WEBVTT

00:00:00.000 --> 00:00:01.895 Funding for Yale Cancer Answers

NOTE Confidence: 0.851100281428572

00:00:01.895 --> 00:00:03.790 is provided by Smilow Cancer

NOTE Confidence: 0.851100281428572

00:00:03.856 --> 00:00:05.500 Hospital and Astra Zeneca.

NOTE Confidence: 0.852915634166667

00:00:07.900 --> 00:00:10.042 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.852915634166667

00:00:10.042 --> 00:00:12.260 your host doctor Anees Chagpar.

NOTE Confidence: 0.852915634166667

00:00:12.260 --> 00:00:13.956 Yale Cancer Answers features the

NOTE Confidence: 0.852915634166667

00:00:13.956 --> 00:00:16.020 latest information on cancer care by

NOTE Confidence: 0.852915634166667

00:00:16.074 --> 00:00:17.470 welcoming oncologists and specialists

NOTE Confidence: 0.852915634166667

00:00:17.470 --> 00:00:19.901 who are on the forefront of the

NOTE Confidence: 0.852915634166667

00:00:19.901 --> 00:00:21.730 battle to fight cancer. This week

NOTE Confidence: 0.852915634166667

00:00:21.730 --> 00:00:23.860 it's a conversation about liver cancer

NOTE Confidence: 0.852915634166667

00:00:23.860 --> 00:00:26.289 with doctors Amy Justice and Tamar Taddei.

NOTE Confidence: 0.852915634166667

00:00:26.290 --> 00:00:27.960 Dr Justice is the CNH

NOTE Confidence: 0.852915634166667

00:00:27.960 --> 00:00:30.192 Long professor of Medicine and Doctor

NOTE Confidence: 0.852915634166667

00:00:30.192 --> 00:00:32.045 Taddei is associate professor of

NOTE Confidence: 0.852915634166667

00:00:32.045 --> 00:00:34.166 medicine at the Yale School of Medicine,

NOTE Confidence: 0.852915634166667

00:00:34.170 --> 00:00:35.935 where Doctor Chagpar is a

NOTE Confidence: 0.852915634166667

00:00:35.935 --> 00:00:37.347 professor of surgical oncology.

NOTE Confidence: 0.77744365375

00:00:38.540 --> 00:00:42.276 So maybe I'll start with you doctor Taddei,

NOTE Confidence: 0.77744365375

00:00:42.280 --> 00:00:44.450 tell us a little bit more about

NOTE Confidence: 0.77744365375

00:00:44.450 --> 00:00:45.889 yourself and what you do.

NOTE Confidence: 0.909573086896552

00:00:46.200 --> 00:00:48.902 So I'm a hepatologist and my research

NOTE Confidence: 0.909573086896552

00:00:48.902 --> 00:00:51.082 focuses on outcomes in liver disease

NOTE Confidence: 0.909573086896552

00:00:51.082 --> 00:00:53.308 and liver cancer as well as in

NOTE Confidence: 0.909573086896552

00:00:53.379 --> 00:00:55.215 clinical trials and prevention

NOTE Confidence: 0.909573086896552

00:00:55.215 --> 00:00:57.510 and detection of liver cancer.

NOTE Confidence: 0.909573086896552

00:00:57.510 --> 00:00:59.118 So that's sort of me in a nutshell.

NOTE Confidence: 0.913868376666667

00:00:59.750 --> 00:01:02.096 OK, what about you doctor Justice?

NOTE Confidence: 0.928514091538461

00:01:02.830 --> 00:01:05.056 So I'm a clinical epidemiologist and

NOTE Confidence: 0.928514091538461

00:01:05.056 --> 00:01:07.619 I have spent my career harnessing

NOTE Confidence: 0.928514091538461

00:01:07.619 --> 00:01:09.568 the national electronic health

NOTE Confidence: 0.928514091538461

00:01:09.568 --> 00:01:12.011 record system that the VA has to

NOTE Confidence: 0.928514091538461

00:01:12.011 --> 00:01:14.274 try to study important clinical

NOTE Confidence: 0.928514091538461

00:01:14.274 --> 00:01:16.118 phenomenon like liver cancer.

NOTE Confidence: 0.928514091538461

00:01:16.120 --> 00:01:17.508 Also, HIV, hepatitis C,

NOTE Confidence: 0.928514091538461

00:01:17.508 --> 00:01:19.590 and a number of other conditions

NOTE Confidence: 0.928514091538461

00:01:19.653 --> 00:01:21.449 using that national database.

NOTE Confidence: 0.926695552142857

00:01:22.410 --> 00:01:25.170 And so I mean, it seems like the two of

NOTE Confidence: 0.926695552142857

00:01:25.249 --> 00:01:27.658 you would have obvious research synergy,

NOTE Confidence: 0.926695552142857

00:01:27.658 --> 00:01:30.626 but one of the things that's always

NOTE Confidence: 0.926695552142857

00:01:30.626 --> 00:01:33.370 exciting and interesting to me is to see

NOTE Confidence: 0.926695552142857

00:01:33.370 --> 00:01:36.189 how people from arguably different fields.

NOTE Confidence: 0.926695552142857

00:01:36.190 --> 00:01:38.975 One an epidemiologist 1A hepatologist

NOTE Confidence: 0.926695552142857

00:01:38.975 --> 00:01:43.131 kind of collide to come up with

NOTE Confidence: 0.926695552142857

00:01:43.131 --> 00:01:45.048 interesting research ideas.

NOTE Confidence: 0.926695552142857

00:01:45.050 --> 00:01:47.241 So Doctor Daddy tell us a little

NOTE Confidence: 0.926695552142857

00:01:47.241 --> 00:01:50.208 bit more about how you met and about

NOTE Confidence: 0.926695552142857

00:01:50.208 --> 00:01:51.776 how this collaboration started.

NOTE Confidence: 0.92282362

00:01:52.620 --> 00:01:54.818 So I wouldn't call it a collision.

NOTE Confidence: 0.92282362

00:01:54.820 --> 00:01:57.445 I actively. I actively sought

NOTE Confidence: 0.92282362

00:01:57.445 --> 00:02:00.070 Amy's mentorship so Amy has

NOTE Confidence: 0.92282362

00:02:00.164 --> 00:02:03.146 more than 20 year history of

NOTE Confidence: 0.92282362

00:02:03.146 --> 00:02:06.059 developing cohorts in the VA in VA.

NOTE Confidence: 0.92282362

00:02:06.060 --> 00:02:08.744 Data to carefully develop

NOTE Confidence: 0.92282362

00:02:08.744 --> 00:02:11.428 clinical phenotypes of disease

NOTE Confidence: 0.92282362

00:02:11.428 --> 00:02:14.099 specifically around HIV and aging,

NOTE Confidence: 0.92282362

00:02:14.100 --> 00:02:15.848 and many other diseases.

NOTE Confidence: 0.92282362

00:02:15.848 --> 00:02:18.470 Because a lot of this work

NOTE Confidence: 0.92282362

00:02:18.557 --> 00:02:20.697 in HIV patients has also,

NOTE Confidence: 0.92282362

00:02:20.700 --> 00:02:22.100 you know HIV patients commonly

NOTE Confidence: 0.92282362

00:02:22.100 --> 00:02:23.710 have hepatitis C, for example.

NOTE Confidence: 0.92282362

00:02:23.710 --> 00:02:25.635 They commonly have metabolic disorders.

NOTE Confidence: 0.92282362

00:02:25.640 --> 00:02:29.490 And so she's really built a research

NOTE Confidence: 0.92282362

00:02:29.490 --> 00:02:32.239 environment that can study systems

NOTE Confidence: 0.92282362

00:02:32.239 --> 00:02:35.353 related diseases in a way that

NOTE Confidence: 0.92282362

00:02:35.353 --> 00:02:37.479 was incredibly intriguing to me.

NOTE Confidence: 0.92282362

00:02:37.480 --> 00:02:40.119 As a young person who wanted to

NOTE Confidence: 0.92282362

00:02:40.119 --> 00:02:42.666 develop a cohort of patients with

NOTE Confidence: 0.92282362

00:02:42.666 --> 00:02:45.336 cirrhosis at risk of liver cancer.

NOTE Confidence: 0.92282362

00:02:45.340 --> 00:02:47.140 And so I sought her advice,

NOTE Confidence: 0.92282362

00:02:47.140 --> 00:02:50.986 and this was in somewhere around 2011, 2012.

NOTE Confidence: 0.92282362

00:02:50.986 --> 00:02:53.420 I asked to meet with her and I said,

NOTE Confidence: 0.92282362

00:02:53.420 --> 00:02:54.980 look, you know, I've I've seen your work.

NOTE Confidence: 0.92282362

00:02:54.980 --> 00:02:56.804 I want to know how to do this.

NOTE Confidence: 0.92282362

00:02:56.810 --> 00:02:58.434 I think I'm going to need a

NOTE Confidence: 0.92282362

00:02:58.434 --> 00:02:59.130 lot of handholding,

NOTE Confidence: 0.92282362

00:02:59.130 --> 00:03:01.790 and there began a decade of a

NOTE Confidence: 0.92282362

00:03:01.790 --> 00:03:03.210 phenomenal mentorship for me,

NOTE Confidence: 0.92282362

00:03:03.210 --> 00:03:05.780 so that's that's how we met.

NOTE Confidence: 0.858066166470588

00:03:05.780 --> 00:03:07.802 And doctor Justice tell us a

NOTE Confidence: 0.858066166470588

00:03:07.802 --> 00:03:09.956 little bit more about kind of

NOTE Confidence: 0.858066166470588

00:03:09.956 --> 00:03:11.786 the ideas that were generated.

NOTE Confidence: 0.858066166470588

00:03:11.790 --> 00:03:13.710 The projects that you've designed,

NOTE Confidence: 0.858066166470588

00:03:13.710 --> 00:03:16.874 and what the Genesis was of that.

NOTE Confidence: 0.892311204

00:03:18.080 --> 00:03:20.490 Well, I'm a general internist,

NOTE Confidence: 0.892311204

00:03:20.490 --> 00:03:21.714 so I think broadly,

NOTE Confidence: 0.892311204

00:03:21.714 --> 00:03:23.550 which is sort of complementary to

NOTE Confidence: 0.892311204

00:03:23.615 --> 00:03:25.870 and being an epidemiologist because

NOTE Confidence: 0.892311204

00:03:25.870 --> 00:03:28.125 epidemiologists also think fairly broadly.

NOTE Confidence: 0.892311204

00:03:28.130 --> 00:03:29.852 But I realized early on that I

NOTE Confidence: 0.892311204

00:03:29.852 --> 00:03:31.795 could not be an expert in every

NOTE Confidence: 0.892311204

00:03:31.795 --> 00:03:33.511 one of the conditions that were

NOTE Confidence: 0.892311204

00:03:33.572 --> 00:03:35.518 worthy of study using the VA data,

NOTE Confidence: 0.892311204

00:03:35.520 --> 00:03:37.950 so I've always had my eyes out for a

NOTE Confidence: 0.892311204

00:03:37.950 --> 00:03:40.292 young promising people who want to be

NOTE Confidence: 0.892311204

00:03:40.292 --> 00:03:42.616 the experts in those particular domains

NOTE Confidence: 0.892311204

00:03:42.616 --> 00:03:45.364 and tomorrow absolutely fit that Bill.

NOTE Confidence: 0.892311204

00:03:45.370 --> 00:03:47.602 And part of what I think is really

NOTE Confidence: 0.892311204

00:03:47.602 --> 00:03:49.267 exciting about doing this work is

NOTE Confidence: 0.892311204

00:03:49.267 --> 00:03:50.994 that there are a number of cores

NOTE Confidence: 0.892311204

00:03:50.994 --> 00:03:52.569 and work groups affiliated with the

NOTE Confidence: 0.892311204

00:03:52.569 --> 00:03:53.929 cohort studies that I've created,

NOTE Confidence: 0.892311204

00:03:53.930 --> 00:03:55.680 and each one of those cores in

NOTE Confidence: 0.892311204

00:03:55.680 --> 00:03:57.076 workgroups has greater depth and

NOTE Confidence: 0.892311204

00:03:57.076 --> 00:03:58.561 understanding of the clinical questions

NOTE Confidence: 0.892311204

00:03:58.561 --> 00:04:00.497 that they are looking at than I do.

NOTE Confidence: 0.892311204

00:04:00.500 --> 00:04:02.446 But what Ioffer is sort of the

NOTE Confidence: 0.892311204

00:04:02.446 --> 00:04:03.929 connectivity among those groups so that

NOTE Confidence: 0.892311204

00:04:03.929 --> 00:04:05.708 we can learn how to do a phenotype

NOTE Confidence: 0.892311204

00:04:05.708 --> 00:04:07.084 once somebody develops diabetes

NOTE Confidence: 0.892311204

00:04:07.084 --> 00:04:09.304 in the endocrine group and we can

NOTE Confidence: 0.892311204

00:04:09.304 --> 00:04:11.033 use it in the liver group without

NOTE Confidence: 0.892311204

00:04:11.033 --> 00:04:13.033 having to recreate another wheel so

NOTE Confidence: 0.892311204

00:04:13.033 --> 00:04:15.714 that we are definitely more as a.

NOTE Confidence: 0.892311204

00:04:15.720 --> 00:04:18.060 We are more than the sum of our parts

NOTE Confidence: 0.892311204

00:04:18.060 --> 00:04:19.820 and I find that exciting and a lot

NOTE Confidence: 0.892311204

00:04:19.820 --> 00:04:21.768 of fun coming into work every day.

NOTE Confidence: 0.877957699545455

00:04:22.700 --> 00:04:25.017 So just for people who are not

NOTE Confidence: 0.877957699545455

00:04:25.017 --> 00:04:27.304 familiar with your work when you're

NOTE Confidence: 0.877957699545455

00:04:27.304 --> 00:04:29.334 talking about these different cores

NOTE Confidence: 0.877957699545455

00:04:29.334 --> 00:04:31.952 and and kind of spanning research

NOTE Confidence: 0.877957699545455

00:04:31.952 --> 00:04:34.476 phenomena across different groups,

NOTE Confidence: 0.877957699545455

00:04:34.480 --> 00:04:37.768 tell us more about how that exactly works.

NOTE Confidence: 0.877957699545455

00:04:37.770 --> 00:04:40.213 Can you contextualize that for us and

NOTE Confidence: 0.877957699545455

00:04:40.213 --> 00:04:43.270 maybe give us a specific example? Sure,

NOTE Confidence: 0.882717808333333

00:04:43.580 --> 00:04:45.422 so I'll talk about tomorrow's work

NOTE Confidence: 0.882717808333333

00:04:45.422 --> 00:04:47.090 because that's most relevant to this.

NOTE Confidence: 0.882717808333333

00:04:47.090 --> 00:04:49.938 Call so when Tamar came to me initially

NOTE Confidence: 0.882717808333333

00:04:49.938 --> 00:04:52.290 she wanted to create her own cohort study,

NOTE Confidence: 0.882717808333333

00:04:52.290 --> 00:04:54.030 which she did with aplomb.

NOTE Confidence: 0.882717808333333

00:04:54.030 --> 00:04:54.982 But then, over time,

NOTE Confidence: 0.882717808333333

00:04:54.982 --> 00:04:56.729 she realized that she could also benefit

NOTE Confidence: 0.882717808333333

00:04:56.729 --> 00:04:58.584 from doing some analysis with some of

NOTE Confidence: 0.882717808333333

00:04:58.584 --> 00:05:00.069 the databases that we had created.

NOTE Confidence: 0.882717808333333

00:05:00.070 --> 00:05:02.016 The cohorts we created that were a

NOTE Confidence: 0.882717808333333

00:05:02.016 --> 00:05:03.855 little bit more generic than only

NOTE Confidence: 0.882717808333333

00:05:03.855 --> 00:05:05.745 people who had cirrhosis per say.

NOTE Confidence: 0.882717808333333

00:05:05.750 --> 00:05:07.486 Not to mention that we had other

NOTE Confidence: 0.882717808333333

00:05:07.486 --> 00:05:09.605 data that we had merged into our

NOTE Confidence: 0.882717808333333

00:05:09.605 --> 00:05:11.255 cohort studies that wasn't yet

NOTE Confidence: 0.882717808333333

00:05:11.255 --> 00:05:13.075 available to her in the other study.

NOTE Confidence: 0.882717808333333

00:05:13.080 --> 00:05:14.658 So she wrote up a proposal,

NOTE Confidence: 0.882717808333333

00:05:14.660 --> 00:05:16.140 which was a brief, suggest,

NOTE Confidence: 0.882717808333333

00:05:16.140 --> 00:05:18.756 brief outline of what she wanted to do.

NOTE Confidence: 0.882717808333333

00:05:18.760 --> 00:05:19.492 I reviewed it,

NOTE Confidence: 0.882717808333333

00:05:19.492 --> 00:05:20.712 thought it had the critical

NOTE Confidence: 0.882717808333333

00:05:20.712 --> 00:05:21.790 information that we needed it,

NOTE Confidence: 0.882717808333333

00:05:21.790 --> 00:05:24.014 and then it went to the liver core,

NOTE Confidence: 0.882717808333333

00:05:24.020 --> 00:05:25.928 which is a standing group of

NOTE Confidence: 0.882717808333333

00:05:25.928 --> 00:05:27.988 people who are very interested in

NOTE Confidence: 0.882717808333333

00:05:27.988 --> 00:05:30.383 liver research in the VA data bin.

NOTE Confidence: 0.882717808333333

00:05:30.383 --> 00:05:32.154 Lorry is the head of that core,

NOTE Confidence: 0.882717808333333

00:05:32.160 --> 00:05:33.344 along with Jan Tate,

NOTE Confidence: 0.882717808333333

00:05:33.344 --> 00:05:34.824 who is the Methodologist Ben

NOTE Confidence: 0.882717808333333

00:05:34.824 --> 00:05:36.258 Larae being the clinician.

NOTE Confidence: 0.882717808333333

00:05:36.260 --> 00:05:37.196 They reviewed it.

NOTE Confidence: 0.882717808333333

00:05:37.196 --> 00:05:38.756 They made suggestions to her.

NOTE Confidence: 0.882717808333333

00:05:38.760 --> 00:05:40.320 Several people in the course said

NOTE Confidence: 0.882717808333333

00:05:40.320 --> 00:05:41.675 they were interested in participating

NOTE Confidence: 0.882717808333333

00:05:41.675 --> 00:05:43.795 and signed on to be on the writing

NOTE Confidence: 0.882717808333333

00:05:43.795 --> 00:05:45.270 committee and we went from there.

NOTE Confidence: 0.880041051739131

00:05:46.670 --> 00:05:49.091 And and so doctor Taty tell us a little

NOTE Confidence: 0.880041051739131

00:05:49.091 --> 00:05:51.502 bit more about the questions that you

NOTE Confidence: 0.880041051739131

00:05:51.502 --> 00:05:54.138 were trying to answer with these studies.

NOTE Confidence: 0.83483079

00:05:55.330 --> 00:05:58.222 So the first question was really

NOTE Confidence: 0.83483079

00:05:58.222 --> 00:06:00.690 how to understand via data.

NOTE Confidence: 0.83483079

00:06:00.690 --> 00:06:04.227 So where do you go to develop a cohort?

NOTE Confidence: 0.83483079

00:06:04.230 --> 00:06:08.164 How is it housed within the you

NOTE Confidence: 0.83483079

00:06:08.164 --> 00:06:11.690 know V8 computing infrastructure?

NOTE Confidence: 0.83483079

00:06:11.690 --> 00:06:13.489 How do you actually look at that

NOTE Confidence: 0.83483079

00:06:13.489 --> 00:06:15.635 data in a way that makes sense

NOTE Confidence: 0.83483079

00:06:15.635 --> 00:06:17.270 and ask the right question?

NOTE Confidence: 0.83483079

00:06:17.270 --> 00:06:20.434 So just having the data doesn't really

NOTE Confidence: 0.83483079

00:06:20.440 --> 00:06:22.066 lead you to the right endpoint.

NOTE Confidence: 0.83483079

00:06:22.070 --> 00:06:23.852 You have to actually start with

NOTE Confidence: 0.83483079

00:06:23.852 --> 00:06:25.582 a good question and sometimes.

NOTE Confidence: 0.83483079

00:06:25.582 --> 00:06:27.662 Good questions actually require a

NOTE Confidence: 0.83483079

00:06:27.662 --> 00:06:30.624 lot of effort to actually be able

NOTE Confidence: 0.83483079

00:06:30.624 --> 00:06:32.674 to define your population properly,

NOTE Confidence: 0.83483079

00:06:32.680 --> 00:06:34.162 and so in the beginning when

NOTE Confidence: 0.83483079

00:06:34.162 --> 00:06:36.219 we set up the cirrhosis cohort,

NOTE Confidence: 0.83483079

00:06:36.220 --> 00:06:38.230 which is called the vocal cohort,

NOTE Confidence: 0.83483079

00:06:38.230 --> 00:06:39.970 I did this with my colleague

NOTE Confidence: 0.83483079

00:06:39.970 --> 00:06:41.130 Dave Kaplan at Upenn.

NOTE Confidence: 0.83483079

00:06:41.130 --> 00:06:42.980 There's a lot of parallels

NOTE Confidence: 0.83483079

00:06:42.980 --> 00:06:44.418 between Upenn and Yale,

NOTE Confidence: 0.83483079

00:06:44.418 --> 00:06:46.910 a lot of collaboration going on there,

NOTE Confidence: 0.83483079

00:06:46.910 --> 00:06:49.422 and so we actually had to really define

NOTE Confidence: 0.83483079

00:06:49.422 --> 00:06:51.910 severity of liver disease in that cohort,

NOTE Confidence: 0.83483079

00:06:51.910 --> 00:06:53.070 which is hard to do,

NOTE Confidence: 0.83483079

00:06:53.070 --> 00:06:56.040 and we took a lot of advice from from.

NOTE Confidence: 0.83483079

00:06:56.040 --> 00:06:59.270 Amy and from then and how to do that and

NOTE Confidence: 0.83483079

00:06:59.360 --> 00:07:02.760 and so since the inception of that cohort,

NOTE Confidence: 0.83483079

00:07:02.760 --> 00:07:05.840 we set that cohort cohort up in 2012.

NOTE Confidence: 0.83483079

00:07:05.840 --> 00:07:08.264 We've published some probably 25 papers

NOTE Confidence: 0.83483079

00:07:08.264 --> 00:07:10.974 now on cirrhosis and outcomes in

NOTE Confidence: 0.83483079

00:07:10.974 --> 00:07:13.534 cirrhosis from everything to important

NOTE Confidence: 0.83483079

00:07:13.534 --> 00:07:16.291 clinical questions around the use of

NOTE Confidence: 0.83483079

00:07:16.291 --> 00:07:18.211 anticoagulants in these patients to

NOTE Confidence: 0.83483079

00:07:18.211 --> 00:07:21.140 the burden of cost of liver cancer.

NOTE Confidence: 0.83483079

00:07:21.140 --> 00:07:22.876 Care to you know,

NOTE Confidence: 0.83483079

00:07:22.876 --> 00:07:25.046 all kinds of different questions

NOTE Confidence: 0.83483079

00:07:25.046 --> 00:07:26.589 that are that are.

NOTE Confidence: 0.83483079

00:07:26.590 --> 00:07:29.176 Well answered in a large cohort,

NOTE Confidence: 0.83483079

00:07:29.180 --> 00:07:31.280 but I think one of the issues

NOTE Confidence: 0.83483079

00:07:31.280 --> 00:07:33.234 that's very important is that when

NOTE Confidence: 0.83483079

00:07:33.234 --> 00:07:34.889 you develop a population cohort,

NOTE Confidence: 0.83483079

00:07:34.890 --> 00:07:36.542 you make a lot of assumptions, right?

NOTE Confidence: 0.83483079

00:07:36.542 --> 00:07:37.118 You say, well,

NOTE Confidence: 0.83483079

00:07:37.118 --> 00:07:38.603 I'm going to be looking at people

NOTE Confidence: 0.83483079

00:07:38.603 --> 00:07:39.760 with cirrhosis, right?

NOTE Confidence: 0.83483079

00:07:39.760 --> 00:07:43.180 And yet, cirrhosis happens over decades.

NOTE Confidence: 0.83483079

00:07:43.180 --> 00:07:44.680 There are many risk factors

NOTE Confidence: 0.83483079

00:07:44.680 --> 00:07:45.880 that lead to cirrhosis,

NOTE Confidence: 0.83483079

00:07:45.880 --> 00:07:47.415 and while cirrhosis is the

NOTE Confidence: 0.83483079

00:07:47.415 --> 00:07:48.643 single most important risk

NOTE Confidence: 0.83483079

00:07:48.643 --> 00:07:50.237 factor leading to liver cancer,

NOTE Confidence: 0.83483079

00:07:50.240 --> 00:07:52.118 I wanted to have a better

NOTE Confidence: 0.83483079

00:07:52.118 --> 00:07:54.344 idea of what happens to people

NOTE Confidence: 0.83483079

00:07:54.344 --> 00:07:56.156 before they develop cirrhosis.

NOTE Confidence: 0.83483079

00:07:56.160 --> 00:07:59.254 And are we missing upstream risk factors?

NOTE Confidence: 0.83483079

00:07:59.260 --> 00:08:01.870 Perhaps by selecting pre selecting

NOTE Confidence: 0.83483079

00:08:01.870 --> 00:08:03.958 this population and because

NOTE Confidence: 0.83483079

00:08:03.958 --> 00:08:06.300 I'm not an epidemiologist,

NOTE Confidence: 0.83483079

00:08:06.300 --> 00:08:09.606 I really rely heavily on Amy's

NOTE Confidence: 0.83483079

00:08:09.606 --> 00:08:11.288 Broadview because you know,

NOTE Confidence: 0.83483079

00:08:11.288 --> 00:08:12.733 the more specialized you become

NOTE Confidence: 0.83483079

00:08:12.733 --> 00:08:13.600 in in medicine.

NOTE Confidence: 0.83483079

00:08:13.600 --> 00:08:15.574 The more blinders you have and and

NOTE Confidence: 0.83483079

00:08:15.574 --> 00:08:17.497 sometimes you need somebody to sort of

NOTE Confidence: 0.83483079

00:08:17.497 --> 00:08:19.460 shock you into saying wait a second,

NOTE Confidence: 0.83483079

00:08:19.460 --> 00:08:20.076 you know,

NOTE Confidence: 0.83483079

00:08:20.076 --> 00:08:21.616 don't look at that population.

NOTE Confidence: 0.83483079

00:08:21.620 --> 00:08:23.570 Look at the whole population and

NOTE Confidence: 0.83483079

00:08:23.570 --> 00:08:25.580 let's think about this rationally.

NOTE Confidence: 0.83483079

00:08:25.580 --> 00:08:27.722 And so in in more recent work

NOTE Confidence: 0.83483079

00:08:27.722 --> 00:08:29.686 we've been looking at the whole

NOTE Confidence: 0.83483079

00:08:29.686 --> 00:08:31.636 VA population to look at upstream

NOTE Confidence: 0.83483079

00:08:31.636 --> 00:08:33.449 risk factors for liver cancer

NOTE Confidence: 0.897395271666667

00:08:34.100 --> 00:08:36.926 and what was important about that was

NOTE Confidence: 0.897395271666667

00:08:36.926 --> 00:08:39.348 the realization that if you only if

NOTE Confidence: 0.897395271666667

00:08:39.348 --> 00:08:41.774 you looked at cirrhosis and put that

NOTE Confidence: 0.897395271666667

00:08:41.774 --> 00:08:44.421 in as the risk factor, it washed out.

NOTE Confidence: 0.897395271666667

00:08:44.421 --> 00:08:46.056 All the factors that occurred

NOTE Confidence: 0.897395271666667

00:08:46.056 --> 00:08:47.250 before cirrhosis occurred,

NOTE Confidence: 0.897395271666667

00:08:47.250 --> 00:08:49.860 yet cirrhosis is hard to reverse

NOTE Confidence: 0.897395271666667

00:08:49.860 --> 00:08:52.010 whereas fatty liver diabetes can

NOTE Confidence: 0.897395271666667

00:08:52.010 --> 00:08:53.690 be addressed more effectively.

NOTE Confidence: 0.897395271666667

00:08:53.690 --> 00:08:55.216 So it was very important to look

NOTE Confidence: 0.897395271666667

00:08:55.216 --> 00:08:56.868 at the whole population and begin

NOTE Confidence: 0.897395271666667

00:08:56.868 --> 00:08:58.443 to look at upstream phenomenon

NOTE Confidence: 0.897395271666667

00:08:58.443 --> 00:08:59.999 like tomorrow was talking about.

NOTE Confidence: 0.871489265217391

00:09:00.750 --> 00:09:03.627 Yeah, I mean, it seems that there's

NOTE Confidence: 0.871489265217391

00:09:03.627 --> 00:09:05.332 a very heterogeneous population

NOTE Confidence: 0.871489265217391

00:09:05.332 --> 00:09:08.104 that kind of all leads to the

NOTE Confidence: 0.871489265217391

00:09:08.104 --> 00:09:10.148 same endpoint of of cirrhosis.

NOTE Confidence: 0.871489265217391

00:09:10.150 --> 00:09:12.166 So tomorrow maybe you can tell

NOTE Confidence: 0.871489265217391

00:09:12.166 --> 00:09:14.390 us a little bit more about.

NOTE Confidence: 0.871489265217391

00:09:14.390 --> 00:09:16.695 The epidemiology of of cirrhosis

NOTE Confidence: 0.871489265217391

00:09:16.695 --> 00:09:18.895 and of liver cancer. How?

NOTE Confidence: 0.871489265217391

00:09:18.895 --> 00:09:20.670 How common is this anyways?

NOTE Confidence: 0.673556138333333

00:09:21.680 --> 00:09:25.880 So cirrhosis is actually quite common.

NOTE Confidence: 0.673556138333333

00:09:25.880 --> 00:09:28.118 And liver disease in the general

NOTE Confidence: 0.673556138333333

00:09:28.118 --> 00:09:30.140 population is also quite common,

NOTE Confidence: 0.673556138333333

00:09:30.140 --> 00:09:32.642 so there's at least thirty million

NOTE Confidence: 0.673556138333333

00:09:32.642 --> 00:09:34.808 Americans living living with liver

NOTE Confidence: 0.673556138333333

00:09:34.808 --> 00:09:36.958 disease with known liver disease.

NOTE Confidence: 0.673556138333333

00:09:36.960 --> 00:09:38.445 And there's probably many more

NOTE Confidence: 0.673556138333333

00:09:38.445 --> 00:09:40.261 millions that are at risk for

NOTE Confidence: 0.673556138333333

00:09:40.261 --> 00:09:41.899 liver disease and don't know it.

NOTE Confidence: 0.673556138333333

00:09:41.900 --> 00:09:45.104 OK, so the major risk factors

NOTE Confidence: 0.673556138333333

00:09:45.104 --> 00:09:48.096 for liver disease are viral,

NOTE Confidence: 0.673556138333333

00:09:48.096 --> 00:09:51.520 hepatitis, hepatitis, B&C, alcohol,

NOTE Confidence: 0.673556138333333

00:09:51.520 --> 00:09:55.492 excessive or unhealthy alcohol use and then.

NOTE Confidence: 0.673556138333333

00:09:55.492 --> 00:09:58.888 What we call fatty liver disease,

NOTE Confidence: 0.673556138333333

00:09:58.890 --> 00:10:01.236 which can be alcohol associated and

NOTE Confidence: 0.673556138333333

00:10:01.236 --> 00:10:03.548 non alcohol associated and and that's

NOTE Confidence: 0.673556138333333

00:10:03.548 --> 00:10:05.588 part of a bigger metabolic syndrome

NOTE Confidence: 0.673556138333333

00:10:05.588 --> 00:10:08.045 that we actually see being sort of

NOTE Confidence: 0.673556138333333

00:10:08.045 --> 00:10:10.158 a canonical risk factor for cancers.

NOTE Confidence: 0.673556138333333

00:10:10.158 --> 00:10:12.606 All kinds of cancers in fact,

NOTE Confidence: 0.673556138333333

00:10:12.610 --> 00:10:15.052 and our epidemiology in in liver

NOTE Confidence: 0.673556138333333

00:10:15.052 --> 00:10:17.140 disease and liver cancer is

NOTE Confidence: 0.673556138333333

00:10:17.140 --> 00:10:19.035 shifting fairly quickly because we

NOTE Confidence: 0.673556138333333

00:10:19.035 --> 00:10:21.768 now have a cure for hepatitis C.

NOTE Confidence: 0.673556138333333

00:10:21.770 --> 00:10:24.426 And so while hepatitis C dominated as a

NOTE Confidence: 0.673556138333333

00:10:24.426 --> 00:10:26.918 risk factor in the US for many decades.

NOTE Confidence: 0.673556138333333

00:10:26.920 --> 00:10:28.480 We're able to cure it now,

NOTE Confidence: 0.673556138333333

00:10:28.480 --> 00:10:31.504 and we're actually seeing more obesity

NOTE Confidence: 0.673556138333333

00:10:31.504 --> 00:10:34.018 and alcohol associated liver disease

NOTE Confidence: 0.673556138333333

00:10:34.018 --> 00:10:36.916 and liver cancer coming to the fore.

NOTE Confidence: 0.673556138333333

00:10:36.920 --> 00:10:41.444 So these are major public health

NOTE Confidence: 0.673556138333333

00:10:41.444 --> 00:10:43.485 issues that that really need to

NOTE Confidence: 0.673556138333333

00:10:43.485 --> 00:10:45.144 be addressed at at a national

NOTE Confidence: 0.673556138333333

00:10:45.144 --> 00:10:47.004 at a federal and state level.

NOTE Confidence: 0.905813465714286

00:10:48.130 --> 00:10:51.396 And so Amy, when you think about you,

NOTE Confidence: 0.905813465714286

00:10:51.396 --> 00:10:55.638 know fatty liver and obesity and alcoholism.

NOTE Confidence: 0.905813465714286

00:10:55.640 --> 00:10:58.824 What proportion would you say of the VA

NOTE Confidence: 0.905813465714286

00:10:58.824 --> 00:11:01.784 cohorts or of the cohorts in general

NOTE Confidence: 0.905813465714286

00:11:01.784 --> 00:11:04.945 that you've looked at are at risk of one

NOTE Confidence: 0.905813465714286

00:11:04.945 --> 00:11:07.375 of these such that you really wanted

NOTE Confidence: 0.905813465714286

00:11:07.375 --> 00:11:10.180 to look at the global population? At

NOTE Confidence: 0.901081652

00:11:10.190 --> 00:11:12.278 least 1/4 I'm depending on and

NOTE Confidence: 0.901081652

00:11:12.278 --> 00:11:14.732 depending on how you define it more

NOTE Confidence: 0.901081652

00:11:14.732 --> 00:11:16.760 than 1/4, possibly even up to half

NOTE Confidence: 0.882790828235294

00:11:17.330 --> 00:11:19.580 and and for all of those

NOTE Confidence: 0.882790828235294

00:11:19.580 --> 00:11:22.031 people is the mechanism and the

NOTE Confidence: 0.882790828235294

00:11:22.031 --> 00:11:24.206 endpoint of cirrhosis the same?

NOTE Confidence: 0.882790828235294

00:11:24.210 --> 00:11:28.095 In other words, both from a molecular

NOTE Confidence: 0.882790828235294

00:11:28.095 --> 00:11:30.736 standpoint that you know there

NOTE Confidence: 0.882790828235294

00:11:30.736 --> 00:11:33.347 is some sort of liver injury that

NOTE Confidence: 0.882790828235294

00:11:33.347 --> 00:11:35.527 essentially then results in cirrhosis.

NOTE Confidence: 0.882790828235294

00:11:35.530 --> 00:11:37.498 As well as the degree and

NOTE Confidence: 0.882790828235294

00:11:37.498 --> 00:11:38.810 the type of cirrhosis,

NOTE Confidence: 0.882790828235294

00:11:38.810 --> 00:11:41.589 are those of the same whether you

NOTE Confidence: 0.882790828235294

00:11:41.589 --> 00:11:44.329 happen to have gotten to that

NOTE Confidence: 0.882790828235294

00:11:44.329 --> 00:11:46.281 endpoint through obesity versus

NOTE Confidence: 0.882790828235294

00:11:46.281 --> 00:11:49.320 a hepatite E versus alcoholism.

NOTE Confidence: 0.855481735625

00:11:49.940 --> 00:11:51.501 I'm going to let tomorrow address that

NOTE Confidence: 0.855481735625

00:11:51.501 --> 00:11:53.068 'cause she spent a lot of time on that

NOTE Confidence: 0.72570625

00:11:53.080 --> 00:11:55.510 and it's a beautiful question.

NOTE Confidence: 0.72570625

00:11:55.510 --> 00:11:57.076 So I think the question is,

NOTE Confidence: 0.72570625

00:11:57.080 --> 00:11:59.012 do you want to make things sound

NOTE Confidence: 0.72570625

00:11:59.012 --> 00:12:01.349 simple or do you want to just

NOTE Confidence: 0.72570625

00:12:01.349 --> 00:12:03.154 embrace the complexity that's there?

NOTE Confidence: 0.72570625

00:12:03.160 --> 00:12:04.558 You know Amy's always telling me.

NOTE Confidence: 0.72570625

00:12:04.560 --> 00:12:06.500 Just embrace complexity, right?

NOTE Confidence: 0.72570625

00:12:06.500 --> 00:12:07.955 And it's true.

NOTE Confidence: 0.72570625

00:12:07.960 --> 00:12:10.618 I think cirrhosis is a final

NOTE Confidence: 0.72570625

00:12:10.618 --> 00:12:13.400 common pathway of all of the

NOTE Confidence: 0.72570625

00:12:13.400 --> 00:12:16.160 Cascades that lead to liver injury

NOTE Confidence: 0.72570625

00:12:16.160 --> 00:12:18.950 and repair and aberrant repair.

NOTE Confidence: 0.72570625

00:12:18.950 --> 00:12:20.828 You know, Yep, you can call

NOTE Confidence: 0.72570625

00:12:20.828 --> 00:12:22.610 cirrhosis the final common pathway,

NOTE Confidence: 0.72570625

00:12:22.610 --> 00:12:25.042 but that tells you very little about all

NOTE Confidence: 0.72570625

00:12:25.042 --> 00:12:27.920 of the Cascades that happen to get there,

NOTE Confidence: 0.72570625

00:12:27.920 --> 00:12:29.896 and I think actually we need to look

NOTE Confidence: 0.72570625

00:12:29.896 --> 00:12:31.995 at liver disease and liver cancer

NOTE Confidence: 0.72570625

00:12:31.995 --> 00:12:33.535 from an ideological standpoint.

NOTE Confidence: 0.72570625

00:12:33.540 --> 00:12:34.812 Meaning what is it?

NOTE Confidence: 0.72570625

00:12:34.812 --> 00:12:36.402 What's the etiology or the

NOTE Confidence: 0.72570625

00:12:36.402 --> 00:12:38.100 'cause that brought you here?

NOTE Confidence: 0.72570625

00:12:38.100 --> 00:12:41.080 Because there are different molecular

NOTE Confidence: 0.72570625

00:12:41.080 --> 00:12:44.098 sort of biologies of those pathways

NOTE Confidence: 0.72570625

00:12:44.098 --> 00:12:46.838 and then the cancers themselves.

NOTE Confidence: 0.72570625

00:12:46.840 --> 00:12:47.330 You know,

NOTE Confidence: 0.72570625

00:12:47.330 --> 00:12:48.555 even though we think about

NOTE Confidence: 0.72570625

00:12:48.555 --> 00:12:49.810 two sort of dominant.

NOTE Confidence: 0.72570625

00:12:49.810 --> 00:12:52.030 Primary liver cancers.

NOTE Confidence: 0.72570625

00:12:52.030 --> 00:12:55.206 The 90% of these liver cancers

NOTE Confidence: 0.72570625

00:12:55.206 --> 00:12:56.902 are are termed hepatocellular

NOTE Confidence: 0.72570625

00:12:56.902 --> 00:12:59.164 cancer and they arise from the

NOTE Confidence: 0.72570625

00:12:59.164 --> 00:13:00.707 liver cell from the hepatocyte.

NOTE Confidence: 0.72570625

00:13:00.707 --> 00:13:02.152 But they look totally different

NOTE Confidence: 0.72570625

00:13:02.152 --> 00:13:03.290 under the microscope.

NOTE Confidence: 0.72570625

00:13:03.290 --> 00:13:04.890 So that begs the question,

NOTE Confidence: 0.72570625

00:13:04.890 --> 00:13:06.654 are we dealing with so much

NOTE Confidence: 0.72570625

00:13:06.654 --> 00:13:08.180 heterogeneity here that we're just

NOTE Confidence: 0.72570625

00:13:08.180 --> 00:13:09.950 lumping these things into one name?

NOTE Confidence: 0.72570625

00:13:09.950 --> 00:13:10.820 Liver cancer?

NOTE Confidence: 0.930582894285714

00:13:12.080 --> 00:13:14.936 Yeah, so you know I I really want

NOTE Confidence: 0.930582894285714

00:13:14.936 --> 00:13:17.737 to dive more into liver cancer.

NOTE Confidence: 0.930582894285714

00:13:17.740 --> 00:13:19.576 The different types of liver cancer.

NOTE Confidence: 0.930582894285714

00:13:19.580 --> 00:13:21.310 Whether the etiologies of these

NOTE Confidence: 0.930582894285714

00:13:21.310 --> 00:13:23.422 cancers actually play a role in

NOTE Confidence: 0.930582894285714

00:13:23.422 --> 00:13:25.360 terms of prognosis and treatment and

NOTE Confidence: 0.930582894285714

00:13:25.360 --> 00:13:27.538 where things are going in the future.

NOTE Confidence: 0.930582894285714

00:13:27.540 --> 00:13:29.364 But right now we have to take a

NOTE Confidence: 0.930582894285714

00:13:29.364 --> 00:13:30.987 short break for a medical minute.

NOTE Confidence: 0.859932672777778

00:13:31.560 --> 00:13:33.415 Funding for Yale Cancer answers

NOTE Confidence: 0.859932672777778

00:13:33.415 --> 00:13:35.270 comes from Smilow Cancer Hospital

NOTE Confidence: 0.859932672777778

00:13:35.333 --> 00:13:37.273 where integrative medicine services

NOTE Confidence: 0.859932672777778

00:13:37.273 --> 00:13:39.213 help patients navigate physical,

NOTE Confidence: 0.859932672777778

00:13:39.220 --> 00:13:41.052 mental and spiritual Wellness

NOTE Confidence: 0.859932672777778

00:13:41.052 --> 00:13:43.342 during and after cancer therapy.

NOTE Confidence: 0.859932672777778

00:13:43.350 --> 00:13:45.120 To learn more,

NOTE Confidence: 0.859932672777778

00:13:45.120 --> 00:13:48.980 visit yalecancercenter.org integrative.

NOTE Confidence: 0.859932672777778

00:13:48.980 --> 00:13:51.872 The American Cancer Society estimates that

NOTE Confidence: 0.859932672777778

00:13:51.872 --> 00:13:54.346 over 200,000 cases of Melanoma will be

NOTE Confidence: 0.859932672777778

00:13:54.346 --> 00:13:56.719 diagnosed in the United States this year,

NOTE Confidence: 0.859932672777778

00:13:56.720 --> 00:13:59.828 with over 1000 patients in Connecticut alone.

NOTE Confidence: 0.859932672777778

00:13:59.830 --> 00:14:02.165 While Melanoma accounts for only

NOTE Confidence: 0.859932672777778

00:14:02.165 --> 00:14:04.712 about 1% of skin cancer cases,

NOTE Confidence: 0.859932672777778

00:14:04.712 --> 00:14:07.750 it causes the most skin cancer deaths,

NOTE Confidence: 0.859932672777778

00:14:07.750 --> 00:14:09.158 but when detected early,

NOTE Confidence: 0.859932672777778

00:14:09.158 --> 00:14:11.840 it is easily treated and highly curable.

NOTE Confidence: 0.859932672777778

00:14:11.840 --> 00:14:14.280 Clinical trials are currently underway

NOTE Confidence: 0.859932672777778

00:14:14.280 --> 00:14:16.232 at federally designated Comprehensive

NOTE Confidence: 0.859932672777778

00:14:16.232 --> 00:14:18.394 cancer centers such as Yale Cancer

NOTE Confidence: 0.859932672777778

00:14:18.394 --> 00:14:20.600 Center and at Smilow Cancer Hospital.

NOTE Confidence: 0.859932672777778

00:14:20.600 --> 00:14:22.810 To test innovative new treatments

NOTE Confidence: 0.859932672777778

00:14:22.810 --> 00:14:23.694 for Melanoma,

NOTE Confidence: 0.859932672777778

00:14:23.700 --> 00:14:25.932 the goal of the specialized programs

NOTE Confidence: 0.859932672777778

00:14:25.932 --> 00:14:27.813 of research excellence and Skin

NOTE Confidence: 0.859932672777778

00:14:27.813 --> 00:14:29.799 Cancer Grant is to better understand

NOTE Confidence: 0.859932672777778

00:14:29.799 --> 00:14:31.559 the biology of skin cancer.

NOTE Confidence: 0.859932672777778

00:14:31.560 --> 00:14:33.215 With a focus on discovering

NOTE Confidence: 0.859932672777778

00:14:33.215 --> 00:14:35.452 targets that will lead to improved

NOTE Confidence: 0.859932672777778

00:14:35.452 --> 00:14:36.997 diagnosis and treatment.

NOTE Confidence: 0.859932672777778

00:14:37.000 --> 00:14:40.060 More information is available at

NOTE Confidence: 0.859932672777778

00:14:40.060 --> 00:14:41.350 yalecancercenter.org you're listening

NOTE Confidence: 0.859932672777778

00:14:41.350 --> 00:14:43.070 to Connecticut Public Radio.

NOTE Confidence: 0.865436773333333

00:14:45.330 --> 00:14:47.430 Welcome back to Yale Cancer answers.

NOTE Confidence: 0.865436773333333

00:14:47.430 --> 00:14:49.173 This is doctor a nice check part

NOTE Confidence: 0.865436773333333

00:14:49.173 --> 00:14:51.088 and I'm joined tonight by my guests,

NOTE Confidence: 0.865436773333333

00:14:51.090 --> 00:14:53.700 doctor, Amy Justice and Tamar Taddei.

NOTE Confidence: 0.865436773333333

00:14:53.700 --> 00:14:55.152 We're learning about liver

NOTE Confidence: 0.865436773333333

00:14:55.152 --> 00:14:56.604 cancer treatments and research,

NOTE Confidence: 0.865436773333333

00:14:56.610 --> 00:14:59.114 and before the break we were talking a

NOTE Confidence: 0.865436773333333

00:14:59.114 --> 00:15:01.823 little bit about cirrhosis and the different

NOTE Confidence: 0.865436773333333

00:15:01.823 --> 00:15:03.929 pathways that people can get cirrhosis.

NOTE Confidence: 0.865436773333333

00:15:03.930 --> 00:15:06.594 But I thought maybe we'd start

NOTE Confidence: 0.865436773333333

00:15:06.594 --> 00:15:08.370 first with thinking about,

NOTE Confidence: 0.865436773333333

00:15:08.370 --> 00:15:10.434 you know, doctor Justice.

NOTE Confidence: 0.865436773333333

00:15:10.434 --> 00:15:13.530 Do all cirrhotics get liver cancer,

NOTE Confidence: 0.865436773333333

00:15:13.530 --> 00:15:15.245 and does all liver cancer

NOTE Confidence: 0.865436773333333

00:15:15.245 --> 00:15:16.274 come from cirrhosis?

NOTE Confidence: 0.868064910909091

00:15:17.410 --> 00:15:20.420 So the answer is that not all

NOTE Confidence: 0.868064910909091

00:15:20.420 --> 00:15:22.350 cirrhotics develop liver cancer,

NOTE Confidence: 0.868064910909091

00:15:22.350 --> 00:15:24.961 but cirrhosis by itself has a pretty

NOTE Confidence: 0.868064910909091

00:15:24.961 --> 00:15:26.630 poor prognosis associated with it.

NOTE Confidence: 0.868064910909091

00:15:26.630 --> 00:15:28.875 So you want to avoid

NOTE Confidence: 0.868064910909091

00:15:28.875 --> 00:15:31.120 cirrhosis if at all possible.

NOTE Confidence: 0.868064910909091

00:15:31.120 --> 00:15:33.490 And it is possible to develop

NOTE Confidence: 0.868064910909091

00:15:33.490 --> 00:15:35.070 liver cancer without cirrhosis.

NOTE Confidence: 0.868064910909091

00:15:35.070 --> 00:15:35.966 Most classically,

NOTE Confidence: 0.868064910909091

00:15:35.966 --> 00:15:39.102 if you have hepatitis B viral infection,

NOTE Confidence: 0.868064910909091

00:15:39.110 --> 00:15:41.679 you can go directly to liver cancer

NOTE Confidence: 0.868064910909091

00:15:41.679 --> 00:15:43.470 without passing through cirrhosis.

NOTE Confidence: 0.868064910909091

00:15:43.470 --> 00:15:45.588 But more typically the vast majority

NOTE Confidence: 0.868064910909091

00:15:45.588 --> 00:15:47.669 of people who develop liver cancer

NOTE Confidence: 0.868064910909091

00:15:47.669 --> 00:15:50.101 or at least have had a cellular liver

NOTE Confidence: 0.868064910909091

00:15:50.165 --> 00:15:52.818 cancer have had cirrhosis previously

NOTE Confidence: 0.793683275

00:15:53.830 --> 00:15:56.494 and and doctor Taty.

NOTE Confidence: 0.793683275

00:15:56.494 --> 00:15:59.158 If you have cirrhosis.

NOTE Confidence: 0.793683275

00:15:59.160 --> 00:16:00.908 How is cirrhosis diagnosed

NOTE Confidence: 0.870694422

00:16:01.040 --> 00:16:03.734 so cirrhosis has to be suspected

NOTE Confidence: 0.870694422

00:16:03.734 --> 00:16:05.530 and that's the problem.

NOTE Confidence: 0.870694422

00:16:05.530 --> 00:16:07.468 So your liver is your largest

NOTE Confidence: 0.870694422

00:16:07.468 --> 00:16:09.640 solid organ and it regenerates,

NOTE Confidence: 0.870694422

00:16:09.640 --> 00:16:10.789 which is marvelous.

NOTE Confidence: 0.870694422

00:16:10.789 --> 00:16:12.704 But it doesn't tell you

NOTE Confidence: 0.870694422

00:16:12.704 --> 00:16:14.698 it's sick until it's very,

NOTE Confidence: 0.870694422

00:16:14.700 --> 00:16:17.316 very sick, and that's a problem.

NOTE Confidence: 0.870694422

00:16:17.320 --> 00:16:20.344 So we would love to detect cirrhosis in

NOTE Confidence: 0.870694422

00:16:20.344 --> 00:16:23.528 that early stage where patients don't feel

NOTE Confidence: 0.870694422

00:16:23.528 --> 00:16:26.939 any different and their counts are still OK,

NOTE Confidence: 0.870694422

00:16:26.940 --> 00:16:29.278 and there's still more or less healthy.

NOTE Confidence: 0.870694422

00:16:29.280 --> 00:16:30.560 But more often than not,

NOTE Confidence: 0.870694422

00:16:30.560 --> 00:16:34.116 we detect cirrhosis when people present with.

NOTE Confidence: 0.870694422

00:16:34.120 --> 00:16:35.700 Signs of early liver failure,

NOTE Confidence: 0.870694422

00:16:35.700 --> 00:16:37.580 like jaundice or bleeding or

NOTE Confidence: 0.870694422

00:16:37.580 --> 00:16:39.084 very low platelet counts.

NOTE Confidence: 0.870694422

00:16:39.090 --> 00:16:40.082 This is already very,

NOTE Confidence: 0.870694422

00:16:40.082 --> 00:16:42.317 very advanced and it very much limits what we

NOTE Confidence: 0.870694422

00:16:42.317 --> 00:16:44.480 can offer that patient in terms of treatment.

NOTE Confidence: 0.870694422

00:16:44.480 --> 00:16:46.888 If they do have a liver cancer.

NOTE Confidence: 0.870694422

00:16:46.890 --> 00:16:49.035 All patients with cirrhosis should

NOTE Confidence: 0.870694422

00:16:49.035 --> 00:16:51.918 have screening for liver cancer in the

NOTE Confidence: 0.870694422

00:16:51.918 --> 00:16:54.242 form of an ultrasound every six months.

NOTE Confidence: 0.870694422

00:16:54.250 --> 00:16:56.602 And it's really important to talk to

NOTE Confidence: 0.870694422

00:16:56.602 --> 00:16:59.170 patients about the fact that your body may

NOTE Confidence: 0.870694422

00:16:59.170 --> 00:17:01.589 have problems even if you don't feel it.

NOTE Confidence: 0.870694422

00:17:01.590 --> 00:17:03.788 And I think this is something that

NOTE Confidence: 0.870694422

00:17:03.790 --> 00:17:06.191 people have a hard time wrapping their

NOTE Confidence: 0.870694422

00:17:06.191 --> 00:17:08.780 head around that you could actually be

NOTE Confidence: 0.870694422

00:17:08.780 --> 00:17:11.024 harboring a chronic illness and really

NOTE Confidence: 0.870694422

00:17:11.089 --> 00:17:13.457 not notice any change in how you feel.

NOTE Confidence: 0.870694422

00:17:13.460 --> 00:17:14.783 Which is why people really do need

NOTE Confidence: 0.870694422

00:17:14.783 --> 00:17:16.320 to go to the doctor regularly.

NOTE Confidence: 0.870694422

00:17:16.320 --> 00:17:18.448 It's it's an important thing to have

NOTE Confidence: 0.870694422

00:17:18.448 --> 00:17:20.703 a physical and to have an established

NOTE Confidence: 0.870694422

00:17:20.703 --> 00:17:22.966 rapport with a primary care doc who

NOTE Confidence: 0.870694422

00:17:22.966 --> 00:17:25.110 knows you and has looked at you over

NOTE Confidence: 0.870694422

00:17:25.110 --> 00:17:27.108 time and can see subtle changes when

NOTE Confidence: 0.870694422

00:17:27.108 --> 00:17:29.338 they come up before you even feel them

NOTE Confidence: 0.836255911111111

00:17:29.620 --> 00:17:30.612 doctor justice talk a

NOTE Confidence: 0.836255911111111

00:17:30.612 --> 00:17:31.852 little bit more about that.

NOTE Confidence: 0.836255911111111

00:17:31.860 --> 00:17:34.188 I mean, we talked about some of the

NOTE Confidence: 0.836255911111111

00:17:34.188 --> 00:17:36.200 things that can lead to cirrhosis,

NOTE Confidence: 0.836255911111111

00:17:36.200 --> 00:17:38.648 and I think some of us might be thinking.

NOTE Confidence: 0.836255911111111

00:17:38.650 --> 00:17:41.053 You know, maybe I am a little bit overweight.

NOTE Confidence: 0.836255911111111

00:17:41.060 --> 00:17:43.650 Maybe I do enjoy a couple of

NOTE Confidence: 0.836255911111111

00:17:43.650 --> 00:17:45.589 drinks every now and then.

NOTE Confidence: 0.836255911111111

00:17:45.590 --> 00:17:47.775 If these are factors that

NOTE Confidence: 0.836255911111111

00:17:47.775 --> 00:17:49.960 potentially can lead to cirrhosis,

NOTE Confidence: 0.836255911111111

00:17:49.960 --> 00:17:52.205 and cirrhosis is silent except

NOTE Confidence: 0.836255911111111

00:17:52.205 --> 00:17:54.920 for when it's pretty late and

NOTE Confidence: 0.836255911111111

00:17:54.920 --> 00:17:56.855 can affect my blood work,

NOTE Confidence: 0.836255911111111

00:17:56.860 --> 00:17:58.324 how is that diagnosed?

NOTE Confidence: 0.836255911111111

00:17:58.324 --> 00:18:01.664 I mean, should should I be going to the

NOTE Confidence: 0.836255911111111

00:18:01.664 --> 00:18:04.042 doctor and getting an ultrasound of my

NOTE Confidence: 0.836255911111111

00:18:04.042 --> 00:18:07.020 liver to see if if I have cirrhosis?

NOTE Confidence: 0.836255911111111

00:18:07.020 --> 00:18:08.934 And would cirrhosis even show up

NOTE Confidence: 0.836255911111111

00:18:08.934 --> 00:18:10.888 on an ultrasound or a CT scan?

NOTE Confidence: 0.911008772727273

00:18:12.000 --> 00:18:13.770 Well again it depends on at

NOTE Confidence: 0.911008772727273

00:18:13.770 --> 00:18:15.340 what stage you're talking about.

NOTE Confidence: 0.911008772727273

00:18:15.340 --> 00:18:18.348 So very early signs of liver injury that

NOTE Confidence: 0.911008772727273

00:18:18.348 --> 00:18:21.319 could lead to cirrhosis and may maybe

NOTE Confidence: 0.911008772727273

00:18:21.319 --> 00:18:24.548 an early harbinger of cirrhosis is the

NOTE Confidence: 0.911008772727273

00:18:24.548 --> 00:18:27.812 ratio of AST aspartate transaminase to

NOTE Confidence: 0.911008772727273

00:18:27.812 --> 00:18:30.139 alanine transaminase and platelets,

NOTE Confidence: 0.911008772727273

00:18:30.140 --> 00:18:31.898 which is also called FIB 4,

NOTE Confidence: 0.911008772727273

00:18:31.900 --> 00:18:36.060 and that's a very routine test of patients.

NOTE Confidence: 0.911008772727273

00:18:36.060 --> 00:18:37.290 Get it very frequently when

NOTE Confidence: 0.911008772727273

00:18:37.290 --> 00:18:38.274 they see their doctors.

NOTE Confidence: 0.911008772727273

00:18:38.280 --> 00:18:40.472 It's part of the the routine panel of

NOTE Confidence: 0.911008772727273

00:18:40.472 --> 00:18:42.449 tests that are sent for blood work.

NOTE Confidence: 0.911008772727273

00:18:42.450 --> 00:18:44.604 And if that test is abnormal

NOTE Confidence: 0.911008772727273

00:18:44.604 --> 00:18:46.670 or not rock solid normal,

NOTE Confidence: 0.911008772727273

00:18:46.670 --> 00:18:48.290 then it would be very reasonable

NOTE Confidence: 0.911008772727273

00:18:48.290 --> 00:18:49.770 to have a conversation around.

NOTE Confidence: 0.911008772727273

00:18:49.770 --> 00:18:50.886 Well, how much do you drink?

NOTE Confidence: 0.911008772727273

00:18:50.890 --> 00:18:52.720 How long have you been drinking?

NOTE Confidence: 0.911008772727273

00:18:52.720 --> 00:18:54.448 OK, let's look at your BMI,

NOTE Confidence: 0.911008772727273

00:18:54.450 --> 00:18:56.256 which is an indication of what your

NOTE Confidence: 0.911008772727273

00:18:56.256 --> 00:18:58.267 risk for fatty liver disease might be.

NOTE Confidence: 0.911008772727273

00:18:58.270 --> 00:18:59.558 What's your family history?

NOTE Confidence: 0.911008772727273

00:18:59.558 --> 00:19:01.490 You know those sorts of questions

NOTE Confidence: 0.911008772727273

00:19:01.545 --> 00:19:02.388 can be explored,

NOTE Confidence: 0.911008772727273

00:19:02.390 --> 00:19:03.944 and if enough of them are positive,

NOTE Confidence: 0.911008772727273

00:19:03.950 --> 00:19:04.672 then yes,

NOTE Confidence: 0.911008772727273

00:19:04.672 --> 00:19:06.838 an ultrasound would make some sense.

NOTE Confidence: 0.911008772727273

00:19:06.840 --> 00:19:08.681 I'll let tomorrow talk a little bit

NOTE Confidence: 0.911008772727273

00:19:08.681 --> 00:19:10.371 more about what would happen when

NOTE Confidence: 0.911008772727273

00:19:10.371 --> 00:19:12.057 I refer the patient over after.

NOTE Confidence: 0.911008772727273

00:19:12.060 --> 00:19:15.216 Ordering the ultrasound to the hepatologist,

NOTE Confidence: 0.911008772727273

00:19:15.220 --> 00:19:16.498 but as the primary care doc.

NOTE Confidence: 0.911008772727273

00:19:16.500 --> 00:19:16.735 Yes,

NOTE Confidence: 0.911008772727273

00:19:16.735 --> 00:19:18.145 I would consider getting an ultrasound

NOTE Confidence: 0.911008772727273

00:19:18.145 --> 00:19:19.447 on someone who I considered to

NOTE Confidence: 0.911008772727273

00:19:19.447 --> 00:19:20.187 be at high risk.

NOTE Confidence: 0.857708461666667

00:19:20.220 --> 00:19:22.257 So tomorrow just to to kind of

NOTE Confidence: 0.857708461666667

00:19:22.257 --> 00:19:24.520 pick up the conversation there.

NOTE Confidence: 0.857708461666667

00:19:24.520 --> 00:19:27.061 One of the things that you both

NOTE Confidence: 0.857708461666667

00:19:27.061 --> 00:19:29.363 mentioned was that cirrhosis in and

NOTE Confidence: 0.857708461666667

00:19:29.363 --> 00:19:32.470 of itself is not is not something

NOTE Confidence: 0.857708461666667

00:19:32.470 --> 00:19:34.996 that you should aspire to have.

NOTE Confidence: 0.857708461666667

00:19:34.996 --> 00:19:37.630 I mean, not only does it increase your

NOTE Confidence: 0.857708461666667

00:19:37.630 --> 00:19:40.580 risk of of Pato cellular carcinoma,

NOTE Confidence: 0.857708461666667

00:19:40.580 --> 00:19:42.560 but in and of itself.

NOTE Confidence: 0.857708461666667

00:19:42.560 --> 00:19:44.919 It it can have problems.

NOTE Confidence: 0.857708461666667

00:19:44.920 --> 00:19:47.086 You mentioned that the liver was

NOTE Confidence: 0.857708461666667

00:19:47.086 --> 00:19:49.400 an organ that can regenerate.

NOTE Confidence: 0.857708461666667

00:19:49.400 --> 00:19:51.240 If you do have cirrhosis.

NOTE Confidence: 0.857708461666667

00:19:51.240 --> 00:19:54.000 If your blood work is abnormal,

NOTE Confidence: 0.857708461666667

00:19:54.000 --> 00:19:56.898 is there a way that you can reverse that?

NOTE Confidence: 0.857708461666667

00:19:56.900 --> 00:19:59.152 Can you lose weight?

NOTE Confidence: 0.857708461666667

00:19:59.152 --> 00:20:00.278 Stop drinking,

NOTE Confidence: 0.857708461666667

00:20:00.280 --> 00:20:02.840 you know you mentioned drugs

NOTE Confidence: 0.857708461666667

00:20:02.840 --> 00:20:05.400 that can cure hepatitis C.

NOTE Confidence: 0.857708461666667

00:20:05.400 --> 00:20:08.920 Now, can that reverse cirrhosis?

NOTE Confidence: 0.857708461666667

00:20:08.920 --> 00:20:11.136 Or is is it the case that once

NOTE Confidence: 0.857708461666667

00:20:11.136 --> 00:20:13.049 you have a cirrhotic liver?

NOTE Confidence: 0.857708461666667

00:20:13.050 --> 00:20:14.340 You have a cirrhotic liver.

NOTE Confidence: 0.8605272375

00:20:14.570 --> 00:20:16.808 It depends on how how significant

NOTE Confidence: 0.8605272375

00:20:16.808 --> 00:20:19.089 the scarring is of the liver.

NOTE Confidence: 0.8605272375

00:20:19.090 --> 00:20:22.010 So very, very early cirrhosis.

NOTE Confidence: 0.8605272375

00:20:22.010 --> 00:20:24.257 We're beginning to think more and more

NOTE Confidence: 0.8605272375

00:20:24.257 --> 00:20:26.854 can be reversed if you take away the

NOTE Confidence: 0.8605272375

00:20:26.854 --> 00:20:28.684 whatever is insulting the liver, right?

NOTE Confidence: 0.8605272375

00:20:28.684 --> 00:20:29.954 So if it's viral hepatitis

NOTE Confidence: 0.8605272375

00:20:29.954 --> 00:20:30.970 you treat the hepatitis.

NOTE Confidence: 0.8605272375

00:20:30.970 --> 00:20:33.250 If it's alcohol, you stop drinking.

NOTE Confidence: 0.8605272375

00:20:33.250 --> 00:20:36.430 There are people who can have

NOTE Confidence: 0.8605272375

00:20:36.430 --> 00:20:39.110 their fibrosis reverse even very,

NOTE Confidence: 0.8605272375

00:20:39.110 --> 00:20:40.097 very early cirrhosis.

NOTE Confidence: 0.8605272375

00:20:40.097 --> 00:20:42.400 But once you have a lot of

NOTE Confidence: 0.8605272375

00:20:42.476 --> 00:20:44.394 scar laid down and a lot of.

NOTE Confidence: 0.8605272375

00:20:44.400 --> 00:20:45.995 Thick trabeculae we call them

NOTE Confidence: 0.8605272375

00:20:45.995 --> 00:20:48.059 sort of thick bands of collagen

NOTE Confidence: 0.8605272375

00:20:48.059 --> 00:20:49.679 deposition in the liver.

NOTE Confidence: 0.8605272375

00:20:49.680 --> 00:20:53.355 The liver really can't repair itself anymore,

NOTE Confidence: 0.8605272375

00:20:53.360 --> 00:20:54.304 and so there is.

NOTE Confidence: 0.8605272375

00:20:54.304 --> 00:20:56.074 There is a point at which you

NOTE Confidence: 0.8605272375

00:20:56.074 --> 00:20:57.529 cannot turn back the clock,

NOTE Confidence: 0.930992792857143

00:20:58.140 --> 00:21:01.486 and so Amy, from an epidemiologic standpoint,

NOTE Confidence: 0.930992792857143

00:21:01.490 --> 00:21:03.182 and we we kind of touched on this a

NOTE Confidence: 0.930992792857143

00:21:03.182 --> 00:21:05.200 little bit before the break, but I just

NOTE Confidence: 0.930992792857143

00:21:05.200 --> 00:21:07.570 want to unpack it a little bit more.

NOTE Confidence: 0.930992792857143

00:21:07.570 --> 00:21:11.114 Is the rate at which you develop cirrhosis.

NOTE Confidence: 0.930992792857143

00:21:11.120 --> 00:21:15.848 If you have had any of these different.

NOTE Confidence: 0.930992792857143

00:21:15.850 --> 00:21:18.106 Sources of injury, whether it's alcohol,

NOTE Confidence: 0.930992792857143

00:21:18.110 --> 00:21:21.840 whether it's a hepatite E, whether it's.

NOTE Confidence: 0.930992792857143

00:21:21.840 --> 00:21:25.745 You know being obese is the rate

NOTE Confidence: 0.930992792857143

00:21:25.745 --> 00:21:27.680 at which you develop cirrhosis,

NOTE Confidence: 0.930992792857143

00:21:27.680 --> 00:21:31.226 different in in those different etiologic

NOTE Confidence: 0.930992792857143

00:21:31.226 --> 00:21:36.230 factors and is the potential to develop

NOTE Confidence: 0.930992792857143

00:21:36.230 --> 00:21:39.626 hepatocellular carcinoma based on those.

NOTE Confidence: 0.930992792857143

00:21:39.626 --> 00:21:42.836 Our priority risk factors different

NOTE Confidence: 0.930992792857143

00:21:42.840 --> 00:21:45.976 in amongst each of those risk factors.

NOTE Confidence: 0.939811940454545

00:21:46.350 --> 00:21:47.935 So obviously drinking a little

NOTE Confidence: 0.939811940454545

00:21:47.935 --> 00:21:49.863 alcohol versus drinking a lot of

NOTE Confidence: 0.939811940454545

00:21:49.863 --> 00:21:51.573 alcohol is going to influence how

NOTE Confidence: 0.939811940454545

00:21:51.573 --> 00:21:53.440 quickly you might develop cirrhosis.

NOTE Confidence: 0.939811940454545

00:21:53.440 --> 00:21:54.832 You know if you,

NOTE Confidence: 0.939811940454545

00:21:54.832 --> 00:21:56.920 if you are drinking extremely heavily

NOTE Confidence: 0.939811940454545

00:21:56.985 --> 00:21:59.015 cirrhosis can occur much earlier

NOTE Confidence: 0.939811940454545

00:21:59.015 --> 00:22:01.045 than if you're drinking fairly

NOTE Confidence: 0.939811940454545

00:22:01.110 --> 00:22:03.427 heavily for a longer period of time.

NOTE Confidence: 0.939811940454545

00:22:03.430 --> 00:22:05.586 We actually have studied this in HIV,

NOTE Confidence: 0.939811940454545

00:22:05.590 --> 00:22:08.290 which is a risk factor also

NOTE Confidence: 0.939811940454545

00:22:08.290 --> 00:22:09.640 for cellular cancer.

NOTE Confidence: 0.939811940454545

00:22:09.640 --> 00:22:12.395 And we were able to show using the VA

NOTE Confidence: 0.939811940454545

00:22:12.395 --> 00:22:15.331 data that people who were able to suppress

NOTE Confidence: 0.939811940454545

00:22:15.331 --> 00:22:18.280 their HIV get their virus undetectable.

NOTE Confidence: 0.939811940454545

00:22:18.280 --> 00:22:20.255 Had a much slower progression

NOTE Confidence: 0.939811940454545

00:22:20.255 --> 00:22:21.835 to hepatocellular cancer than

NOTE Confidence: 0.939811940454545

00:22:21.835 --> 00:22:23.547 the people who were not.

NOTE Confidence: 0.939811940454545

00:22:23.550 --> 00:22:25.734 So I think that's actually a pretty good

NOTE Confidence: 0.939811940454545

00:22:25.734 --> 00:22:27.666 template for a lot of these phenomenon.

NOTE Confidence: 0.939811940454545

00:22:27.670 --> 00:22:30.106 If you can manage these risk factors,

NOTE Confidence: 0.939811940454545

00:22:30.110 --> 00:22:32.326 try to get them as low as possible.

NOTE Confidence: 0.939811940454545

00:22:32.330 --> 00:22:34.076 You can modify how rapidly someone

NOTE Confidence: 0.939811940454545

00:22:34.076 --> 00:22:35.840 is going to develop cirrhosis,

NOTE Confidence: 0.939811940454545

00:22:35.840 --> 00:22:37.200 and that's a very important

NOTE Confidence: 0.939811940454545

00:22:37.200 --> 00:22:38.560 modification in terms of their

NOTE Confidence: 0.939811940454545

00:22:38.606 --> 00:22:40.058 risk for hepatocellular cancer.

NOTE Confidence: 0.924779428

00:22:40.780 --> 00:22:43.430 So do we know just to follow up on that?

NOTE Confidence: 0.924779428

00:22:43.430 --> 00:22:46.190 Amy, do we know, for example,

NOTE Confidence: 0.924779428

00:22:46.190 --> 00:22:49.046 that whether if you have a history

NOTE Confidence: 0.924779428

00:22:49.046 --> 00:22:51.336 of hepatitis C that that's

NOTE Confidence: 0.924779428

00:22:51.336 --> 00:22:53.776 worse in terms of developing?

NOTE Confidence: 0.924779428

00:22:53.780 --> 00:22:56.072 Cirrhosis and subsequent Pato

NOTE Confidence: 0.924779428

00:22:56.072 --> 00:22:57.610 cellular carcinoma. Then,

NOTE Confidence: 0.924779428

00:22:57.610 --> 00:23:01.120 if you were a heavy drinker or you know,

NOTE Confidence: 0.924779428

00:23:01.120 --> 00:23:03.616 being a heavy drinker is a little bit

NOTE Confidence: 0.924779428

00:23:03.616 --> 00:23:05.736 worse than having a BMI of 30 do.

NOTE Confidence: 0.924779428

00:23:05.740 --> 00:23:09.132 Do we have any kind of ideas about the

NOTE Confidence: 0.924779428

00:23:09.132 --> 00:23:11.868 relative risk of each of these risk factors?

NOTE Confidence: 0.841997312

00:23:12.400 --> 00:23:14.920 So hepatitis B is probably the

NOTE Confidence: 0.841997312

00:23:14.920 --> 00:23:16.600 strongest individual risk factor.

NOTE Confidence: 0.841997312

00:23:16.600 --> 00:23:18.405 Thankfully, the prevalence of hepatitis

NOTE Confidence: 0.841997312

00:23:18.405 --> 00:23:21.318 B in the United States is relatively low.

NOTE Confidence: 0.841997312

00:23:21.320 --> 00:23:23.856 When you talk about things like hepatitis C,

NOTE Confidence: 0.841997312

00:23:23.860 --> 00:23:27.700 alcohol, fatty liver HIV,

NOTE Confidence: 0.841997312

00:23:27.700 --> 00:23:29.578 it's not one size fits all.

NOTE Confidence: 0.841997312

00:23:29.580 --> 00:23:32.212 It really depends on how severely you

NOTE Confidence: 0.841997312

00:23:32.212 --> 00:23:34.340 have those problems or conditions,

NOTE Confidence: 0.841997312

00:23:34.340 --> 00:23:36.230 and so it's it's not true to say that

NOTE Confidence: 0.841997312

00:23:36.230 --> 00:23:37.975 one is much worse than the other.

NOTE Confidence: 0.841997312

00:23:37.980 --> 00:23:39.515 It really depends on how

NOTE Confidence: 0.841997312

00:23:39.515 --> 00:23:41.050 out of control they are.

NOTE Confidence: 0.8248152784375

00:23:42.560 --> 00:23:45.912 Yeah, and so Tim are picking up on

NOTE Confidence: 0.8248152784375

00:23:45.912 --> 00:23:49.099 what Amy had kind of lead us to.

NOTE Confidence: 0.8248152784375

00:23:49.100 --> 00:23:52.748 You know if if you're referred to patient

NOTE Confidence: 0.8248152784375

00:23:52.748 --> 00:23:55.580 who's got a suspicion for cirrhosis,

NOTE Confidence: 0.8248152784375

00:23:55.580 --> 00:23:59.493 they come to you and they they've

NOTE Confidence: 0.8248152784375

00:23:59.493 --> 00:24:02.708 had an ultrasound or a CT scan.

NOTE Confidence: 0.8248152784375

00:24:02.710 --> 00:24:05.968 What's the next step in terms of you know,

NOTE Confidence: 0.8248152784375

00:24:05.970 --> 00:24:08.200 checking to see whether they

NOTE Confidence: 0.8248152784375

00:24:08.200 --> 00:24:09.538 have hepatocellular carcinoma?

NOTE Confidence: 0.957048768888889

00:24:10.190 --> 00:24:12.422 So if they come to me with an ultrasound,

NOTE Confidence: 0.957048768888889

00:24:12.430 --> 00:24:14.530 usually that ultrasound is sufficient

NOTE Confidence: 0.957048768888889

00:24:14.530 --> 00:24:17.838 to look for large tumors in the liver

NOTE Confidence: 0.957048768888889

00:24:17.838 --> 00:24:19.888 tumors over 2 centimeters, for example.

NOTE Confidence: 0.957048768888889

00:24:19.888 --> 00:24:22.470 But we know that ultrasound in and of itself

NOTE Confidence: 0.957048768888889

00:24:22.470 --> 00:24:24.684 is a very insensitive screening modality,

NOTE Confidence: 0.957048768888889

00:24:24.690 --> 00:24:27.178 which is why there are studies underway to

NOTE Confidence: 0.957048768888889

00:24:27.178 --> 00:24:30.107 look at more sensitive screening modalities.

NOTE Confidence: 0.957048768888889

00:24:30.110 --> 00:24:31.930 When I'm refer to patient,

NOTE Confidence: 0.957048768888889

00:24:31.930 --> 00:24:34.216 I actually think very carefully about.

NOTE Confidence: 0.957048768888889

00:24:34.220 --> 00:24:35.520 What brought them to me?

NOTE Confidence: 0.957048768888889

00:24:35.520 --> 00:24:38.240 So I think about viral,

NOTE Confidence: 0.957048768888889

00:24:38.240 --> 00:24:40.075 metabolic and inherited disorders of

NOTE Confidence: 0.957048768888889

00:24:40.075 --> 00:24:42.769 the liver that can lead to cirrhosis

NOTE Confidence: 0.957048768888889

00:24:42.769 --> 00:24:44.739 as well as autoimmune disorders.

NOTE Confidence: 0.957048768888889

00:24:44.740 --> 00:24:46.920 So I think you know,

NOTE Confidence: 0.957048768888889

00:24:46.920 --> 00:24:49.080 cirrhosis is stigmatized because people

NOTE Confidence: 0.957048768888889

00:24:49.080 --> 00:24:51.240 associate it entirely with alcohol.

NOTE Confidence: 0.957048768888889

00:24:51.240 --> 00:24:53.532 And actually there are many different

NOTE Confidence: 0.957048768888889

00:24:53.532 --> 00:24:55.939 causes of cirrhosis and even alcohol.

NOTE Confidence: 0.957048768888889

00:24:55.940 --> 00:24:57.308 Some people can drink very heavily

NOTE Confidence: 0.957048768888889

00:24:57.308 --> 00:24:58.600 and never have liver disease.

NOTE Confidence: 0.957048768888889

00:24:58.600 --> 00:25:00.292 And some people can drink fairly

NOTE Confidence: 0.957048768888889

00:25:00.292 --> 00:25:01.890 modestly and get liver disease.

NOTE Confidence: 0.957048768888889

00:25:01.890 --> 00:25:03.126 So I think you know there

NOTE Confidence: 0.957048768888889

00:25:03.126 --> 00:25:04.320 really should be no stigma.

NOTE Confidence: 0.957048768888889

00:25:04.320 --> 00:25:05.247 Associated with cirrhosis.

NOTE Confidence: 0.957048768888889

00:25:05.247 --> 00:25:08.136 So I I look at all of the sort

NOTE Confidence: 0.957048768888889

00:25:08.136 --> 00:25:09.776 of pathways that could have

NOTE Confidence: 0.957048768888889

00:25:09.776 --> 00:25:11.799 gotten them to where they are,

NOTE Confidence: 0.957048768888889

00:25:11.800 --> 00:25:14.040 and then we usually in the liver

NOTE Confidence: 0.957048768888889

00:25:14.040 --> 00:25:16.614 in the liver clinic now have non

NOTE Confidence: 0.957048768888889

00:25:16.614 --> 00:25:18.918 invasive ways of testing the liver

NOTE Confidence: 0.957048768888889

00:25:18.997 --> 00:25:21.489 stiffness which is a marker of of

NOTE Confidence: 0.957048768888889

00:25:21.489 --> 00:25:23.964 how fibrotic the liver is and those

NOTE Confidence: 0.957048768888889

00:25:23.964 --> 00:25:26.070 those ways of measuring are called

NOTE Confidence: 0.957048768888889

00:25:26.141 --> 00:25:27.889 transient elastography where we

NOTE Confidence: 0.957048768888889

00:25:27.889 --> 00:25:30.511 measure the stiffness of the liver

NOTE Confidence: 0.957048768888889

00:25:30.584 --> 00:25:32.901 and can give the patient right there

NOTE Confidence: 0.957048768888889

00:25:32.901 --> 00:25:35.130 in the clinic an estimation of.

NOTE Confidence: 0.957048768888889

00:25:35.130 --> 00:25:37.180 How serious this may be,

NOTE Confidence: 0.957048768888889

00:25:37.180 --> 00:25:39.727 and then from there I try to figure out

NOTE Confidence: 0.957048768888889

00:25:39.727 --> 00:25:42.429 if there's anything I can help remove

NOTE Confidence: 0.957048768888889

00:25:42.429 --> 00:25:44.739 that could be stressing the liver,

NOTE Confidence: 0.957048768888889

00:25:44.740 --> 00:25:46.945 and so there are some treatments for

NOTE Confidence: 0.957048768888889

00:25:46.945 --> 00:25:49.658 some of these different causes obviously,

NOTE Confidence: 0.957048768888889

00:25:49.660 --> 00:25:51.388 and then you know they I make sure

NOTE Confidence: 0.957048768888889

00:25:51.388 --> 00:25:53.439 I go over what we call cirrhosis,

NOTE Confidence: 0.957048768888889

00:25:53.440 --> 00:25:55.540 health maintenance with the patient,

NOTE Confidence: 0.957048768888889

00:25:55.540 --> 00:25:56.842 you know what they can do to

NOTE Confidence: 0.957048768888889

00:25:56.842 --> 00:25:57.400 protect their liver,

NOTE Confidence: 0.957048768888889

00:25:57.400 --> 00:25:59.640 how often they need to be seen,

NOTE Confidence: 0.957048768888889

00:25:59.640 --> 00:26:00.948 how to protect themselves

NOTE Confidence: 0.957048768888889

00:26:00.948 --> 00:26:01.929 against other illnesses,

NOTE Confidence: 0.957048768888889

00:26:01.930 --> 00:26:03.598 because when the liver has cirrhosis,

NOTE Confidence: 0.957048768888889

00:26:03.600 --> 00:26:06.208 it sort of loses a lot of its.

NOTE Confidence: 0.957048768888889

00:26:06.210 --> 00:26:07.998 You know immune surveillance

NOTE Confidence: 0.957048768888889

00:26:07.998 --> 00:26:09.786 ability for certain pathogens.

NOTE Confidence: 0.957048768888889

00:26:09.790 --> 00:26:11.294 You know they need to be up to

NOTE Confidence: 0.957048768888889

00:26:11.294 --> 00:26:12.708 date with their adult vaccines,

NOTE Confidence: 0.957048768888889

00:26:12.710 --> 00:26:13.558 that sort of thing.

NOTE Confidence: 0.957048768888889

00:26:13.558 --> 00:26:15.152 And then you know if if the

NOTE Confidence: 0.957048768888889

00:26:15.152 --> 00:26:16.507 liver disease is very severe.

NOTE Confidence: 0.957048768888889

00:26:16.510 --> 00:26:18.965 We talk about things like

NOTE Confidence: 0.957048768888889

00:26:18.965 --> 00:26:19.947 liver transplantation.

NOTE Confidence: 0.957048768888889

00:26:19.950 --> 00:26:21.140 And certainly if the patient

NOTE Confidence: 0.957048768888889

00:26:21.140 --> 00:26:22.710 comes to me with liver cancer,

NOTE Confidence: 0.957048768888889

00:26:22.710 --> 00:26:24.429 as many of my patients come to me with,

NOTE Confidence: 0.957048768888889

00:26:24.430 --> 00:26:25.070 you know,

NOTE Confidence: 0.957048768888889

00:26:25.070 --> 00:26:26.350 newly diagnosed liver cancer,

NOTE Confidence: 0.957048768888889

00:26:26.350 --> 00:26:28.822 that's a whole other conversation around

NOTE Confidence: 0.957048768888889

00:26:28.822 --> 00:26:31.259 prognosis and treatment and all of that.

NOTE Confidence: 0.938074675

00:26:32.410 --> 00:26:34.450 So, so in our last minute,

NOTE Confidence: 0.938074675

00:26:34.450 --> 00:26:37.098 maybe we can just talk a little bit.

NOTE Confidence: 0.938074675

00:26:37.100 --> 00:26:39.825 About prognosis and treatment of

NOTE Confidence: 0.938074675

00:26:39.825 --> 00:26:42.048 liver cancer tell us more about

NOTE Confidence: 0.938074675

00:26:42.048 --> 00:26:43.740 how that's treated and and what

NOTE Confidence: 0.938074675

00:26:43.799 --> 00:26:45.379 the prognosis really is Amy.

NOTE Confidence: 0.80013

00:26:46.590 --> 00:26:48.510 Well, this is really tomorrow specialty,

NOTE Confidence: 0.80013

00:26:48.510 --> 00:26:50.895 but unfortunately because people present

NOTE Confidence: 0.80013

00:26:50.895 --> 00:26:53.570 so late the prognosis is quite grim.

NOTE Confidence: 0.80013

00:26:53.570 --> 00:26:55.514 With that I will hand it over tomorrow.

NOTE Confidence: 0.883947237333333

00:26:56.220 --> 00:26:57.532 So tomorrow are there.

NOTE Confidence: 0.883947237333333

00:26:57.532 --> 00:26:59.500 Are there new treatments that can

NOTE Confidence: 0.883947237333333

00:26:59.568 --> 00:27:01.328 make that prognosis less grim?

NOTE Confidence: 0.930070698636364

00:27:02.040 --> 00:27:04.408 Yes, so in the last five years we've

NOTE Confidence: 0.930070698636364

00:27:04.408 --> 00:27:07.224 seen a number of new agents come to

NOTE Confidence: 0.930070698636364

00:27:07.224 --> 00:27:09.629 the market for advanced liver cancer.

NOTE Confidence: 0.930070698636364

00:27:09.630 --> 00:27:11.424 We'd still really like to detect

NOTE Confidence: 0.930070698636364

00:27:11.424 --> 00:27:13.599 liver cancer at its earliest stages,

NOTE Confidence: 0.930070698636364

00:27:13.600 --> 00:27:15.966 where it either can be removed by

NOTE Confidence: 0.930070698636364

00:27:15.966 --> 00:27:17.899 surgery or treated ablative Lee.

NOTE Confidence: 0.930070698636364

00:27:17.900 --> 00:27:20.224 And so I think it's important to

NOTE Confidence: 0.930070698636364

00:27:20.224 --> 00:27:21.939 really raise awareness for people

NOTE Confidence: 0.930070698636364

00:27:21.939 --> 00:27:23.895 to get screened if they have

NOTE Confidence: 0.930070698636364

00:27:23.895 --> 00:27:25.519 been diagnosed with cirrhosis.

NOTE Confidence: 0.930070698636364

00:27:25.520 --> 00:27:26.896 Certainly we're always looking

NOTE Confidence: 0.930070698636364

00:27:26.896 --> 00:27:28.616 at screening and risk factors,

NOTE Confidence: 0.930070698636364

00:27:28.620 --> 00:27:30.366 and whether there are other things

NOTE Confidence: 0.930070698636364

00:27:30.366 --> 00:27:31.855 apart from cirrhosis that would

NOTE Confidence: 0.930070698636364

00:27:31.855 --> 00:27:33.230 bring a person to screening.

NOTE Confidence: 0.930070698636364

00:27:33.230 --> 00:27:35.606 Like chronic hepatitis B for example,

NOTE Confidence: 0.930070698636364

00:27:35.610 --> 00:27:38.316 but the treatments are dependent on

NOTE Confidence: 0.930070698636364

00:27:38.316 --> 00:27:41.455 stage and the overall survival in liver

NOTE Confidence: 0.930070698636364

00:27:41.455 --> 00:27:44.309 cancer is about 18% at five years,

NOTE Confidence: 0.930070698636364

00:27:44.309 --> 00:27:45.488 which is dismal.

NOTE Confidence: 0.930070698636364

00:27:45.490 --> 00:27:47.610 But it's getting better because

NOTE Confidence: 0.930070698636364

00:27:47.610 --> 00:27:49.306 we have new agents,

NOTE Confidence: 0.930070698636364

00:27:49.310 --> 00:27:50.912 things that can really change the

NOTE Confidence: 0.930070698636364

00:27:50.912 --> 00:27:52.506 course of a patient's life is,

NOTE Confidence: 0.930070698636364

00:27:52.506 --> 00:27:54.590 you know, surgery to remove the tumor,

NOTE Confidence: 0.930070698636364

00:27:54.590 --> 00:27:56.425 but also liver transplantation in

NOTE Confidence: 0.930070698636364

00:27:56.425 --> 00:27:58.960 patients who have liver disease and are

NOTE Confidence: 0.930070698636364

00:27:58.960 --> 00:28:00.868 perhaps too sick for those surgeries.

NOTE Confidence: 0.930070698636364

00:28:00.870 --> 00:28:01.818 And so you know,

NOTE Confidence: 0.930070698636364

00:28:01.818 --> 00:28:03.536 there are a number of different local

NOTE Confidence: 0.930070698636364

00:28:03.536 --> 00:28:05.258 treatments that can be done for sort

NOTE Confidence: 0.930070698636364

00:28:05.258 --> 00:28:07.240 of what we call intermediate disease.

NOTE Confidence: 0.930070698636364

00:28:07.240 --> 00:28:09.396 But the most important thing is for

NOTE Confidence: 0.930070698636364

00:28:09.396 --> 00:28:11.500 the patients case to be discussed

NOTE Confidence: 0.930070698636364

00:28:11.500 --> 00:28:13.355 in a multidisciplinary tumor board,

NOTE Confidence: 0.930070698636364

00:28:13.360 --> 00:28:15.532 because there are many people who

NOTE Confidence: 0.930070698636364

00:28:15.532 --> 00:28:17.868 manage liver cancer and we all need

NOTE Confidence: 0.930070698636364

00:28:17.868 --> 00:28:19.779 to come to the table to develop

NOTE Confidence: 0.930070698636364

00:28:19.848 --> 00:28:21.815 a a clear plan for the patient.

NOTE Confidence: 0.930070698636364

00:28:21.820 --> 00:28:24.060 And you know, to really think about that,

NOTE Confidence: 0.930070698636364

00:28:24.060 --> 00:28:25.720 patient their unique circumstances

NOTE Confidence: 0.930070698636364

00:28:25.720 --> 00:28:27.795 and what's best for them.

NOTE Confidence: 0.7590263351875

00:28:28.510 --> 00:28:30.675 Doctor Tamar Taddei is associate

NOTE Confidence: 0.7590263351875

00:28:30.675 --> 00:28:32.840 professor of medicine and digestive

NOTE Confidence: 0.7590263351875

00:28:32.910 --> 00:28:35.268 diseases and doctor Amy Justices CNH,

NOTE Confidence: 0.7590263351875

00:28:35.270 --> 00:28:36.960 Long professor of medicine at

NOTE Confidence: 0.7590263351875

00:28:36.960 --> 00:28:38.650 the Yale School of Medicine.

NOTE Confidence: 0.7590263351875

00:28:38.650 --> 00:28:40.586 If you have questions,

NOTE Confidence: 0.7590263351875

00:28:40.586 --> 00:28:42.478 the address is canceranswers@yale.edu

NOTE Confidence: 0.7590263351875

00:28:42.478 --> 00:28:45.106 and past editions of the program

NOTE Confidence: 0.7590263351875

00:28:45.106 --> 00:28:47.399 are available in audio and written

NOTE Confidence: 0.7590263351875

00:28:47.399 --> 00:28:48.319 form at yalecancercenter.org.

NOTE Confidence: 0.7590263351875

00:28:48.319 --> 00:28:50.791 We hope you'll join us next week to

NOTE Confidence: 0.7590263351875

00:28:50.791 --> 00:28:52.675 learn more about the fight against

NOTE Confidence: 0.7590263351875

00:28:52.675 --> 00:28:54.195 cancer here on Connecticut Public

NOTE Confidence: 0.7590263351875

00:28:54.251 --> 00:28:55.696 radio funding for Yale Cancer

NOTE Confidence: 0.7590263351875

00:28:55.696 --> 00:28:57.141 Answers is provided by Smilow

NOTE Confidence: 0.7590263351875

00:28:57.150 --> 00:29:00.000 Cancer Hospital and Astra Zeneca.