22:38.179 –> 0:22:40.315 colorectal cancer patient for years

0:22:40.315 –> 0:22:41.995 with those two regimens together,

0:22:42 –> 0:22:44.552 but at some point we run out of

0:22:44.552 –> 0:22:46.21 mileage with those agents,

0:22:46.21 –> 0:22:46.912 resistance develops,

0:22:46.912 –> 0:22:48.667 tolerability becomes an issue,

0:22:48.67 –> 0:22:50.122 something that necessitates us

0:22:50.122 –> 0:22:51.937 moving on from those regimens.

0:22:51.94 –> 0:22:53.998 And we really don't have great

0:22:53.998 –> 0:22:55.027 agents after that,

0:22:55.03 –> 0:22:57.424 so I'm often thinking about clinical trials,

0:22:57.43 –> 0:22:59.145 novel clinical trials after those

0:22:59.145 –> 0:23:00.517 regimens have stopped working,

0:23:00.52 –> 0:23:03.18 but I am often thinking about clinical

0:23:03.18 –> 0:23:05.656 trials even initially where those

0:23:07.052 –> 0:23:09.43 agents will be added on,

0:23:09.43 –> 0:23:10.79 or different treatment approaches

0:23:10.79 –> 0:23:13.21 will be added onto those chemo drugs,

0:23:13.21 –> 0:23:15.256 so they are good chemo backbones.

0:23:15.26 –> 0:23:17.661 We can do better and we are

0:23:17.661 –> 0:23:18.69 investigating numerous ways,

0:23:18.69 –> 0:23:20.748 adding an immunotherapy, new targeted drugs,

0:23:20.75 –> 0:23:22.988 new chemo drugs to those regimens.

0:23:22.99 –> 0:23:24.75 But we're also investigating

0:23:24.75 –> 0:23:26.395 completely new regimens in the

0:23:26.395 –> 0:23:28.62 3rd and the 4th line setting.

0:23:28.62 –> 0:23:30.582 There are third and fourth line

0:23:30.582 –> 0:23:31.89 drugs available for patients

0:23:31.946 –> 0:23:33.2 with colorectal cancer,

0:23:33.2 –> 0:23:35.657 and there's a drug called task 102.

0:23:38.13 –> 0:23:40.65 But the effect of those is marginal

0:23:40.65 –> 0:23:42.349 compared to those

0:23:42.35 –> 0:23:44.456 other therapies that I mentioned.

0:23:44.46 –> 0:23:46.91 It sounds like clinical

0:23:46.91 –> 0:23:49.04 trials have two kind of roles.

0:23:49.04 –> 0:23:51.574 One is after our standard tried and

0:23:51.574 –> 0:23:53.46 true regiment have failed and

0:23:53.46 –> 0:23:55.602 And we're looking for the best thing that might

0:23:57.836 –> 0:24:00.05 help and move us further afield.

0:24:00.05 –> 0:24:02.409 And the other is in investigating novel

0:24:02.409 –> 0:24:04.287 therapies and straight out of the box.

0:24:04.29 –> 0:24:05.199 Is that right?

0:24:05.199 –> 0:24:06.108 Yeah, that's

0:24:06.11 –> 0:24:06.714 definitely right.

0:24:08.23 –> 0:24:10.054 These treatments like folfox and folfiri

0:24:10.054 –> 0:24:12.169 have doubled and tripled the survival rate.

0:24:12.17 –> 0:24:14.586 But we can still do better than that.

0:24:14.59 –> 0:24:16.718 But they are the standard of care,

0:24:16.72 –> 0:24:18.526 and since they are so effective,

0:24:18.53 –> 0:24:20.717 we add on to those and we should add

0:24:20.717 –> 0:24:23.55 on to those so that patients get the

0:24:23.55 –> 0:24:25.199 best treatment available to them.

0:24:25.2 –> 0:24:26.892 When we've moved on to our

0:24:26.892 –> 0:24:28.839 third and our first fourth line,

0:24:28.84 –> 0:24:30.868 treatments is task one or two

0:24:32.59 –> 0:24:33.619 and start chemo pills.

0:24:33.619 –> 0:24:35.677 There is not a great alternative.

0:24:35.68 –> 0:24:37.515 They are not tolerated super

0:24:37.515 –> 0:24:39.738 well and their time

0:24:39.738 –> 0:24:41.308 with Disease Control is not

0:24:41.308 –> 0:24:43.57 not as good as we would like,

0:24:43.57 –> 0:24:45.901 so that is a time that we try a

0:24:45.901 –> 0:24:48.029 more novel approach generally.

0:24:49.18 –> 0:24:52.492 So tell us a little bit more about

0:24:52.492 –> 0:24:54.972 your research and some of the

0:24:54.972 –> 0:24:56.624 things that you're particularly

0:24:56.63 –> 0:24:59.115 excited about in this field.

0:24:59.115 –> 0:25:01.605 I guess maybe I'll start by

0:25:01.605 –> 0:25:04.135 talking about some of the things

0:25:04.135 –> 0:25:06.15 I'm excited about more broadly,

0:25:06.15 –> 0:25:09.21 and one area that I think has garnered a lot

0:25:09.282 –> 0:25:12.396 of attention lately for colorectal cancer

0:25:12.396 –> 0:25:15.26 is something called circulating tumor DNA,

0:25:15.26 –> 0:25:17.36 where we can detect minimal

0:25:17.36 –> 0:25:19.46 amounts of circulating tumor DNA

0:25:19.46 –> 0:25:22.088 in the bloodstream after a surgery.

0:25:22.09 –> 0:25:26.474 So, for example, patients with stage two

0:25:26.474 –> 0:25:29.578 colorectal cancer that happens to have

0:25:29.58 –> 0:25:31.638 a blood test done that

0:25:31.638 –> 0:25:33.67 circulating tumor DNA is detected.

0:25:33.67 –> 0:25:37.366 Now we know that that patient is probably

0:25:37.366 –> 0:25:41.335 going to relapse if we don't do anything

0:25:41.34 –> 0:25:41.922 besides observation,

0:25:41.922 –> 0:25:44.25 so we can use a tool like that

0:25:44.313 –> 0:25:45.798 to decide who's high risk,

0:25:45.8 –> 0:25:47.426 who's low risk and that gives

0:25:47.426 –> 0:25:48.51 us opportunities to intensify

0:25:48.557 –> 0:25:49.658 and deintensify treatment.

0:25:49.66 –> 0:25:51.292 So trying to increase cure rates

0:25:51.292 –> 0:25:53.275 for those that are high risk but

0:25:53.275 –> 0:25:54.665 also knowing when somebody is

0:25:54.665 –> 0:25:56.935 going to do well and maybe avoid

0:25:56.935 –> 0:25:58.263 circumstances of over treatment.

0:25:58.27 –> 0:26:00.349 So that's something as a field

0:26:00.35 –> 0:26:01.534 I think we're learning

0:26:01.534 –> 0:26:03.014 how to use these tests.

0:26:03.02 –> 0:26:05.029 We know they correlate really well with

0:26:05.029 –> 0:26:07.504 whether or not the cancer is going to come

0:26:07.504 –> 0:26:09.559 back when you're only doing observation,

0:26:09.56 –> 0:26:11.653 but we don't know how well it

0:26:11.653 –> 0:26:13.27 predicts for benefit from chemo

0:26:13.27 –> 0:26:16.028 and most our studies are ongoing.

0:26:16.03 –> 0:26:18.328 We have some of those studies

0:26:18.328 –> 0:26:20.36 ongoing here at Yale.

0:26:20.36 –> 0:26:22.67 I also have

0:26:22.67 –> 0:26:24.54 a busy clinical practice and

0:26:24.54 –> 0:26:26.41 research program studying more novel

0:26:26.474 –> 0:26:28.258 therapies in colorectal cancer.

0:26:28.26 –> 0:26:30.702 So we have different types of

0:26:30.702 –> 0:26:33.039 trials we develop here at Yale.

0:26:33.04 –> 0:26:35.931 We have trials where we call them

0:26:35.931 –> 0:26:38.229 industry sponsored trials where we

0:26:38.23 –> 0:26:40.606 have worked with a company who's

0:26:40.606 –> 0:26:43.053 developed a drug and opened their

0:26:43.053 –> 0:26:45.405 trial that they came up with

0:26:46.634 –> 0:26:49.8 maybe with some input than us from us,

0:26:49.8 –> 0:26:53.456 but we've had a little bit less

0:26:53.456 –> 0:26:56.108 involvement, perhaps in a trial like that,

0:26:56.11 –> 0:26:57.494 and designing the trial,

0:26:57.494 –> 0:27:00.036 and in analyzing the data so those

0:27:00.036 –> 0:27:01.604 are industry sponsored

0:27:01.604 –> 0:27:03.564 trials that we have here.

0:27:03.57 –> 0:27:06.506 But we also have a robust program of

0:27:06.506 –> 0:27:08.049 investigator initiated trials here,

0:27:08.05 –> 0:27:10.898 and I have a couple open and one

0:27:10.898 –> 0:27:12.9 specifically in that third line,

0:27:12.9 –> 0:27:14.76 colorectal cancer Group, for example.

0:27:14.76 –> 0:27:17.28 This is a trial where we've come

0:27:17.28 –> 0:27:18.86 up with the idea,

0:27:18.86 –> 0:27:21.737 and maybe we've written a grant or

0:27:21.737 –> 0:27:24.389 we've partnered with a drug company to

0:27:24.39 –> 0:27:27.25 tell them in a way that we think that

0:27:27.325 –> 0:27:30.259 we could look at a new subtype of cancer,

0:27:30.26 –> 0:27:33.536 or a new way to look at

0:27:33.536 –> 0:27:36.296 their drug to leverage that and

0:27:36.3 –> 0:27:38 for patients with that disease,

0:27:38 –> 0:27:40.303 so I have an investigator initiated trial

0:27:40.303 –> 0:27:42.386 for colorectal cancer that is received

0:27:42.386 –> 0:27:44.116 two different types of chemotherapy,

0:27:44.12 –> 0:27:46.84 where we look for a marker called MGMT.

0:27:46.84 –> 0:27:48.88 So we basically meet a patient,

0:27:49.879 –> 0:27:51.877 if they are potential candidate we will

0:27:51.877 –> 0:27:53.98 test their tumor for this marker,

0:27:53.98 –> 0:27:56.002 and if they have this marker

0:27:56.002 –> 0:27:58.4 which ends up being about 40% of

0:27:58.4 –> 0:28:00.44 patients if they have this marker,

0:28:00.44 –> 0:28:02.384 we will then offer them enrollment

0:28:02.384 –> 0:28:03.68 in a clinical trial.

0:28:07.994 –> 0:28:10.49 So we basically identify this subgroup

0:28:10.544 –> 0:28:12.704 of colorectal cancer and then we had this

0:28:12.704 –> 0:28:14.806 trial that we came up with here at Yale.

0:28:14.81 –> 0:28:16.658 And we're also studying the

0:28:16.658 –> 0:28:18.889 outcome of patients with this to make

0:28:18.889 –> 0:28:20.767 sure that we're actually helping people,

0:28:20.77 –> 0:28:22.996 but also studying the science to develop

0:28:22.996 –> 0:28:24.859 the next generation of trials which,

0:28:24.86 –> 0:28:27.204 in my opinion will be leveraging the immune

0:28:27.204 –> 0:28:29.74 system to make it work for the majority

0:28:29.74 –> 0:28:31.45 of patients with colorectal cancer

0:28:31.45 –> 0:28:33.97 as my colleagues in lung cancer and Melanoma

0:28:33.97 –> 0:28:36.157 have been doing for the last decade.

0:28:36.61 –> 0:28:38.89 Doctor Michael Cecchini is an assistant

0:28:38.89 –> 0:28:40.828 professor of medicine and medical

0:28:40.828 –> 0:28:43.285 oncology at the Yale School of Medicine.

0:28:43.29 –> 0:28:44.778 If you have questions,

0:28:44.778 –> 0:28:46.266 the address is canceranswers@yale.edu

0:28:46.266 –> 0:28:48.321 and past editions of the program

0:28:48.321 –> 0:28:50.199 are available in audio and written

0:28:50.254 –> 0:28:51.82 form at yalecancercenter.org.

0:28:51.82 –> 0:28:54.556 We hope you'll join us next week to

0:28:54.556 –> 0:28:57.214 learn more about the fight against

0:28:57.214 –> 0:29:00.064 cancer here on Connecticut Public Radio.