WEBVTT

00:00:00.000 --> 00:00:01.965 Funding for Yale Cancer Answers

NOTE Confidence: 0.847663965

00:00:01.965 --> 00:00:03.930 is provided by Smilow Cancer

NOTE Confidence: 0.847663965

00:00:03.997 --> 00:00:05.697 Hospital and AstraZeneca.

NOTE Confidence: 0.880735906

00:00:07.960 --> 00:00:09.808 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.880735906

00:00:09.808 --> 00:00:11.843 your host doctor Anees Chagpar.

NOTE Confidence: 0.880735906

00:00:11.843 --> 00:00:13.693 Yale Cancer Answers features the

NOTE Confidence: 0.880735906

00:00:13.693 --> 00:00:15.923 latest information on cancer care by

NOTE Confidence: 0.880735906

00:00:15.923 --> 00:00:17.335 welcoming oncologists and specialists

NOTE Confidence: 0.880735906

00:00:17.335 --> 00:00:19.664 who are on the forefront of the

NOTE Confidence: 0.880735906

00:00:19.664 --> 00:00:21.438 battle to fight cancer. This week,

NOTE Confidence: 0.880735906

00:00:21.438 --> 00:00:23.216 it's a conversation about the care of

NOTE Confidence: 0.880735906

00:00:23.216 --> 00:00:24.860 patients with liver cancer with doctor

NOTE Confidence: 0.880735906

00:00:24.860 --> 00:00:27.219 Ariel Jaffe. Dr. Jaffe is an assistant

NOTE Confidence: 0.880735906

00:00:27.219 --> 00:00:29.575 professor of medicine and the section of

NOTE Confidence: 0.880735906

00:00:29.575 --> 00:00:31.495 digestive diseases at the Yale School

NOTE Confidence: 0.880735906

00:00:31.559 --> 00:00:33.617 of Medicine where Doctor Chagpar is

NOTE Confidence: 0.880735906

00:00:33.620 --> 00:00:35.570 a professor of surgical oncology.

NOTE Confidence: 0.898659783

00:00:36.750 --> 00:00:38.486 Ariel, maybe we can start off by

NOTE Confidence: 0.898659783

00:00:38.486 --> 00:00:40.389 you telling us a little bit about

NOTE Confidence: 0.898659783

00:00:40.389 --> 00:00:42.039 yourself and what exactly you do.

NOTE Confidence: 0.89122893

00:00:42.810 --> 00:00:44.900 Sure, so basically I specialize

NOTE Confidence: 0.89122893

00:00:44.900 --> 00:00:47.842 in the care of patients that have

NOTE Confidence: 0.89122893

00:00:47.842 --> 00:00:50.164 advanced liver disease and I work

NOTE Confidence: 0.89122893

00:00:50.164 --> 00:00:52.770 both in the transplant program,

NOTE Confidence: 0.89122893

00:00:52.770 --> 00:00:54.513 so patients who need to go on

NOTE Confidence: 0.89122893

00:00:54.513 --> 00:00:56.410 to have a liver transplant,

NOTE Confidence: 0.89122893

00:00:56.410 --> 00:00:58.035 and also patients

NOTE Confidence: 0.89122893

00:00:58.035 --> 00:00:59.335 that develop liver cancer,

NOTE Confidence: 0.89122893

00:00:59.340 --> 00:01:01.152 which is an extremely common

NOTE Confidence: 0.89122893

00:01:01.152 --> 00:01:02.964 complication in patients that

NOTE Confidence: 0.89122893

00:01:02.964 --> 00:01:04.880 have chronic liver disease.

NOTE Confidence: 0.9015373325

00:01:05.150 --> 00:01:07.686 So let's talk a little bit about that.

NOTE Confidence: 0.9015373325

00:01:07.690 --> 00:01:10.540 So when you're talking about

NOTE Confidence: 0.9015373325

00:01:10.540 --> 00:01:12.820 patients who require transplant,

NOTE Confidence: 0.9015373325

00:01:12.820 --> 00:01:14.944 what kinds of conditions

NOTE Confidence: 0.9015373325

00:01:14.944 --> 00:01:16.537 require liver transplants?

NOTE Confidence: 0.9015373325

00:01:16.540 --> 00:01:20.920 I mean, are these patients who

NOTE Confidence: 0.9015373325

00:01:20.920 --> 00:01:23.376 have hepatitis, cirrhosis, tell

NOTE Confidence: 0.9015373325

00:01:23.376 --> 00:01:25.238 us a little bit more about what

NOTE Confidence: 0.9015373325

00:01:25.238 --> 00:01:26.877 kinds of conditions will lead

NOTE Confidence: 0.9015373325

00:01:26.877 --> 00:01:28.965 you down the path of transplant?

00:01:31.202 --> 00:01:33.045 Most commonly, patients that develop

NOTE Confidence: 0.930915051666667

00:01:33.045 --> 00:01:35.064 end stage liver disease, which is

NOTE Confidence: 0.930915051666667

00:01:35.064 --> 00:01:36.966 what we commonly know

NOTE Confidence: 0.930915051666667

00:01:36.966 --> 00:01:39.275 as cirrhosis are the ones that we

NOTE Confidence: 0.930915051666667

00:01:39.275 --> 00:01:40.890 do evaluate for liver transplant,

NOTE Confidence: 0.930915051666667

00:01:40.890 --> 00:01:42.626 and that could be from a variety

NOTE Confidence: 0.930915051666667

00:01:42.626 --> 00:01:43.370 of different causes.

NOTE Confidence: 0.930915051666667

00:01:43.370 --> 00:01:45.410 Some which you alluded to.

NOTE Confidence: 0.930915051666667

00:01:45.410 --> 00:01:47.182 You know patients that

NOTE Confidence: 0.930915051666667

00:01:47.182 --> 00:01:48.954 have chronic viral disease.

NOTE Confidence: 0.930915051666667

00:01:48.960 --> 00:01:51.172 Certain toxins, like alcohol use,

NOTE Confidence: 0.930915051666667

00:01:51.172 --> 00:01:53.384 certain genetic disorders,

NOTE Confidence: 0.930915051666667

00:01:53.390 --> 00:01:55.946 patients with obesity and diabetes which

NOTE Confidence: 0.930915051666667

00:01:55.946 --> 00:01:59.128 can lead to fatty liver and

NOTE Confidence: 0.930915051666667

00:01:59.130 --> 00:02:00.434 go on to develop

NOTE Confidence: 0.930915051666667

00:02:00.434 --> 00:02:01.738 end stage liver disease.

NOTE Confidence: 0.930915051666667

00:02:01.740 --> 00:02:03.350 Once you start to have

NOTE Confidence: 0.930915051666667

00:02:03.350 --> 00:02:04.316 complications from that,

NOTE Confidence: 0.930915051666667

00:02:04.320 --> 00:02:06.350 we generally start to consider

NOTE Confidence: 0.930915051666667

00:02:06.350 --> 00:02:07.568 you for transplant.

NOTE Confidence: 0.930915051666667

00:02:07.570 --> 00:02:10.130 There are a subset of patients who may

NOTE Confidence: 0.930915051666667

00:02:10.130 --> 00:02:11.949 actually have really well preserved

NOTE Confidence: 0.930915051666667

00:02:11.949 --> 00:02:14.539 liver function and look and feel well,

NOTE Confidence: 0.930915051666667

00:02:14.540 --> 00:02:17.158 but in patients that develop liver cancer,

NOTE Confidence: 0.930915051666667

00:02:17.160 --> 00:02:18.270 which sort of as I mentioned,

NOTE Confidence: 0.930915051666667

00:02:18.270 --> 00:02:20.720 is an extremely common complication,

NOTE Confidence: 0.930915051666667

00:02:20.720 --> 00:02:23.449 8 to 10% of patients with

NOTE Confidence: 0.930915051666667

00:02:23.449 --> 00:02:25.927 cirrhosis will develop cancer each year.

NOTE Confidence: 0.930915051666667

00:02:25.930 --> 00:02:27.946 That's another indication in which we

NOTE Confidence: 0.930915051666667

00:02:27.946 --> 00:02:30.580 go on to consider them for transplant.

NOTE Confidence: 0.930915051666667

00:02:30.580 --> 00:02:30.865 Because

00:02:31.435 --> 00:02:33.430 transplant will not only cure the cancer,

NOTE Confidence: 0.930915051666667

00:02:33.430 --> 00:02:35.356 but it will actually cure their

NOTE Confidence: 0.930915051666667

00:02:35.356 --> 00:02:36.319 underlying liver disease,

NOTE Confidence: 0.930915051666667

00:02:36.320 --> 00:02:38.282 which is the major risk factor

NOTE Confidence: 0.930915051666667

00:02:38.282 --> 00:02:39.590 for their cancer development.

NOTE Confidence: 0.948544537692308

00:02:40.750 --> 00:02:43.228 So tell us a little bit more

NOTE Confidence: 0.948544537692308

00:02:43.228 --> 00:02:45.729 about that in terms of cancer.

NOTE Confidence: 0.948544537692308

00:02:45.730 --> 00:02:48.376 Are all patients with liver cancer

NOTE Confidence: 0.948544537692308

00:02:48.376 --> 00:02:50.568 candidates for

NOTE Confidence: 0.948544537692308

00:02:50.568 --> 00:02:52.650 transplant or is it only those

NOTE Confidence: 0.948544537692308

00:02:52.650 --> 00:02:54.817 who have that underlying chronic

NOTE Confidence: 0.948544537692308

00:02:54.817 --> 00:02:57.955 liver disease that would make them

NOTE Confidence: 0.948544537692308

00:02:57.955 --> 00:03:00.100 potentially a candidate anyways?

NOTE Confidence: 0.909833305

00:03:01.290 --> 00:03:03.725 So not all patients are

NOTE Confidence: 0.909833305

00:03:03.725 --> 00:03:05.186 candidates for transplant.

NOTE Confidence: 0.909833305

00:03:05.190 --> 00:03:06.960 The majority of patients who

NOTE Confidence: 0.909833305

00:03:06.960 --> 00:03:09.146 develop liver cancer will have some

NOTE Confidence: 0.909833305

00:03:09.146 --> 00:03:10.896 form of chronic liver disease,

NOTE Confidence: 0.909833305

00:03:10.900 --> 00:03:12.444 but interestingly, we're actually

NOTE Confidence: 0.909833305

00:03:12.444 --> 00:03:14.760 seeing a unique population who don't

NOTE Confidence: 0.909833305

00:03:14.818 --> 00:03:16.968 have underlying advanced liver disease

NOTE Confidence: 0.909833305

00:03:16.970 --> 00:03:19.690 go on to develop liver cancer and it's

NOTE Confidence: 0.909833305

00:03:19.690 --> 00:03:21.335 a little bit of a controversial field

NOTE Confidence: 0.909833305

00:03:21.340 --> 00:03:24.560 if those patients should be

NOTE Confidence: 0.909833305

00:03:24.560 --> 00:03:26.540 considered for transplant or not.

NOTE Confidence: 0.909833305

00:03:26.540 --> 00:03:28.540 But in terms of those that

NOTE Confidence: 0.909833305

00:03:28.540 --> 00:03:30.249 may have chronic liver disease

NOTE Confidence: 0.909833305

00:03:30.249 --> 00:03:31.777 and develop liver cancer,

NOTE Confidence: 0.909833305

00:03:31.780 --> 00:03:33.418 there are certain criteria that need

NOTE Confidence: 0.909833305

00:03:33.418 --> 00:03:35.812 to be met for patients to be considered

NOTE Confidence: 0.909833305

00:03:35.812 --> 00:03:38.230 for transplant and some of that includes

NOTE Confidence: 0.909833305

00:03:38.230 --> 00:03:41.366 how extensive their liver cancer is.

NOTE Confidence: 0.909833305

00:03:41.370 --> 00:03:42.357 So for example,

NOTE Confidence: 0.909833305

00:03:42.357 --> 00:03:44.660 if it's spread outside of the liver,

NOTE Confidence: 0.909833305

00:03:44.660 --> 00:03:46.245 they would not be good

NOTE Confidence: 0.909833305

00:03:46.245 --> 00:03:47.196 candidates for transplant,

NOTE Confidence: 0.909833305

00:03:47.200 --> 00:03:49.741 or if they have a large amount

NOTE Confidence: 0.909833305

00:03:49.741 --> 00:03:51.680 of tumors within the liver,

NOTE Confidence: 0.909833305

00:03:51.680 --> 00:03:54.080 they would not be considered

NOTE Confidence: 0.909833305

00:03:54.080 --> 00:03:54.880 good candidates.

NOTE Confidence: 0.909833305

00:03:54.880 --> 00:03:57.267 We also sometimes like to look at

NOTE Confidence: 0.909833305

00:03:57.267 --> 00:03:59.859 patients if they have recurrent cancer.

00:04:00.586 --> 00:04:02.764 We're more likely to consider them

NOTE Confidence: 0.909833305

00:04:02.764 --> 00:04:04.855 for transplant or if their underlying

NOTE Confidence: 0.909833305

00:04:04.855 --> 00:04:07.223 liver is really very very sick so

NOTE Confidence: 0.909833305

00:04:07.223 --> 00:04:09.323 that they have other complications of

NOTE Confidence: 0.909833305

00:04:09.323 --> 00:04:11.550 liver disease in addition to cancer,

NOTE Confidence: 0.909833305

00:04:11.550 --> 00:04:12.720 then you know,

00:04:13.028 --> 00:04:15.184 we're more likely to want to pursue

NOTE Confidence: 0.909833305

00:04:15.184 --> 00:04:16.689 transplant in those patients.

NOTE Confidence: 0.947595725263158

00:04:17.790 --> 00:04:20.009 One of the things that

NOTE Confidence: 0.947595725263158

00:04:20.009 --> 00:04:22.268 people might be thinking about when

NOTE Confidence: 0.947595725263158

00:04:22.268 --> 00:04:24.746 we think about transplant is that

NOTE Confidence: 0.947595725263158

00:04:24.750 --> 00:04:26.890 oftentimes people

NOTE Confidence: 0.947595725263158

00:04:26.890 --> 00:04:29.030 may be under the impression

NOTE Confidence: 0.947595725263158

00:04:29.106 --> 00:04:31.316 that patients who have cancers,

NOTE Confidence: 0.947595725263158

00:04:31.320 --> 00:04:36.206 for example, may not be a potential

NOTE Confidence: 0.947595725263158

00:04:36.206 --> 00:04:39.380 recipient of organs,

NOTE Confidence: 0.947595725263158

00:04:39.380 --> 00:04:41.599 but it sounds like for liver cancer,

NOTE Confidence: 0.947595725263158

00:04:41.600 --> 00:04:43.555 that's not the case, that

NOTE Confidence: 0.947595725263158

00:04:43.555 --> 00:04:45.510 if you have liver cancer,

NOTE Confidence: 0.947595725263158

00:04:45.510 --> 00:04:48.588 even if it's recurrent liver cancer,

NOTE Confidence: 0.947595725263158

00:04:48.590 --> 00:04:52.806 you can still be on the organ

NOTE Confidence: 0.947595725263158

00:04:52.806 --> 00:04:53.860 recipient list.

NOTE Confidence: 0.947595725263158

00:04:53.860 --> 00:04:54.388 Is that right?

NOTE Confidence: 0.88007138625

00:04:54.950 --> 00:04:56.262 Yes, actually

NOTE Confidence: 0.88007138625

00:04:56.262 --> 00:04:58.230 it's a really unique cancer and

NOTE Confidence: 0.88007138625

00:04:58.290 --> 00:05:00.078 you're very spot on with that.

NOTE Confidence: 0.88007138625

00:05:00.080 --> 00:05:01.860 In that transplant is

NOTE Confidence: 0.88007138625

00:05:01.860 --> 00:05:04.280 considered one of the curative therapies,

00:05:05.750 --> 00:05:07.352 and it really can't have spread outside

NOTE Confidence: 0.88007138625

00:05:07.352 --> 00:05:09.375 of the liver or you can't have

NOTE Confidence: 0.88007138625

00:05:09.375 --> 00:05:10.880 such an extensive tumor burden.

NOTE Confidence: 0.88007138625

00:05:10.880 --> 00:05:12.948 But because you're really

NOTE Confidence: 0.88007138625

00:05:12.948 --> 00:05:14.499 replacing the liver,

NOTE Confidence: 0.88007138625

00:05:14.500 --> 00:05:16.120 you're not only treating the cancer,

NOTE Confidence: 0.88007138625

00:05:16.120 --> 00:05:18.437 but you're sort of getting rid of

NOTE Confidence: 0.88007138625

00:05:18.437 --> 00:05:20.360 the damaged organ because we like

NOTE Confidence: 0.88007138625

00:05:20.360 --> 00:05:22.530 to think of liver cancer in

NOTE Confidence: 0.88007138625

00:05:22.602 --> 00:05:24.786 particular as sort of a complication

NOTE Confidence: 0.88007138625

00:05:24.786 --> 00:05:26.850 of a failing organ.

NOTE Confidence: 0.88007138625

00:05:26.850 --> 00:05:31.169 I think it's an important perspective to have.

00:05:32.290 --> 00:05:33.555 Yeah, it does not mean that

NOTE Confidence: 0.88007138625

00:05:33.555 --> 00:05:34.343 you're not a candidate.

NOTE Confidence: 0.88007138625

00:05:34.350 --> 00:05:36.246 It's actually one of the most

NOTE Confidence: 0.88007138625

00:05:36.246 --> 00:05:37.510 curative therapies and really

NOTE Confidence: 0.88007138625

00:05:37.568 --> 00:05:39.228 currently in the United States,

NOTE Confidence: 0.88007138625

00:05:39.230 --> 00:05:39.539 honestly,

NOTE Confidence: 0.88007138625

00:05:39.539 --> 00:05:41.084 about a quarter of transplants

NOTE Confidence: 0.88007138625

00:05:41.084 --> 00:05:42.744 are done for the indication

NOTE Confidence: 0.88007138625

00:05:42.744 --> 00:05:44.216 of having liver cancer.

NOTE Confidence: 0.913460033809524

00:05:44.610 --> 00:05:48.018 Wow, so the other thing that we often

NOTE Confidence: 0.913460033809524

00:05:48.018 --> 00:05:51.530 think about when we think about transplant

NOTE Confidence: 0.913460033809524

00:05:51.530 --> 00:05:54.800 is the universal shortage of organs.

NOTE Confidence: 0.913460033809524

00:05:54.800 --> 00:05:58.978 Liver is one of those nice organs that there

NOTE Confidence: 0.913460033809524

00:05:58.978 --> 00:06:02.402 is a potential for a living related donor.

NOTE Confidence: 0.913460033809524

00:06:02.410 --> 00:06:04.558 How often is that used in

NOTE Confidence: 0.913460033809524

00:06:04.558 --> 00:06:06.580 patients who have liver cancer?

NOTE Confidence: 0.913460033809524

00:06:06.580 --> 00:06:08.164 Can you talk a little bit more about that?

NOTE Confidence: 0.806786033333333

00:06:09.000 --> 00:06:11.894 Definitely so the liver is

00:06:13.240 --> 00:06:15.270 just one of the most remarkable

NOTE Confidence: 0.806786033333333

00:06:15.270 --> 00:06:17.480 organs, and its ability to regenerate.

NOTE Confidence: 0.806786033333333

00:06:17.480 --> 00:06:20.126 So in certain patients who are

NOTE Confidence: 0.806786033333333

00:06:20.126 --> 00:06:22.681 candidates for a living donor organ,

NOTE Confidence: 0.806786033333333

00:06:22.681 --> 00:06:25.300 meaning that a part of the liver is taken

NOTE Confidence: 0.806786033333333

00:06:25.363 --> 00:06:27.874 from a donor and put into the recipient and

NOTE Confidence: 0.806786033333333

00:06:27.874 --> 00:06:30.399 it will actually grow to a normal size,

NOTE Confidence: 0.806786033333333

00:06:30.400 --> 00:06:33.166 usually in about 12 weeks time.

00:06:34.210 --> 00:06:35.734 To determine if someone is

NOTE Confidence: 0.806786033333333

00:06:35.734 --> 00:06:37.479 a candidate for a living donor,

NOTE Confidence: 0.806786033333333

00:06:37.480 --> 00:06:39.154 there's a few factors that we

NOTE Confidence: 0.806786033333333

00:06:39.154 --> 00:06:40.810 have to take into account.

NOTE Confidence: 0.806786033333333

00:06:40.810 --> 00:06:43.344 One is the size of the patient

NOTE Confidence: 0.806786033333333

00:06:43.350 --> 00:06:46.566 because there's a certain sort of

NOTE Confidence: 0.806786033333333

00:06:46.570 --> 00:06:48.994 massive liver that you would need

NOTE Confidence: 0.806786033333333

00:06:48.994 --> 00:06:51.790 to sufficiently

NOTE Confidence: 0.806786033333333

00:06:51.790 --> 00:06:54.157 do its job in a person.

NOTE Confidence: 0.806786033333333

00:06:54.160 --> 00:06:56.566 So if you're a really really

NOTE Confidence: 0.806786033333333

00:06:56.566 --> 00:06:58.740 big guy or big girl,

NOTE Confidence: 0.806786033333333

00:06:58.740 --> 00:07:01.134 your candidates might be limited.

NOTE Confidence: 0.806786033333333

00:07:01.140 --> 00:07:03.191 You would really need someone who is

NOTE Confidence: 0.806786033333333

00:07:03.191 --> 00:07:05.199 equally as tall or as large as you.

NOTE Confidence: 0.806786033333333

00:07:05.200 --> 00:07:06.620 The second thing is,

NOTE Confidence: 0.806786033333333

00:07:06.620 --> 00:07:09.537 if you're really incredibly sick and have a

NOTE Confidence: 0.806786033333333

00:07:09.537 --> 00:07:12.057 lot of complications from your liver disease,

NOTE Confidence: 0.806786033333333

00:07:12.060 --> 00:07:14.324 there's concern that you may not be able

NOTE Confidence: 0.806786033333333

00:07:14.324 --> 00:07:16.310 to tolerate just a piece of an organ.

NOTE Confidence: 0.806786033333333

00:07:16.310 --> 00:07:18.215 So it's actually something

NOTE Confidence: 0.806786033333333

00:07:18.215 --> 00:07:20.120 that we use quite often,

NOTE Confidence: 0.806786033333333

00:07:22.042 --> 00:07:23.974 and it varies based on programs and

NOTE Confidence: 0.806786033333333

00:07:23.974 --> 00:07:25.830 how large the programs are,

NOTE Confidence: 0.806786033333333

00:07:25.830 --> 00:07:28.238 but we definitely do a lot of

NOTE Confidence: 0.806786033333333

00:07:28.238 --> 00:07:30.548 living donors in our center here,

NOTE Confidence: 0.806786033333333

00:07:30.550 --> 00:07:33.042 and it's a really a great option

NOTE Confidence: 0.806786033333333

00:07:33.042 --> 00:07:35.160 for a certain subset of patients.

NOTE Confidence: 0.932702718571428

00:07:36.120 --> 00:07:38.264 And tell us a little

NOTE Confidence: 0.932702718571428

00:07:38.264 --> 00:07:40.318 bit more about how that works,

NOTE Confidence: 0.932702718571428

00:07:40.320 --> 00:07:43.414 because I think that for many people

NOTE Confidence: 0.932702718571428

00:07:43.414 --> 00:07:46.480 just the thought of having a relative

NOTE Confidence: 0.932702718571428

00:07:46.567 --> 00:07:49.983 or a loved one being diagnosed with

NOTE Confidence: 0.932702718571428

00:07:49.983 --> 00:07:52.110 a potentially treatable cancer,

NOTE Confidence: 0.932702718571428

00:07:52.110 --> 00:07:53.580 but that you can help with,

NOTE Confidence: 0.932702718571428

00:07:53.580 --> 00:07:57.188 you can help give them a new life,

00:08:00.796 --> 00:08:04.204 is really awesome in terms of the actual

NOTE Confidence: 0.932702718571428

00:08:04.204 --> 00:08:07.130 benefit that you can provide,

NOTE Confidence: 0.932702718571428

00:08:07.130 --> 00:08:09.140 but people may have some

NOTE Confidence: 0.932702718571428

00:08:09.140 --> 00:08:10.346 questions about that.

NOTE Confidence: 0.88794437125

00:08:10.380 --> 00:08:13.604 Yes, so it's definitely a pretty

NOTE Confidence: 0.88794437125

00:08:13.610 --> 00:08:15.746 grueling process

NOTE Confidence: 0.88794437125

00:08:15.746 --> 00:08:18.792 and the way that it works

NOTE Confidence: 0.88794437125

00:08:18.792 --> 00:08:20.978 is once we determine that someone

NOTE Confidence: 0.88794437125

00:08:20.978 --> 00:08:23.246 is ineligible as a transplant candidate,

NOTE Confidence: 0.88794437125

00:08:23.250 --> 00:08:25.497 they're then open to have either relatives

NOTE Confidence: 0.88794437125

00:08:25.497 --> 00:08:28.103 or even just altruistic

NOTE Confidence: 0.88794437125

00:08:28.103 --> 00:08:30.735 donors that can call in and be screened

NOTE Confidence: 0.88794437125

00:08:30.735 --> 00:08:32.715 to see if they're compatible and

NOTE Confidence: 0.88794437125

00:08:32.720 --> 00:08:34.340 usually it starts with

NOTE Confidence: 0.88794437125

00:08:34.340 --> 00:08:36.002 just looking at blood typing to

NOTE Confidence: 0.88794437125

00:08:36.002 --> 00:08:37.580 see if there is a compatibility.

NOTE Confidence: 0.88794437125

00:08:37.580 --> 00:08:40.163 The rejection is a little bit different

NOTE Confidence: 0.88794437125

00:08:40.163 --> 00:08:43.059 in the liver compared to other organs,

NOTE Confidence: 0.88794437125

00:08:43.060 --> 00:08:45.643 so it's nice in that there's not

NOTE Confidence: 0.88794437125

00:08:45.650 --> 00:08:47.810 so many factors that have to be

NOTE Confidence: 0.88794437125

00:08:47.810 --> 00:08:50.504 directly matched to be

NOTE Confidence: 0.88794437125

00:08:50.504 --> 00:08:52.300 considered a compatible donor.

NOTE Confidence: 0.88794437125

00:08:52.300 --> 00:08:53.872 But once we think that there's

NOTE Confidence: 0.88794437125

00:08:53.872 --> 00:08:55.900 not going to be overt rejection,

NOTE Confidence: 0.88794437125

00:08:55.900 --> 00:08:58.108 and that really comes down a lot of

NOTE Confidence: 0.88794437125

00:08:58.108 --> 00:09:00.678 times to compatibility and blood typing.

NOTE Confidence: 0.88794437125

00:09:00.680 --> 00:09:03.200 We have a very strict process

NOTE Confidence: 0.88794437125

00:09:03.200 --> 00:09:05.251 to make sure that the donor itself

NOTE Confidence: 0.88794437125

00:09:05.251 --> 00:09:07.388 is someone who would do very well

NOTE Confidence: 0.88794437125

00:09:07.388 --> 00:09:09.182 going to surgery, that they have

NOTE Confidence: 0.88794437125

00:09:09.244 --> 00:09:10.920 no underlying liver disease,

NOTE Confidence: 0.88794437125

00:09:10.920 --> 00:09:12.292 and that ultimately we

NOTE Confidence: 0.88794437125

00:09:12.980 --> 00:09:15.345 feel would essentially come out

NOTE Confidence: 0.88794437125

00:09:15.345 --> 00:09:18.228 unscathed should they decide to go

NOTE Confidence: 0.88794437125

00:09:18.228 --> 00:09:20.418 forth with donating their liver.

NOTE Confidence: 0.88794437125

00:09:20.420 --> 00:09:23.943 It's extremely rare in general to have any

NOTE Confidence: 0.88794437125

00:09:23.943 --> 00:09:25.958 type of rejection from incompatibility.

NOTE Confidence: 0.88794437125

00:09:25.960 --> 00:09:27.808 Just because our ability to screen

NOTE Confidence: 0.88794437125

00:09:27.808 --> 00:09:30.016 and make sure that blood types and

NOTE Confidence: 0.88794437125

00:09:30.016 --> 00:09:31.840 things match is so great now,

NOTE Confidence: 0.88794437125

00:09:31.840 --> 00:09:34.726 so that's not generally a major

NOTE Confidence: 0.88794437125

00:09:34.730 --> 00:09:35.438 major concern,

NOTE Confidence: 0.88794437125

00:09:35.438 --> 00:09:37.916 but there's a lot of strict processes

NOTE Confidence: 0.88794437125

00:09:37.916 --> 00:09:40.722 in terms of making sure the size is

NOTE Confidence: 0.88794437125

00:09:40.722 --> 00:09:42.692 appropriate that the recipient,

NOTE Confidence: 0.88794437125

00:09:42.692 --> 00:09:44.897 whatever portion was donated,

NOTE Confidence: 0.88794437125

00:09:44.900 --> 00:09:47.516 that that would be enough for the patient

NOTE Confidence: 0.88794437125

00:09:47.516 --> 00:09:50.490 not to have what we call post operative

NOTE Confidence: 0.88794437125

00:09:50.490 --> 00:09:53.530 liver failure or liver insufficiency.

NOTE Confidence: 0.88794437125

00:09:53.530 --> 00:09:56.344 So I would say technology and our

NOTE Confidence: 0.88794437125

00:09:56.344 --> 00:09:58.425 screening strategies are just so

NOTE Confidence: 0.88794437125

00:09:58.425 --> 00:10:00.435 remarkable now that those

NOTE Confidence: 0.88794437125

00:10:00.435 --> 00:10:03.029 factors are really very well detailed

NOTE Confidence: 0.88794437125

00:10:03.030 --> 00:10:05.070 before we would proceed with any

NOTE Confidence: 0.88794437125

00:10:05.070 --> 00:10:07.520 type of living donor liver transplant.

NOTE Confidence: 0.95414725

00:10:08.510 --> 00:10:10.730 And then after the transplant,

NOTE Confidence: 0.95414725

00:10:10.730 --> 00:10:13.540 does the recipient stay on

NOTE Confidence: 0.95414725

00:10:13.540 --> 00:10:15.788 immunosuppressive therapy for life?

NOTE Confidence: 0.95414725

00:10:15.790 --> 00:10:16.920 Or how does that work?

NOTE Confidence: 0.855898225

00:10:18.200 --> 00:10:20.594 Yeah, so there's variations

NOTE Confidence: 0.855898225

00:10:20.594 --> 00:10:23.502 in the quantity of immunosuppression

NOTE Confidence: 0.855898225

00:10:23.502 --> 00:10:25.966 in liver transplant recipients.

NOTE Confidence: 0.855898225

00:10:25.970 --> 00:10:29.090 Generally within a year after transplant

NOTE Confidence: 0.855898225

00:10:29.090 --> 00:10:31.458 you can get patients down to an extremely

NOTE Confidence: 0.855898225

00:10:31.458 --> 00:10:33.646 low level of immunosuppression which

NOTE Confidence: 0.855898225

00:10:33.646 --> 00:10:35.561 again is slightly different than

NOTE Confidence: 0.855898225

00:10:35.561 --> 00:10:37.471 other organs where rejection rates

NOTE Confidence: 0.855898225

00:10:37.471 --> 00:10:40.322 are much higher and it's interesting

NOTE Confidence: 0.855898225

00:10:40.322 --> 00:10:43.038 because there are certain reports

NOTE Confidence: 0.855898225

00:10:43.038 --> 00:10:45.306 of patients being able to completely

NOTE Confidence: 0.855898225

00:10:45.306 --> 00:10:47.799 come off of immunosuppression.

NOTE Confidence: 0.855898225

00:10:47.800 --> 00:10:49.865 And we've actually had a few patients

NOTE Confidence: 0.855898225

00:10:49.865 --> 00:10:52.100 within our center that we've done that on.

NOTE Confidence: 0.855898225

00:10:52.100 --> 00:10:53.666 It's a little bit higher risk,

NOTE Confidence: 0.855898225

00:10:53.670 --> 00:10:56.197 and it requires some more close monitoring,

NOTE Confidence: 0.855898225

00:10:56.200 --> 00:10:58.840 but I would say the vast majority of

NOTE Confidence: 0.855898225

00:10:58.840 --> 00:11:01.391 patients are usually on at least one

NOTE Confidence: 0.855898225

00:11:01.391 --> 00:11:04.020 medication for the duration of their life,

NOTE Confidence: 0.855898225

00:11:04.020 --> 00:11:07.035 but it's again incredibly low

NOTE Confidence: 0.855898225

00:11:07.035 --> 00:11:09.470 dose compared to the majority of

NOTE Confidence: 0.855898225

00:11:09.470 --> 00:11:11.610 other organ transplant recipients.

NOTE Confidence: 0.901657845

00:11:12.340 --> 00:11:14.506 And they quote cured?

NOTE Confidence: 0.936026030909091

00:11:16.300 --> 00:11:17.461 Yeah, so that's

NOTE Confidence: 0.936026030909091

00:11:17.461 --> 00:11:20.170 exactly the hope is

NOTE Confidence: 0.936026030909091

00:11:20.252 --> 00:11:22.960 that from liver transplant,

NOTE Confidence: 0.936026030909091

00:11:22.960 --> 00:11:24.744 you're essentially replacing the

NOTE Confidence: 0.936026030909091

00:11:24.744 --> 00:11:27.568 entire organ, and so whatever the

NOTE Confidence: 0.936026030909091

00:11:27.568 --> 00:11:29.496 etiology of that patients,

NOTE Confidence: 0.936026030909091

00:11:29.500 --> 00:11:32.880 liver diseases is essentially cured.

NOTE Confidence: 0.936026030909091

00:11:32.880 --> 00:11:35.796 Of course, there's a risk if

NOTE Confidence: 0.936026030909091

00:11:35.796 --> 00:11:37.740 patients redevelop viral infections,

NOTE Confidence: 0.936026030909091

00:11:37.740 --> 00:11:40.022 or if some of the risk factors

NOTE Confidence: 0.936026030909091

00:11:40.022 --> 00:11:41.850 that led initially to their

NOTE Confidence: 0.936026030909091

00:11:41.850 --> 00:11:43.800 liver disease are still present.

NOTE Confidence: 0.936026030909091

00:11:43.800 --> 00:11:46.344 And I think a lot in our population

NOTE Confidence: 0.936026030909091

00:11:46.350 --> 00:11:48.672 the common things are patients

NOTE Confidence: 0.936026030909091

00:11:48.672 --> 00:11:50.810 who develop fatty liver disease

NOTE Confidence: 0.936026030909091

00:11:50.810 --> 00:11:52.609 in the post transplant setting,

NOTE Confidence: 0.936026030909091

00:11:52.610 --> 00:11:54.944 if they continue to

NOTE Confidence: 0.936026030909091

00:11:54.944 --> 00:11:56.500 have diabetes or obesity,

NOTE Confidence: 0.936026030909091

00:11:56.500 --> 00:11:57.924 you can develop recurrent

NOTE Confidence: 0.936026030909091

00:11:57.924 --> 00:11:59.348 disease in the organ.

NOTE Confidence: 0.936026030909091

00:11:59.350 --> 00:12:02.795 But if patients mitigate their risk

NOTE Confidence: 0.936026030909091

00:12:02.795 --> 00:12:06.070 factors and go on to live a healthy life,

NOTE Confidence: 0.936026030909091

00:12:06.070 --> 00:12:07.715 then yes, liver transplant is

NOTE Confidence: 0.936026030909091

00:12:07.715 --> 00:12:09.830 curative not only for the cancer,

NOTE Confidence: 0.936026030909091

00:12:09.830 --> 00:12:11.755 but again for the initial

NOTE Confidence: 0.936026030909091

00:12:11.755 --> 00:12:13.295 cause of their cirrhosis.

NOTE Confidence: 0.90897716125

00:12:14.190 --> 00:12:17.678 And so for patients who have liver cancer

NOTE Confidence: 0.90897716125

00:12:17.680 --> 00:12:19.983 is transplant one of the things that

NOTE Confidence: 0.90897716125

00:12:19.983 --> 00:12:22.548 you think of first or do people have

NOTE Confidence: 0.90897716125

00:12:22.548 --> 00:12:25.000 to kind of go through chemotherapy?

NOTE Confidence: 0.90897716125

00:12:25.000 --> 00:12:27.015 At least in assessment of

NOTE Confidence: 0.90897716125

00:12:27.015 --> 00:12:29.030 surgical resection and so on?

NOTE Confidence: 0.90897716125

00:12:29.030 --> 00:12:31.145 Kind of the more commonplace

NOTE Confidence: 0.90897716125

00:12:31.145 --> 00:12:33.260 cancer therapies before you think

NOTE Confidence: 0.90897716125

00:12:33.333 --> 00:12:35.413 about transplant or is transplant

NOTE Confidence: 0.90897716125

00:12:35.413 --> 00:12:37.910 something that is now first line?

NOTE Confidence: 0.91454872

00:12:38.920 --> 00:12:41.285 So it definitely is extremely

NOTE Confidence: 0.91454872

00:12:41.285 --> 00:12:43.520 independent on each patient's case.

NOTE Confidence: 0.91454872

00:12:43.520 --> 00:12:48.020 If we see a patient who has a single tumor,

NOTE Confidence: 0.91454872

00:12:48.020 --> 00:12:50.020 that's very small in size,

NOTE Confidence: 0.91454872

00:12:50.020 --> 00:12:52.436 and we think that we can cure them

NOTE Confidence: 0.91454872

00:12:52.436 --> 00:12:54.016 with a local resection, meaning,

NOTE Confidence: 0.91454872

00:12:54.016 --> 00:12:56.609 just cutting out a portion of that liver,

NOTE Confidence: 0.91454872

00:12:56.610 --> 00:12:58.800 that's generally the first line

NOTE Confidence: 0.91454872

00:12:58.800 --> 00:13:01.490 therapy that we would actually go to.

NOTE Confidence: 0.91454872

00:13:01.490 --> 00:13:03.220 In patients that have more

NOTE Confidence: 0.91454872

00:13:03.220 --> 00:13:04.950 advanced liver disease and other

NOTE Confidence: 0.91454872

00:13:05.017 --> 00:13:06.837 complications from their liver,

NOTE Confidence: 0.91454872

00:13:06.840 --> 00:13:07.970 if they develop a cancer

NOTE Confidence: 0.91454872

00:13:07.970 --> 00:13:10.472 on top of that, we know that a transplant

NOTE Confidence: 0.91454872

00:13:10.472 --> 00:13:12.407 would cure both of those aspects,

NOTE Confidence: 0.91454872

00:13:12.410 --> 00:13:15.450 so I would not say it's often firstline,

NOTE Confidence: 0.91454872

00:13:15.450 --> 00:13:17.592 but it's a curative approach that we

NOTE Confidence: 0.91454872

00:13:17.592 --> 00:13:19.798 definitely have in the back of our heads

NOTE Confidence: 0.91454872

00:13:19.800 --> 00:13:21.480 for a subset of patients that

NOTE Confidence: 0.91454872

00:13:21.480 --> 00:13:22.600 would be good candidates.

NOTE Confidence: 0.922269156923077

00:13:23.050 --> 00:13:25.096 Terrific, we're going to learn

NOTE Confidence: 0.922269156923077

00:13:25.096 --> 00:13:27.685 a lot more about liver cancer and

NOTE Confidence: 0.922269156923077

00:13:27.685 --> 00:13:29.615 transplant hepatology right after we

NOTE Confidence: 0.922269156923077

00:13:29.615 --> 00:13:32.579 take a short break for a medical minute.

NOTE Confidence: 0.922269156923077

00:13:32.580 --> 00:13:34.404 Please stay tuned to learn more

NOTE Confidence: 0.922269156923077

00:13:34.404 --> 00:13:36.389 with my guest doctor Ariel Jaffe.

NOTE Confidence: 0.904233914761905

00:13:37.090 --> 00:13:39.050 Funding for Yale Cancer Answers

NOTE Confidence: 0.904233914761905

00:13:39.050 --> 00:13:41.010 comes from AstraZeneca, dedicated

NOTE Confidence: 0.904233914761905

00:13:41.074 --> 00:13:42.944 to advancing options and providing

NOTE Confidence: 0.904233914761905

00:13:42.944 --> 00:13:45.300 hope for people living with cancer.

NOTE Confidence: 0.904233914761905

00:13:45.300 --> 00:13:50.880 More information at AstraZeneca Dash us.com.

NOTE Confidence: 0.904233914761905

00:13:50.880 --> 00:13:52.752 Genetic testing can be useful for

NOTE Confidence: 0.904233914761905

00:13:52.752 --> 00:13:54.585 people with certain types of cancer

NOTE Confidence: 0.904233914761905

00:13:54.585 --> 00:13:56.433 that seem to run in their families.

NOTE Confidence: 0.904233914761905

00:13:56.440 --> 00:13:58.948 Genetic counseling is a process that

NOTE Confidence: 0.904233914761905

00:13:58.948 --> 00:14:01.084 includes collecting a detailed personal

NOTE Confidence: 0.904233914761905

00:14:01.084 --> 00:14:03.835 and family history or risk assessment and

NOTE Confidence: 0.904233914761905

00:14:03.835 --> 00:14:06.380 a discussion of genetic testing options.

NOTE Confidence: 0.904233914761905

00:14:06.380 --> 00:14:09.052 Only about 5 to 10% of all cancers

NOTE Confidence: 0.904233914761905

00:14:09.052 --> 00:14:10.976 are inherited, and genetic testing

NOTE Confidence: 0.904233914761905

00:14:10.976 --> 00:14:13.036 is not recommended for everyone.

NOTE Confidence: 0.904233914761905

00:14:13.040 --> 00:14:15.380 Individuals who have a personal and

NOTE Confidence: 0.904233914761905

00:14:15.380 --> 00:14:17.464 or family history that includes

NOTE Confidence: 0.904233914761905

00:14:17.464 --> 00:14:19.709 cancer at unusually early ages,

NOTE Confidence: 0.904233914761905

00:14:19.710 --> 00:14:20.376 multiple relatives

NOTE Confidence: 0.904233914761905

00:14:20.376 --> 00:14:22.707 on the same side of the family

NOTE Confidence: 0.904233914761905

00:14:22.707 --> 00:14:24.070 with the same cancer,

NOTE Confidence: 0.904233914761905

00:14:24.070 --> 00:14:25.930 more than one diagnosis of

NOTE Confidence: 0.904233914761905

00:14:25.930 --> 00:14:27.790 cancer in the same individual,

NOTE Confidence: 0.904233914761905

00:14:27.790 --> 00:14:30.597 rare cancers or a family history of a

NOTE Confidence: 0.904233914761905

00:14:30.597 --> 00:14:32.912 known altered cancer predisposing gene

NOTE Confidence: 0.904233914761905

00:14:32.912 --> 00:14:36.026 could be candidates for genetic testing.

NOTE Confidence: 0.904233914761905

00:14:36.030 --> 00:14:38.095 Resources for genetic counseling and

NOTE Confidence: 0.904233914761905

00:14:38.095 --> 00:14:40.160 testing are available at federally

NOTE Confidence: 0.904233914761905

00:14:40.222 --> 00:14:41.443 designated comprehensive cancer

NOTE Confidence: 0.904233914761905

00:14:41.443 --> 00:14:43.885 centers such as Yale Cancer Center

NOTE Confidence: 0.904233914761905

00:14:43.885 --> 00:14:45.868 and at Smilow Cancer Hospital.

NOTE Confidence: 0.904233914761905

00:14:45.870 --> 00:14:48.950 More information is available at

NOTE Confidence: 0.904233914761905

00:14:48.950 --> 00:14:50.546 yalecancercenter.org. You're listening

NOTE Confidence: 0.904233914761905

00:14:50.546 --> 00:14:52.674 to Connecticut Public Radio.

NOTE Confidence: 0.904233914761905

00:14:52.680 --> 00:14:53.160 Welcome

NOTE Confidence: 0.83218378

00:14:53.170 --> 00:14:55.110 back to Yale Cancer Answers.

NOTE Confidence: 0.83218378

00:14:55.110 --> 00:14:58.017 This is doctor Anees Chagpar and I'm joined

NOTE Confidence: 0.83218378

00:14:58.017 --> 00:15:00.367 tonight by my guest doctor Ariel Jaffe.

NOTE Confidence: 0.83218378

00:15:00.370 --> 00:15:03.196 We're talking about patients with liver

NOTE Confidence: 0.83218378

00:15:03.196 --> 00:15:06.052 cancer, and before the break we talked

NOTE Confidence: 0.83218378

00:15:06.052 --> 00:15:08.680 about the whole aspect of transplant

NOTE Confidence: 0.83218378

00:15:08.680 --> 00:15:11.560 as a potential curative modality for

NOTE Confidence: 0.83218378

00:15:11.560 --> 00:15:14.126 patients with liver cancer. But Ariel,

NOTE Confidence: 0.83218378

00:15:14.126 --> 00:15:16.350 just as we were heading to the break,

NOTE Confidence: 0.83218378

00:15:16.350 --> 00:15:18.018 you mentioned that there are a

NOTE Confidence: 0.83218378

00:15:18.018 --> 00:15:20.092 lot of other things that go into

NOTE Confidence: 0.83218378

00:15:20.092 --> 00:15:21.904 thinking about liver cancer as well,

NOTE Confidence: 0.83218378

00:15:21.910 --> 00:15:23.520 so I wanted to take a step back

NOTE Confidence: 0.83218378

00:15:23.520 --> 00:15:26.236 and talk a little bit about

NOTE Confidence: 0.83218378

00:15:26.240 --> 00:15:28.879 how common is liver cancer?

00:15:29.810 --> 00:15:32.687 Primary liver cancer is actually

NOTE Confidence: 0.893263985833333

00:15:32.687 --> 00:15:34.939 a quite significant global burden.

NOTE Confidence: 0.893263985833333

00:15:34.940 --> 00:15:37.072 There's over 800,000 new

NOTE Confidence: 0.893263985833333

00:15:37.072 --> 00:15:39.204 cases diagnosed each year,

NOTE Confidence: 0.893263985833333

00:15:39.210 --> 00:15:41.240 and actually in the US in particular,

NOTE Confidence: 0.893263985833333

00:15:41.240 --> 00:15:43.090 it's the fastest increasing cause

NOTE Confidence: 0.893263985833333

00:15:43.090 --> 00:15:45.435 of cancer and the fastest increasing

NOTE Confidence: 0.893263985833333

00:15:45.435 --> 00:15:47.580 cause of cancer related death.

NOTE Confidence: 0.893263985833333

00:15:47.580 --> 00:15:49.897 When we talk about

NOTE Confidence: 0.893263985833333

00:15:49.897 --> 00:15:52.012 primary liver cancer we mean cancer

NOTE Confidence: 0.893263985833333

00:15:52.012 --> 00:15:53.762 that has originated and developed

NOTE Confidence: 0.893263985833333

00:15:53.762 --> 00:15:56.127 in the liver from the beginning.

NOTE Confidence: 0.893263985833333

00:15:56.130 --> 00:15:58.605 There are two main types that we think about,

NOTE Confidence: 0.893263985833333

00:15:58.610 --> 00:16:00.488 so hepatocellular carcinoma,

NOTE Confidence: 0.893263985833333

00:16:00.488 --> 00:16:03.618 probably accounts for 80 to

NOTE Confidence: 0.893263985833333

00:16:03.618 --> 00:16:05.634 90% of primary liver cancer,

NOTE Confidence: 0.893263985833333

00:16:05.634 --> 00:16:08.156 but another common type that we see

NOTE Confidence: 0.893263985833333

00:16:08.156 --> 00:16:10.454 that often develops in patients with

NOTE Confidence: 0.893263985833333

00:16:10.454 --> 00:16:12.518 chronic liver disease is something

NOTE Confidence: 0.893263985833333

00:16:12.518 --> 00:16:13.796 called cholangiocarcinoma and

NOTE Confidence: 0.893263985833333

00:16:13.796 --> 00:16:16.198 that arises in the biliary cells,

NOTE Confidence: 0.893263985833333

00:16:16.198 --> 00:16:17.806 and these are the cells that line

NOTE Confidence: 0.893263985833333

00:16:17.806 --> 00:16:19.933 the little lakes

NOTE Confidence: 0.893263985833333

00:16:19.933 --> 00:16:21.513 and channels within the liver

NOTE Confidence: 0.893263985833333

00:16:21.520 --> 00:16:23.697 that sort of drain and modify the

NOTE Confidence: 0.893263985833333

00:16:23.697 --> 00:16:25.410 substance that the liver makes,

NOTE Confidence: 0.893263985833333

00:16:25.410 --> 00:16:26.136 called bile.

NOTE Confidence: 0.893263985833333

00:16:26.136 --> 00:16:28.314 When you think about

NOTE Confidence: 0.893263985833333

00:16:28.314 --> 00:16:29.550 secondary liver cancer,

NOTE Confidence: 0.893263985833333

00:16:29.550 --> 00:16:31.314 a lot of times what we're talking

NOTE Confidence: 0.893263985833333

00:16:31.314 --> 00:16:32.500 about is metastatic disease,

NOTE Confidence: 0.893263985833333

00:16:32.500 --> 00:16:35.920 so cancer that may have spread to the liver,

NOTE Confidence: 0.893263985833333

00:16:35.920 --> 00:16:37.950 but that's really treated and

NOTE Confidence: 0.893263985833333

00:16:37.950 --> 00:16:39.168 managed extremely differently

NOTE Confidence: 0.893263985833333

00:16:39.168 --> 00:16:40.769 than primary liver cancer.

NOTE Confidence: 0.872148328

00:16:41.910 --> 00:16:43.710 And so that's really fascinating.

NOTE Confidence: 0.872148328

00:16:43.710 --> 00:16:45.582 I didn't realize that liver

NOTE Confidence: 0.872148328

00:16:45.582 --> 00:16:47.942 cancer in the United States was the

NOTE Confidence: 0.872148328

00:16:47.942 --> 00:16:50.036 the fastest growing in terms of

NOTE Confidence: 0.872148328

00:16:50.036 --> 00:16:52.641 incidence and mortality. Why is that?

NOTE Confidence: 0.872148328

00:16:52.641 --> 00:16:55.263 What are the risk factors that

NOTE Confidence: 0.872148328

00:16:55.263 --> 00:16:58.138 predispose to liver cancer that

NOTE Confidence: 0.872148328

00:16:58.138 --> 00:17:00.488 are factoring into this equation?

NOTE Confidence: 0.872148328

00:17:00.490 --> 00:17:02.098 Or is it the risk factors?

NOTE Confidence: 0.854780327931034

00:17:02.780 --> 00:17:04.929 Yes, so there's definitely been a shift

NOTE Confidence: 0.854780327931034

00:17:04.929 --> 00:17:07.665 sort of in the risk factors globally where

NOTE Confidence: 0.854780327931034

00:17:07.665 --> 00:17:10.216 prior the major causes of liver disease

NOTE Confidence: 0.854780327931034

00:17:10.216 --> 00:17:12.792 used to really be chronic viral disease.

NOTE Confidence: 0.854780327931034

00:17:12.800 --> 00:17:15.240 And mainly we're talking about

NOTE Confidence: 0.854780327931034

00:17:15.240 --> 00:17:17.910 chronic hepatitis B and hepatitis C,

NOTE Confidence: 0.854780327931034

00:17:17.910 --> 00:17:20.310 but with the ability to treat

NOTE Confidence: 0.854780327931034

00:17:20.310 --> 00:17:22.899 hepatitis C and control hepatitis B,

NOTE Confidence: 0.854780327931034

00:17:22.900 --> 00:17:26.680 and even prevent that with vaccinations

NOTE Confidence: 0.854780327931034

00:17:26.680 --> 00:17:28.240 really in the Western world,

NOTE Confidence: 0.854780327931034

00:17:28.240 --> 00:17:30.744 what we're seeing as the major cause of

NOTE Confidence: 0.854780327931034

00:17:30.744 --> 00:17:33.028 liver disease is definitely what we call

NOTE Confidence: 0.854780327931034

00:17:33.030 --> 00:17:35.660 Fatty liver disease or non-alcoholic

NOTE Confidence: 0.854780327931034

00:17:35.660 --> 00:17:38.284 fatty liver disease, and

NOTE Confidence: 0.854780327931034

00:17:38.284 --> 00:17:42.419 as we see a rise in the obesity epidemic,

NOTE Confidence: 0.854780327931034

00:17:42.420 --> 00:17:45.381 we're seeing more and more patients that

NOTE Confidence: 0.854780327931034

00:17:45.381 --> 00:17:47.479 develop complications such as diabetes,

NOTE Confidence: 0.854780327931034

00:17:47.480 --> 00:17:50.260 high cholesterol,

NOTE Confidence: 0.854780327931034

00:17:50.260 --> 00:17:51.556 central adiposity,

NOTE Confidence: 0.854780327931034

00:17:51.556 --> 00:17:53.176 meaning

NOTE Confidence: 0.854780327931034

00:17:53.180 --> 00:17:55.288 a lot of belly fat, which is inflammatory

NOTE Confidence: 0.854780327931034

00:17:55.288 --> 00:17:58.200 bad fat that the body does not like,

NOTE Confidence: 0.854780327931034

00:17:58.200 --> 00:18:00.160 and high blood pressure.

00:18:01.140 --> 00:18:03.100 As we're seeing more patients

NOTE Confidence: 0.854780327931034

00:18:03.100 --> 00:18:04.276 develop those complications,

NOTE Confidence: 0.854780327931034

00:18:04.280 --> 00:18:05.930 we're seeing a rise in the

NOTE Confidence: 0.854780327931034

00:18:05.930 --> 00:18:07.470 incidence of fatty liver disease.

NOTE Confidence: 0.898420929090909

00:18:07.750 --> 00:18:10.630 It is certainly true that there's just

NOTE Confidence: 0.898420929090909

00:18:10.630 --> 00:18:13.621 this exponential rise in obesity in

NOTE Confidence: 0.898420929090909

00:18:13.621 --> 00:18:16.638 America and in the world quite frankly.

NOTE Confidence: 0.898420929090909

00:18:16.640 --> 00:18:21.049 So let me ask you this, is it possible

NOTE Confidence: 0.898420929090909

00:18:21.049 --> 00:18:24.096 to reverse that, if you lose weight,

NOTE Confidence: 0.898420929090909

00:18:24.096 --> 00:18:26.847 do you reduce your risk of fatty

NOTE Confidence: 0.898420929090909

00:18:26.847 --> 00:18:29.577 liver and therefore reduce your

NOTE Confidence: 0.898420929090909

00:18:29.577 --> 00:18:31.761 risk of hepatocellular carcinoma?

NOTE Confidence: 0.923605856666667

00:18:32.530 --> 00:18:34.306 Absolutely,

NOTE Confidence: 0.923605856666667

00:18:34.306 --> 00:18:36.082 generally when patients have

NOTE Confidence: 0.923605856666667

00:18:36.082 --> 00:18:38.199 developed cirrhosis which is really

NOTE Confidence: 0.923605856666667

00:18:38.199 --> 00:18:40.139 advanced scarring within the liver,

NOTE Confidence: 0.923605856666667

00:18:40.140 --> 00:18:42.508 we do say that you can't

NOTE Confidence: 0.923605856666667

00:18:42.508 --> 00:18:44.249 reverse completely to having

NOTE Confidence: 0.923605856666667

00:18:44.250 --> 00:18:45.342 a normal healthy liver,

NOTE Confidence: 0.923605856666667

00:18:45.342 --> 00:18:47.340 but for a lot of patients who

NOTE Confidence: 0.923605856666667

00:18:47.340 --> 00:18:48.825 are not quite yet cirrhotic,

NOTE Confidence: 0.923605856666667

00:18:48.830 --> 00:18:51.870 or who may be cirrhotic but have active,

NOTE Confidence: 0.923605856666667

00:18:51.870 --> 00:18:54.110 ongoing inflammation, which is a

NOTE Confidence: 0.923605856666667

00:18:54.110 --> 00:18:55.994 big risk factor for

NOTE Confidence: 0.923605856666667

00:18:55.994 --> 00:18:57.250 the development of cancer,

NOTE Confidence: 0.923605856666667

00:18:57.250 --> 00:19:00.260 you can absolutely reduce the risk of

NOTE Confidence: 0.923605856666667

00:19:00.260 --> 00:19:02.520 developing complications from liver disease,

NOTE Confidence: 0.923605856666667

00:19:02.520 --> 00:19:04.800 and the development of liver cancer.

NOTE Confidence: 0.923605856666667

00:19:04.800 --> 00:19:08.349 So in particular for fatty liver disease,

NOTE Confidence: 0.923605856666667

00:19:08.350 --> 00:19:10.780 really the only kind of approved

NOTE Confidence: 0.923605856666667

00:19:10.780 --> 00:19:13.430 therapy at this time is the

NOTE Confidence: 0.923605856666667

00:19:13.430 --> 00:19:15.318 recommendation to lose weight.

NOTE Confidence: 0.923605856666667

00:19:15.320 --> 00:19:18.143 And generally we say 5 to 10% of

NOTE Confidence: 0.923605856666667

00:19:18.143 --> 00:19:20.458 weight loss has been associated

NOTE Confidence: 0.923605856666667

00:19:20.458 --> 00:19:22.310 with reduction in inflammation

NOTE Confidence: 0.923605856666667

00:19:22.385 --> 00:19:24.875 reduction in scarring of the liver,

NOTE Confidence: 0.923605856666667

00:19:24.880 --> 00:19:26.610 and even reduction in the

NOTE Confidence: 0.923605856666667

00:19:26.610 --> 00:19:28.340 potential to develop liver cancer.

NOTE Confidence: 0.923605856666667

00:19:28.340 --> 00:19:30.628 And it's why we like to really tell

NOTE Confidence: 0.923605856666667

00:19:30.628 --> 00:19:32.779 patients that a lot of the risk factors

NOTE Confidence: 0.923605856666667

00:19:32.780 --> 00:19:34.742 to develop liver disease and liver

NOTE Confidence: 0.923605856666667

00:19:34.742 --> 00:19:36.050 cancer are really preventable.

NOTE Confidence: 0.728149108666667

00:19:36.220 --> 00:19:39.790 And you see and

NOTE Confidence: 0.728149108666667

00:19:39.887 --> 00:19:43.840 treat patients with liver disease who may

NOTE Confidence: 0.728149108666667

00:19:43.840 --> 00:19:46.815 be at risk of developing liver cancer,

NOTE Confidence: 0.728149108666667

00:19:46.820 --> 00:19:49.268 and you also see patients who

NOTE Confidence: 0.728149108666667

00:19:49.268 --> 00:19:50.900 have developed liver cancer.

NOTE Confidence: 0.728149108666667

00:19:50.900 --> 00:19:52.817 You know if you tell them to lose weight,

NOTE Confidence: 0.728149108666667

00:19:52.820 --> 00:19:56.918 that's often easier said than done.

NOTE Confidence: 0.728149108666667

00:19:56.920 --> 00:19:58.930 Are there any specific recommendations

NOTE Confidence: 0.728149108666667

00:19:58.930 --> 00:20:00.538 that you give patients?

NOTE Confidence: 0.728149108666667

00:20:00.540 --> 00:20:02.878 I'm just thinking that our listeners

NOTE Confidence: 0.728149108666667

00:20:02.880 --> 00:20:04.092 might be thinking, yeah,

NOTE Confidence: 0.728149108666667

00:20:04.092 --> 00:20:07.600 I'd love to lose 5 to 10% of my body weight.

NOTE Confidence: 0.728149108666667

00:20:07.600 --> 00:20:09.730 How exactly do I do that?

NOTE Confidence: 0.893434313

00:20:10.350 --> 00:20:12.282 Yeah, so it is definitely

NOTE Confidence: 0.893434313

00:20:12.282 --> 00:20:13.570 easier said than done,

NOTE Confidence: 0.893434313

00:20:13.570 --> 00:20:15.730 and I think especially in the COVID era

NOTE Confidence: 0.893434313

00:20:15.730 --> 00:20:18.280 where a lot of people were really

NOTE Confidence: 0.893434313

00:20:18.280 --> 00:20:19.738 confined to their home,

NOTE Confidence: 0.893434313

00:20:19.740 --> 00:20:21.906 it's been an even bigger challenge,

NOTE Confidence: 0.893434313

00:20:21.910 --> 00:20:24.278 so oftentimes what I say to patients is,

NOTE Confidence: 0.893434313

00:20:24.280 --> 00:20:26.248 we kind of go through what

NOTE Confidence: 0.893434313

00:20:26.248 --> 00:20:28.137 they're eating and their physical activity.

NOTE Confidence: 0.893434313

00:20:28.140 --> 00:20:30.168 And sometimes their food choices.

NOTE Confidence: 0.893434313

00:20:30.170 --> 00:20:31.780 They may think that they're eating healthy,

NOTE Confidence: 0.893434313

00:20:31.780 --> 00:20:34.202 but when we actually breakdown the calories

NOTE Confidence: 0.893434313

00:20:34.202 --> 00:20:36.758 or the amount of sugar they're eating,

NOTE Confidence: 0.893434313

00:20:36.760 --> 00:20:39.345 it's a lot more than they're aware of so

NOTE Confidence: 0.893434313

00:20:39.345 --> 00:20:40.320 off the bat,

NOTE Confidence: 0.893434313

00:20:40.320 --> 00:20:42.703 I always offer patients to speak with

NOTE Confidence: 0.893434313

00:20:42.703 --> 00:20:45.258 nutrition because I think to have someone

NOTE Confidence: 0.893434313

00:20:45.258 --> 00:20:48.309 hold you accountable and really go through

NOTE Confidence: 0.893434313

00:20:48.310 --> 00:20:51.187 the target of each food

NOTE Confidence: 0.893434313

00:20:51.187 --> 00:20:53.480 group and macro and micro nutrients

NOTE Confidence: 0.893434313

00:20:53.480 --> 00:20:55.657 you should be hitting is very helpful.

NOTE Confidence: 0.893434313

00:20:55.660 --> 00:20:57.832 We also have specific fatty liver

NOTE Confidence: 0.893434313

00:20:57.832 --> 00:21:00.180 clinics and weight loss clinics here,

NOTE Confidence: 0.893434313

00:21:00.180 --> 00:21:02.310 so there are definitely patients

NOTE Confidence: 0.893434313

00:21:02.310 --> 00:21:04.608 even if they're dieting or exercising,

NOTE Confidence: 0.893434313

00:21:04.610 --> 00:21:06.746 they're just really stuck in this

NOTE Confidence: 0.893434313

00:21:06.746 --> 00:21:08.519 challenging place and they can't

NOTE Confidence: 0.893434313

00:21:08.519 --> 00:21:10.247 get to an ideal body weight.

NOTE Confidence: 0.893434313

00:21:10.250 --> 00:21:12.434 And in that situation there are

NOTE Confidence: 0.893434313

00:21:12.434 --> 00:21:14.235 medications that are available to

NOTE Confidence: 0.893434313

00:21:14.235 --> 00:21:15.897 sort of assist in weight loss.

NOTE Confidence: 0.893434313

00:21:15.900 --> 00:21:17.671 So we have a lot of programs

NOTE Confidence: 0.893434313

00:21:17.671 --> 00:21:19.240 and a lot of

00:21:19.874 --> 00:21:21.459 ancillary help for patients that

NOTE Confidence: 0.893434313

00:21:21.459 --> 00:21:22.093 really struggle.

NOTE Confidence: 0.832900532727273

00:21:22.490 --> 00:21:24.230 Alright, so the news flash

NOTE Confidence: 0.832900532727273

00:21:24.230 --> 00:21:26.550 there is talk to your doctor,

NOTE Confidence: 0.832900532727273

00:21:26.550 --> 00:21:28.790 because there likely is

NOTE Confidence: 0.832900532727273

00:21:28.790 --> 00:21:31.134 help available and we can

NOTE Confidence: 0.832900532727273

00:21:31.134 --> 00:21:33.126 all get through this

NOTE Confidence: 0.832900532727273

00:21:33.126 --> 00:21:34.950 and hopefully reduce our risk.

NOTE Confidence: 0.832900532727273

00:21:34.950 --> 00:21:36.903 But Ariel, I want to just kind

NOTE Confidence: 0.832900532727273

00:21:36.903 --> 00:21:38.590 of switch gears a little bit.

NOTE Confidence: 0.832900532727273

00:21:38.590 --> 00:21:40.858 Let's suppose it's a little too late.

NOTE Confidence: 0.832900532727273

00:21:40.860 --> 00:21:44.710 And we develop liver cancer.

NOTE Confidence: 0.832900532727273

00:21:44.710 --> 00:21:47.132 How do you know that you

NOTE Confidence: 0.832900532727273

00:21:47.132 --> 00:21:48.770 have developed liver cancer?

NOTE Confidence: 0.832900532727273

00:21:48.770 --> 00:21:50.750 So how is that diagnosis made?

NOTE Confidence: 0.832900532727273

00:21:50.750 --> 00:21:53.534 Are you going to have signs and symptoms?

NOTE Confidence: 0.832900532727273

00:21:53.540 --> 00:21:56.177 Are you going to go yellow or is this

NOTE Confidence: 0.832900532727273

00:21:56.177 --> 00:21:58.228 something that is picked up

NOTE Confidence: 0.832900532727273

00:21:58.230 --> 00:21:59.920 incidentally?

NOTE Confidence: 0.932234018

00:21:59.930 --> 00:22:01.310 That's a great question.

NOTE Confidence: 0.932234018

00:22:01.310 --> 00:22:03.746 You know, the majority of patients

NOTE Confidence: 0.932234018

00:22:03.746 --> 00:22:06.426 that develop liver cancer are really

NOTE Confidence: 0.932234018

00:22:06.426 --> 00:22:08.638 asymptomatic until it becomes very advanced.

NOTE Confidence: 0.932234018

00:22:08.638 --> 00:22:11.059 So at the time that someone may have

NOTE Confidence: 0.932234018

00:22:11.060 --> 00:22:14.032 pain or start to have

NOTE Confidence: 0.932234018

00:22:14.032 --> 00:22:16.062 some vague symptoms like weight

NOTE Confidence: 0.932234018

00:22:16.062 --> 00:22:18.460 loss or significant fatigue or even

NOTE Confidence: 0.932234018

00:22:18.460 --> 00:22:20.680 jaundice or yellowing of the eyes,

NOTE Confidence: 0.932234018

00:22:20.680 --> 00:22:23.170 which suggests that there's either a

NOTE Confidence: 0.932234018

00:22:23.170 --> 00:22:25.926 blockage in the liver or that the tumor

NOTE Confidence: 0.932234018

00:22:25.926 --> 00:22:28.365 has spread so much in the liver that it's

NOTE Confidence: 0.932234018

00:22:28.365 --> 00:22:30.563 just kind of taken over any remaining

NOTE Confidence: 0.932234018

00:22:30.563 --> 00:22:32.490 normal tissue, that's often too late.

NOTE Confidence: 0.932234018

00:22:32.490 --> 00:22:35.388 So really, what's incredibly important is

NOTE Confidence: 0.932234018

00:22:35.388 --> 00:22:38.689 to identify patients that have chronic liver

NOTE Confidence: 0.932234018

00:22:38.689 --> 00:22:41.713 disease or risk factors for liver cancer.

NOTE Confidence: 0.932234018

00:22:41.720 --> 00:22:43.875 Some which include

NOTE Confidence: 0.932234018

00:22:43.875 --> 00:22:45.168 poorly controlled diabetes,

NOTE Confidence: 0.932234018

00:22:45.170 --> 00:22:47.026 heavy alcohol use, obesity,

NOTE Confidence: 0.932234018

00:22:47.026 --> 00:22:49.346 and make sure that we're

NOTE Confidence: 0.932234018

00:22:49.346 --> 00:22:51.009 screening those patients.

NOTE Confidence: 0.932234018

00:22:51.010 --> 00:22:53.344 So really all major societies recommend

NOTE Confidence: 0.932234018

00:22:53.344 --> 00:22:55.746 in patients with chronic liver disease

NOTE Confidence: 0.932234018

00:22:55.746 --> 00:22:58.080 that every six months you're actually

NOTE Confidence: 0.932234018

00:22:58.080 --> 00:23:00.118 screened for liver cancer with the

NOTE Confidence: 0.932234018

00:23:00.118 --> 00:23:02.278 hopes that if you develop a cancer,

NOTE Confidence: 0.932234018

00:23:02.278 --> 00:23:04.854 you can actually pick it up early.

NOTE Confidence: 0.932234018

00:23:04.860 --> 00:23:06.800 And it's interesting because liver

NOTE Confidence: 0.932234018

00:23:06.800 --> 00:23:09.655 cancer is the only solid organ tumor

NOTE Confidence: 0.932234018

00:23:09.655 --> 00:23:11.770 that could actually be diagnosed

NOTE Confidence: 0.932234018

00:23:11.770 --> 00:23:14.010 based on imaging alone,

NOTE Confidence: 0.932234018

00:23:14.010 --> 00:23:17.802 so it has very unique features when we

NOTE Confidence: 0.932234018

00:23:17.802 --> 00:23:20.150 do a CAT scan or an MRI that basically

NOTE Confidence: 0.932234018

00:23:20.150 --> 00:23:22.586 allow us to definitively tell if this

NOTE Confidence: 0.932234018

00:23:22.586 --> 00:23:24.644 is a hepatocellular carcinoma and

NOTE Confidence: 0.932234018

00:23:24.644 --> 00:23:27.647 oftentimes we don't even have to do

NOTE Confidence: 0.932234018

00:23:27.650 --> 00:23:30.236 a biopsy to confirm the diagnosis.

NOTE Confidence: 0.869718790625

00:23:30.890 --> 00:23:33.578 So people who have those risk factors

NOTE Confidence: 0.869718790625

00:23:33.578 --> 00:23:36.840 should have a CT or MRI every six months.

NOTE Confidence: 0.89414847

00:23:37.570 --> 00:23:40.366 So we always recommend an ultrasound.

NOTE Confidence: 0.89414847

00:23:40.370 --> 00:23:41.669 That's the first

NOTE Confidence: 0.89414847

00:23:41.669 --> 00:23:44.700 step for screening,

NOTE Confidence: 0.89414847

00:23:44.700 --> 00:23:46.175 and that's really just based

NOTE Confidence: 0.89414847

00:23:46.175 --> 00:23:47.650 on sort of cost effectiveness,

NOTE Confidence: 0.89414847

00:23:47.650 --> 00:23:49.906 and you know the fact that it is

NOTE Confidence: 0.89414847

00:23:49.906 --> 00:23:52.086 fairly sensitive, but in some patients,

NOTE Confidence: 0.89414847

00:23:52.086 --> 00:23:54.980 if their liver is very scarred down,

NOTE Confidence: 0.89414847

00:23:54.980 --> 00:23:57.250 so you can't get a good look at that tissue,

NOTE Confidence: 0.89414847

00:23:57.250 --> 00:23:59.578 or if there's a lot of obesity, because

NOTE Confidence: 0.89414847

00:23:59.578 --> 00:24:02.483 a lot of fat in the belly can limit how

NOTE Confidence: 0.89414847

00:24:02.490 --> 00:24:04.594 good of a look you can get.

NOTE Confidence: 0.89414847

00:24:04.600 --> 00:24:05.386 In those cases,

NOTE Confidence: 0.89414847

00:24:05.386 --> 00:24:07.820 you may then need to do more advanced

NOTE Confidence: 0.89414847

00:24:07.820 --> 00:24:10.244 imaging, but generally once we see

NOTE Confidence: 0.89414847

00:24:10.244 --> 00:24:12.690 something abnormal on an ultrasound,

NOTE Confidence: 0.89414847

00:24:12.690 --> 00:24:15.741 the next step is to do a cross sectional

NOTE Confidence: 0.89414847

00:24:15.741 --> 00:24:18.199 scan with either a CT or an MRI.

00:24:19.140 --> 00:24:21.130 And so it's interesting

NOTE Confidence: 0.906000097391305

00:24:21.130 --> 00:24:23.511 that liver cancers are one of

NOTE Confidence: 0.906000097391305

00:24:23.511 --> 00:24:25.688 the few where you don't need a

NOTE Confidence: 0.906000097391305

00:24:25.688 --> 00:24:27.839 biopsy to make that diagnosis.

NOTE Confidence: 0.906000097391305

00:24:27.840 --> 00:24:30.514 So let's suppose you see that,

NOTE Confidence: 0.906000097391305

00:24:30.520 --> 00:24:32.590 tell us about some of

NOTE Confidence: 0.906000097391305

00:24:32.590 --> 00:24:33.625 the medical management,

NOTE Confidence: 0.906000097391305

00:24:33.630 --> 00:24:35.562 some of the things that are coming

NOTE Confidence: 0.906000097391305

00:24:35.562 --> 00:24:37.408 down the Pike short of transplant

NOTE Confidence: 0.906000097391305

00:24:37.408 --> 00:24:39.322 that might be helpful in these patients.

00:24:41.900 --> 00:24:43.730 Whenever someone has a new

NOTE Confidence: 0.91731619

00:24:43.730 --> 00:24:45.194 diagnosis of liver cancer,

NOTE Confidence: 0.91731619

00:24:45.200 --> 00:24:46.733 we always want to make sure that

NOTE Confidence: 0.91731619

00:24:46.733 --> 00:24:48.239 it hasn't spread outside the liver.

NOTE Confidence: 0.91731619

00:24:48.240 --> 00:24:49.460 So that's a big step,

NOTE Confidence: 0.91731619

00:24:49.460 --> 00:24:51.400 because once it has spread,

NOTE Confidence: 0.91731619

00:24:51.400 --> 00:24:53.556 your treatment is a little bit different,

NOTE Confidence: 0.91731619

00:24:53.560 --> 00:24:56.336 and it's very important to look at a

NOTE Confidence: 0.91731619

00:24:56.340 --> 00:24:57.796 patient's underlying liver function,

NOTE Confidence: 0.91731619

00:24:57.796 --> 00:25:00.432 because that plays a major role in

NOTE Confidence: 0.91731619

00:25:00.432 --> 00:25:02.412 understanding if they're eligible or

NOTE Confidence: 0.91731619

00:25:02.412 --> 00:25:03.996 would tolerate certain treatments.

NOTE Confidence: 0.91731619

00:25:04.000 --> 00:25:05.412 And outside of transplant,

NOTE Confidence: 0.91731619

00:25:05.412 --> 00:25:07.980 we really do think of

NOTE Confidence: 0.91731619

00:25:07.980 --> 00:25:09.875 liver cancer treatment in either

NOTE Confidence: 0.91731619

00:25:09.875 --> 00:25:11.934 a curative approach or what's

NOTE Confidence: 0.91731619

00:25:11.934 --> 00:25:14.281 called a palliative approach, and

NOTE Confidence: 0.91731619

00:25:14.281 --> 00:25:17.508 transplant is one of the curative therapies,

NOTE Confidence: 0.91731619

00:25:17.510 --> 00:25:19.780 but other curative therapies include

NOTE Confidence: 0.91731619

00:25:19.780 --> 00:25:22.050 local resection and that's

NOTE Confidence: 0.91731619

00:25:22.126 --> 00:25:24.324 when we cut out a small

NOTE Confidence: 0.91731619

00:25:24.324 --> 00:25:26.138 piece where that tumor is

NOTE Confidence: 0.91731619

00:25:26.140 --> 00:25:26.980 and of course,

NOTE Confidence: 0.91731619

00:25:26.980 --> 00:25:28.940 someone has to be a good candidate

NOTE Confidence: 0.91731619

00:25:28.997 --> 00:25:30.845 to undergo surgery and so if

NOTE Confidence: 0.91731619

00:25:30.845 --> 00:25:32.420 they have really advanced liver

NOTE Confidence: 0.91731619

00:25:32.420 --> 00:25:34.380 disease that would not be

NOTE Confidence: 0.91731619

00:25:34.380 --> 00:25:36.108 an ideal treatment choice,

NOTE Confidence: 0.91731619

00:25:36.108 --> 00:25:39.028 but other curative therapies

NOTE Confidence: 0.91731619

00:25:39.028 --> 00:25:41.704 include something called ablation which

NOTE Confidence: 0.91731619

00:25:41.704 --> 00:25:45.088 is really where you destroy the tumor and

NOTE Confidence: 0.91731619

00:25:45.088 --> 00:25:47.228 that can be either through

NOTE Confidence: 0.91731619

00:25:47.228 --> 00:25:48.084 thermal techniques,

NOTE Confidence: 0.91731619

00:25:48.090 --> 00:25:49.198 radiation techniques,

NOTE Confidence: 0.91731619

00:25:49.198 --> 00:25:50.306 electrical injury,

NOTE Confidence: 0.91731619

00:25:50.306 --> 00:25:54.896 and then we think of some of our

NOTE Confidence: 0.91731619

00:25:54.896 --> 00:25:57.248 palliative treatments which include

NOTE Confidence: 0.91731619

00:25:57.250 --> 00:26:00.225 what we call local regional

NOTE Confidence: 0.91731619

00:26:00.225 --> 00:26:02.230 therapies or transarterial therapies,

NOTE Confidence: 0.91731619

00:26:02.230 --> 00:26:04.768 and that's basically where you can

NOTE Confidence: 0.91731619

00:26:04.770 --> 00:26:06.734 either induce radiation damage

NOTE Confidence: 0.91731619

00:26:06.734 --> 00:26:09.680 or locally give chemotherapy to

NOTE Confidence: 0.91731619

00:26:09.767 --> 00:26:12.575 the tumor to kind of cut off the

NOTE Confidence: 0.91731619

00:26:12.575 --> 00:26:14.918 blood supply and kill that tumor,

NOTE Confidence: 0.91731619

00:26:14.920 --> 00:26:16.152 and then for patients

NOTE Confidence: 0.91731619

00:26:16.152 --> 00:26:18.000 that either are just not responding

NOTE Confidence: 0.91731619

00:26:18.065 --> 00:26:19.990 to those or where the cancer has

NOTE Confidence: 0.91731619

00:26:19.990 --> 00:26:21.430 spread outside of the liver,

NOTE Confidence: 0.91731619

00:26:21.430 --> 00:26:24.022 we start to think about systemic

NOTE Confidence: 0.91731619

00:26:24.022 --> 00:26:25.318 therapy or chemotherapy.

NOTE Confidence: 0.872388781111111

00:26:26.730 --> 00:26:28.110 And so you know,

NOTE Confidence: 0.872388781111111

00:26:28.110 --> 00:26:30.710 I can imagine that no patient wants

NOTE Confidence: 0.872388781111111

00:26:30.710 --> 00:26:33.410 to go through chemotherapy and

NOTE Confidence: 0.872388781111111

00:26:33.410 --> 00:26:35.848 everybody has heard horror stories

NOTE Confidence: 0.872388781111111

00:26:35.848 --> 00:26:38.368 about what chemotherapy is like.

NOTE Confidence: 0.872388781111111

00:26:38.370 --> 00:26:40.954 But very often on this show we've been

NOTE Confidence: 0.872388781111111

00:26:40.954 --> 00:26:43.338 talking about some of the newer advances,

NOTE Confidence: 0.872388781111111

00:26:43.340 --> 00:26:45.332 especially in systemic therapy,

NOTE Confidence: 0.872388781111111

00:26:45.332 --> 00:26:47.822 where we really are looking

NOTE Confidence: 0.872388781111111

00:26:47.822 --> 00:26:50.029 towards personalized medicine,

NOTE Confidence: 0.872388781111111

00:26:50.030 --> 00:26:51.350 sometimes immunotherapies.

NOTE Confidence: 0.872388781111111

00:26:51.350 --> 00:26:53.550 Is there anything like that

NOTE Confidence: 0.872388781111111

00:26:53.550 --> 00:26:56.159 going on in primary liver cancer?

NOTE Confidence: 0.93367624047619

00:26:56.740 --> 00:26:59.626 Absolutely, so I think probably the

NOTE Confidence: 0.93367624047619

00:26:59.626 --> 00:27:02.424 management for patients with liver cancer

NOTE Confidence: 0.93367624047619

00:27:02.424 --> 00:27:05.608 that's more advanced has been one of the

NOTE Confidence: 0.93367624047619

00:27:05.689 --> 00:27:07.904 most innovative

NOTE Confidence: 0.93367624047619

00:27:07.904 --> 00:27:09.620 fields within liver cancer.

NOTE Confidence: 0.93367624047619

00:27:09.620 --> 00:27:12.668 And that's because there have been so many

NOTE Confidence: 0.93367624047619

00:27:12.668 --> 00:27:14.405 new advancements in systemic therapies.

NOTE Confidence: 0.93367624047619

00:27:14.405 --> 00:27:17.399 Just a few years ago,

NOTE Confidence: 0.93367624047619

00:27:17.400 --> 00:27:20.334 we just had one or two medications,

NOTE Confidence: 0.93367624047619

00:27:20.340 --> 00:27:23.316 and now we have 10 FDA approved therapies.

NOTE Confidence: 0.93367624047619

00:27:23.320 --> 00:27:26.705 And as of May 2020, so just a

NOTE Confidence: 0.93367624047619

00:27:26.705 --> 00:27:28.835 little over a year ago,

NOTE Confidence: 0.93367624047619

00:27:28.840 --> 00:27:30.328 a new combination therapy.

00:27:31.820 --> 00:27:33.661 One of the components

NOTE Confidence: 0.93367624047619

00:27:33.661 --> 00:27:35.620 was an immune checkpoint inhibitor,

NOTE Confidence: 0.93367624047619

00:27:35.620 --> 00:27:38.662 which is one of our immunotherapy

NOTE Confidence: 0.93367624047619

00:27:38.662 --> 00:27:40.690 medications that actually proved to

NOTE Confidence: 0.93367624047619

00:27:40.771 --> 00:27:42.490 be the best first line therapy,

NOTE Confidence: 0.93367624047619

00:27:42.490 --> 00:27:45.100 so it had improvement in overall

NOTE Confidence: 0.93367624047619

00:27:45.100 --> 00:27:46.405 survival and disease

NOTE Confidence: 0.93367624047619

00:27:46.410 --> 00:27:48.906 free progression compared to what our

NOTE Confidence: 0.93367624047619

00:27:48.906 --> 00:27:51.551 prior first line was and is actually

NOTE Confidence: 0.93367624047619

00:27:51.551 --> 00:27:54.670 now what we try to use for our patients.

NOTE Confidence: 0.93367624047619

00:27:54.670 --> 00:27:58.000 And I think it's also important to know that

NOTE Confidence: 0.93367624047619

00:27:58.000 --> 00:27:58.346 oftentimes,

NOTE Confidence: 0.93367624047619

00:27:58.346 --> 00:28:00.768 when our patients hear that they're going

NOTE Confidence: 0.93367624047619

00:28:00.768 --> 00:28:03.629 to go on systemic therapy or chemotherapy,

NOTE Confidence: 0.93367624047619

00:28:03.630 --> 00:28:05.730 they kind of think of

00:28:06.360 --> 00:28:08.565 the movies or loved ones that they've

NOTE Confidence: 0.93367624047619

00:28:08.565 --> 00:28:10.709 seen have gotten really very sick.

NOTE Confidence: 0.93367624047619

00:28:10.710 --> 00:28:13.358 Or their hair has fallen out or their

NOTE Confidence: 0.93367624047619

00:28:13.358 --> 00:28:15.650 immune system is completely wiped out,

NOTE Confidence: 0.93367624047619

00:28:15.650 --> 00:28:18.093 and the medications that we use to

NOTE Confidence: 0.93367624047619

00:28:18.093 --> 00:28:19.876 treat liver cancer are definitely

NOTE Confidence: 0.93367624047619

00:28:19.876 --> 00:28:20.980 much more tolerable

00:28:22.366 --> 00:28:23.752 with significantly reduced side

NOTE Confidence: 0.93367624047619

00:28:23.752 --> 00:28:25.138 effects compared to

NOTE Confidence: 0.93367624047619

00:28:25.140 --> 00:28:27.768 what a lot of patients think about

NOTE Confidence: 0.93367624047619

00:28:27.770 --> 00:28:29.445 for sort of standard chemotherapy

NOTE Confidence: 0.93367624047619

00:28:29.445 --> 00:28:30.450 for other tumors.

NOTE Confidence: 0.871790415238095

00:28:31.270 --> 00:28:33.268 Doctor Ariel Jaffe is an assistant

NOTE Confidence: 0.871790415238095

00:28:33.268 --> 00:28:34.969 professor of medicine in the

NOTE Confidence: 0.871790415238095

00:28:34.969 --> 00:28:36.209 section of digestive diseases

NOTE Confidence: 0.871790415238095

00:28:36.209 --> 00:28:38.330 at the Yale School of Medicine.

NOTE Confidence: 0.871790415238095

00:28:38.330 --> 00:28:39.790 If you have questions,

NOTE Confidence: 0.871790415238095

00:28:39.790 --> 00:28:41.980 the address is cancer answers at

NOTE Confidence: 0.871790415238095

00:28:41.980 --> 00:28:44.458 yale.edu and past editions of the

NOTE Confidence: 0.871790415238095

00:28:44.458 --> 00:28:46.899 program are available in audio and

NOTE Confidence: 0.871790415238095

00:28:46.899 --> 00:28:48.280 written form at yalecancercenter.org.

NOTE Confidence: 0.871790415238095

00:28:48.280 --> 00:28:50.760 We hope you'll join us next week to

NOTE Confidence: 0.871790415238095

00:28:50.760 --> 00:28:52.650 learn more about the fight against

NOTE Confidence: 0.871790415238095

00:28:52.650 --> 00:28:54.175 cancer here on Connecticut Public Radio.

NOTE Confidence: 0.871790415238095

00:28:54.231 --> 00:28:55.681 Funding for Yale Cancer

NOTE Confidence: 0.871790415238095

00:28:55.681 --> 00:28:57.131 Answers is provided by Smilow

NOTE Confidence: 0.871790415238095

00:28:57.140 --> 00:29:00.000 Cancer Hospital and AstraZeneca.