WEBVTT

 $00:00:00.000 \longrightarrow 00:00:02.545$ Funding for Yale Cancer Answers

NOTE Confidence: 0.953102473571429

 $00{:}00{:}02.545 \dashrightarrow 00{:}00{:}05.090$ is provided by Smilow Cancer

NOTE Confidence: 0.953102473571429

 $00{:}00{:}05.174 \dashrightarrow 00{:}00{:}07.378$ Hospital and AstraZeneca.

NOTE Confidence: 0.953102473571429

 $00:00:07.380 \longrightarrow 00:00:08.684$ Welcome to Yale Cancer

NOTE Confidence: 0.953102473571429

 $00:00:08.684 \longrightarrow 00:00:09.988$ Answers with your host

NOTE Confidence: 0.953102473571429

00:00:09.990 --> 00:00:12.447 Dr. Anees Chappar. Yale Cancer Answers

NOTE Confidence: 0.953102473571429

 $00:00:12.447 \longrightarrow 00:00:14.476$ features the latest information on

NOTE Confidence: 0.953102473571429

 $00{:}00{:}14.476 \dashrightarrow 00{:}00{:}17.194$ cancer care by welcoming on cologists and

NOTE Confidence: 0.953102473571429

00:00:17.194 --> 00:00:19.768 specialists who are on the forefront of

NOTE Confidence: 0.953102473571429

 $00:00:19.768 \longrightarrow 00:00:22.102$ the battle to fight cancer. This week,

NOTE Confidence: 0.953102473571429

00:00:22.102 --> 00:00:23.932 it's a conversation about thyroid

NOTE Confidence: 0.953102473571429

00:00:23.932 --> 00:00:25.669 cancer with Doctor Grace Lee.

NOTE Confidence: 0.953102473571429

 $00{:}00{:}25.670 \dashrightarrow 00{:}00{:}27.452$ Doctor Lee is an assistant professor

NOTE Confidence: 0.953102473571429

 $00{:}00{:}27.452 \dashrightarrow 00{:}00{:}29.539$ of surgery at the Yale School of

NOTE Confidence: 0.953102473571429

 $00:00:29.539 \longrightarrow 00:00:31.219$ Medicine where Doctor Chagpar is

 $00:00:31.219 \longrightarrow 00:00:33.267$ a professor of surgical oncology.

NOTE Confidence: 0.984242213

 $00:00:34.380 \longrightarrow 00:00:36.186$ Grace, maybe we can start off by

NOTE Confidence: 0.984242213

 $00:00:36.186 \longrightarrow 00:00:38.136$ you telling us a little bit about

NOTE Confidence: 0.984242213

 $00:00:38.136 \longrightarrow 00:00:40.040$ yourself and about what you do.

NOTE Confidence: 0.974203992222222

00:00:40.050 --> 00:00:43.038 As an endocrine surgeon I

NOTE Confidence: 0.974203992222222

00:00:43.038 --> 00:00:45.030 remove the thyroid, parathyroid in

NOTE Confidence: 0.974203992222222

 $00:00:45.120 \longrightarrow 00:00:48.335$ adrenal glands for various different

NOTE Confidence: 0.974203992222222

00:00:48.335 --> 00:00:50.264 disorders including cancer.

NOTE Confidence: 0.974203992222222

 $00{:}00{:}50.270 \dashrightarrow 00{:}00{:}53.372$ My areas of clinical and research

NOTE Confidence: 0.974203992222222

 $00:00:53.372 \longrightarrow 00:00:54.923$ interest include different

NOTE Confidence: 0.974203992222222

 $00{:}00{:}54.923 \mathrel{--}{>} 00{:}00{:}56.597$ minimally invasive techniques

NOTE Confidence: 0.974203992222222

00:00:56.597 --> 00:00:59.292 and new imaging techniques for

NOTE Confidence: 0.974203992222222

 $00:00:59.292 \longrightarrow 00:01:01.730$ treatment of endocrine disorders.

NOTE Confidence: 0.970094495

 $00{:}01{:}01.800 \dashrightarrow 00{:}01{:}03.585$ So let's start off by talking a

NOTE Confidence: 0.970094495

 $00:01:03.585 \longrightarrow 00:01:05.199$ little bit about thyroid cancer.

NOTE Confidence: 0.970094495

 $00:01:05.200 \longrightarrow 00:01:07.260$ After all, it is thyroid

00:01:07.260 --> 00:01:08.496 cancer awareness month.

NOTE Confidence: 0.970094495

 $00:01:08.500 \longrightarrow 00:01:10.988$ So tell us a little bit more about

NOTE Confidence: 0.970094495

00:01:10.988 --> 00:01:12.780 the epidemiology of thyroid cancer.

NOTE Confidence: 0.970094495

00:01:12.780 --> 00:01:14.940 How many people get diagnosed?

NOTE Confidence: 0.970094495

 $00:01:14.940 \longrightarrow 00:01:17.236$ How many people succumb to their disease?

NOTE Confidence: 0.970094495

00:01:17.240 --> 00:01:18.488 How common is this?

NOTE Confidence: 0.769741365

 $00:01:19.360 \longrightarrow 00:01:23.228$ So thyroid cancer is

NOTE Confidence: 0.769741365

00:01:23.230 --> 00:01:26.314 number wise, about the eighth most

NOTE Confidence: 0.769741365

00:01:26.314 --> 00:01:28.990 common cancer in the US, however,

NOTE Confidence: 0.769741365

 $00:01:28.990 \longrightarrow 00:01:32.001$ it only accounts for about 4% of

NOTE Confidence: 0.769741365

00:01:32.001 --> 00:01:34.587 all the new cancers being diagnosed,

NOTE Confidence: 0.769741365

 $00:01:34.590 \longrightarrow 00:01:37.240$ and people who succumb to

NOTE Confidence: 0.769741365

 $00:01:37.240 \longrightarrow 00:01:38.830$ thyroid cancer annually

NOTE Confidence: 0.769741365

 $00:01:38.830 \longrightarrow 00:01:43.035$ we guesstimate at about 2000 so

NOTE Confidence: 0.769741365

 $00:01:43.035 \longrightarrow 00:01:46.485$ it is not as prevalent as

 $00:01:46.485 \longrightarrow 00:01:49.959$ breast cancer or colon cancer,

NOTE Confidence: 0.769741365

 $00{:}01{:}49.960 \dashrightarrow 00{:}01{:}52.804$ but what's interesting is that new

NOTE Confidence: 0.769741365

 $00:01:52.804 \longrightarrow 00:01:55.195$ diagnoses of thyroid cancers have

NOTE Confidence: 0.769741365

 $00:01:55.195 \longrightarrow 00:01:57.709$ tripled in the past three decades.

NOTE Confidence: 0.769741365

 $00:01:57.710 \longrightarrow 00:02:00.804$ It is one of the most rapidly

NOTE Confidence: 0.769741365

 $00:02:00.804 \longrightarrow 00:02:02.660$ increasing cancers in the US

NOTE Confidence: 0.769741365

 $00:02:02.660 \longrightarrow 00:02:04.724$ but we believe that much of

NOTE Confidence: 0.769741365

 $00:02:04.724 \longrightarrow 00:02:06.967$ the increase owes to the fact

NOTE Confidence: 0.769741365

 $00{:}02{:}06.967 \dashrightarrow 00{:}02{:}08.937$ that we're just catching them

NOTE Confidence: 0.769741365

 $00:02:08.937 \longrightarrow 00:02:10.990$ earlier and more frequently,

NOTE Confidence: 0.769741365

 $00:02:10.990 \longrightarrow 00:02:12.766$ as mentioned before,

NOTE Confidence: 0.769741365

 $00:02:12.766 \longrightarrow 00:02:13.950$ we utilized

NOTE Confidence: 0.769741365

 $00:02:13.950 \longrightarrow 00:02:17.800$ various diagnostic imaging to further

NOTE Confidence: 0.769741365

 $00:02:17.800 \longrightarrow 00:02:21.232$ elucidate many conditions and we

NOTE Confidence: 0.769741365

 $00:02:21.232 \longrightarrow 00:02:24.037$ just catch these incidental thyroid

NOTE Confidence: 0.769741365

 $00{:}02{:}24.037 \dashrightarrow 00{:}02{:}27.014$ nodules while we are just looking

00:02:27.014 --> 00:02:29.780 into our body for different diseases.

NOTE Confidence: 0.769741365

 $00:02:29.780 \longrightarrow 00:02:32.280$ So thyroid nodules are just

NOTE Confidence: 0.769741365

 $00:02:32.280 \longrightarrow 00:02:34.965$ being caught earlier and more

NOTE Confidence: 0.769741365

 $00:02:34.965 \longrightarrow 00:02:37.630$ frequently. Some of these imaging

NOTE Confidence: 0.769741365

 $00:02:37.630 \longrightarrow 00:02:40.205$ studies that patients get include

NOTE Confidence: 0.769741365

 $00:02:40.205 \longrightarrow 00:02:43.218$ CT scans after a car accident.

NOTE Confidence: 0.769741365

00:02:43.220 --> 00:02:46.104 Pet CT to survey and other cancers

NOTE Confidence: 0.769741365

 $00:02:46.104 \longrightarrow 00:02:48.948$ such as breast cancer or Melanoma

NOTE Confidence: 0.769741365

 $00:02:48.950 \longrightarrow 00:02:50.518$ or even carotid ultrasound,

NOTE Confidence: 0.769741365

00:02:50.518 --> 00:02:52.086 to examine narrowing of

NOTE Confidence: 0.769741365

 $00:02:52.086 \longrightarrow 00:02:53.430$ the carotid arteries.

NOTE Confidence: 0.98001511

 $00:02:53.800 \longrightarrow 00:02:56.410$ Let's dig a little bit more

NOTE Confidence: 0.98001511

 $00:02:56.410 \longrightarrow 00:02:58.817$ into that because I find that statistic

NOTE Confidence: 0.98001511

00:02:58.817 --> 00:03:03.192 of a tripling in the rate of thyroid

NOTE Confidence: 0.98001511

 $00:03:03.192 \longrightarrow 00:03:06.980$ cancers to be really quite an awesome,

 $00{:}03{:}06.980 \dashrightarrow 00{:}03{:}10.766$ not in the sense of awe some 'awesome' but awe-some

NOTE Confidence: 0.98001511

 $00:03:10.766 \longrightarrow 00:03:14.640$ in the sense of a huge number deserving of awe.

 $00:03:17.004 \longrightarrow 00:03:20.420$ What are the risk factors for thyroid cancer?

NOTE Confidence: 0.98001511

 $00{:}03{:}20.420 \dashrightarrow 00{:}03{:}23.556$ I appreciate that you said that

NOTE Confidence: 0.98001511

 $00:03:23.560 \longrightarrow 00:03:26.820$ we think that a lot of this is just because

NOTE Confidence: 0.98001511

 $00{:}03{:}26.899 \dashrightarrow 00{:}03{:}30.680$ of an increasing rate of detection,

NOTE Confidence: 0.98001511

 $00:03:30.680 \longrightarrow 00:03:33.976$ but help us to understand what are the

NOTE Confidence: 0.98001511

 $00:03:33.976 \longrightarrow 00:03:36.230$ etiologic causes of thyroid cancer?

NOTE Confidence: 0.983482328

 $00:03:36.340 \longrightarrow 00:03:38.160$ That's an excellent question,

NOTE Confidence: 0.983482328

 $00:03:38.160 \longrightarrow 00:03:40.960$ if we can actually get down to

NOTE Confidence: 0.983482328

 $00:03:41.027 \longrightarrow 00:03:43.757$ the bottom of why thyroid cancer happens

NOTE Confidence: 0.983482328

00:03:43.760 --> 00:03:46.088 perhaps we can even prevent it,

NOTE Confidence: 0.983482328

 $00:03:46.090 \longrightarrow 00:03:50.446$ so there have been many studies that have

NOTE Confidence: 0.983482328

 $00:03:50.446 \longrightarrow 00:03:53.757$ been performed to characterize who are the

NOTE Confidence: 0.983482328

 $00:03:53.757 \longrightarrow 00:03:56.927$ folks that are getting thyroid cancer.

NOTE Confidence: 0.983482328

00:03:56.930 --> 00:03:58.964 Why we are catching

 $00:03:58.964 \longrightarrow 00:04:00.730$ and detecting more of them.

NOTE Confidence: 0.983482328

 $00:04:00.730 \longrightarrow 00:04:03.943$ Some of the risk factors for

NOTE Confidence: 0.983482328

 $00:04:03.943 \longrightarrow 00:04:06.520$ thyroid cancer include being a woman

NOTE Confidence: 0.983482328

 $00:04:06.520 \longrightarrow 00:04:10.433$ and of the Asian race and

NOTE Confidence: 0.983482328

 $00:04:10.433 \longrightarrow 00:04:13.760$ age between 25 to 65 years old.

NOTE Confidence: 0.983482328

 $00:04:13.760 \longrightarrow 00:04:15.910$ Although we do see some

NOTE Confidence: 0.983482328

 $00:04:15.910 \longrightarrow 00:04:18.710$ extreme distribution of ages,

NOTE Confidence: 0.983482328

00:04:18.710 --> 00:04:22.210 such as pediatric population versus

NOTE Confidence: 0.983482328

 $00{:}04{:}22.210 \dashrightarrow 00{:}04{:}25.420$ very advanced age population.

NOTE Confidence: 0.986016675

 $00:04:26.390 \longrightarrow 00:04:27.850$ And also having had

NOTE Confidence: 0.984340156521739

 $00:04:27.880 \longrightarrow 00:04:30.160$ prior radiation treatment to the

NOTE Confidence: 0.984340156521739

 $00:04:30.160 \longrightarrow 00:04:34.094$ head and neck area as a child or

NOTE Confidence: 0.984340156521739

 $00{:}04{:}34.094 \dashrightarrow 00{:}04{:}36.186$ having had environmental radiation

NOTE Confidence: 0.984340156521739

 $00{:}04{:}36.186 \dashrightarrow 00{:}04{:}39.450$ exposure such as a nuclear accident.

NOTE Confidence: 0.984340156521739

 $00:04:39.450 \longrightarrow 00:04:41.988$ And having a family member with

 $00:04:41.988 \longrightarrow 00:04:44.218$ history of thyroid disease or

NOTE Confidence: 0.984340156521739

 $00:04:44.218 \longrightarrow 00:04:46.528$ enlarged thyroid or thyroid cancer.

NOTE Confidence: 0.984340156521739

 $00:04:46.530 \longrightarrow 00:04:49.565$ And again, the detection catches

NOTE Confidence: 0.984340156521739

00:04:49.565 --> 00:04:51.386 incidental thyroid nodules.

NOTE Confidence: 0.984340156521739

00:04:51.390 --> 00:04:53.666 Not necessarily thyroid cancer.

NOTE Confidence: 0.984340156521739

00:04:53.666 --> 00:04:57.080 So most of these thyroid nodules

NOTE Confidence: 0.984340156521739

00:04:57.178 --> 00:04:59.848 turn out to be benign nodules.

NOTE Confidence: 0.984340156521739

00:04:59.850 --> 00:05:01.758 But because we're catching

NOTE Confidence: 0.984340156521739

00:05:01.758 --> 00:05:03.666 benign nodules,

NOTE Confidence: 0.984340156521739

 $00:05:03.670 \longrightarrow 00:05:05.338$ we are also seeing the increase

NOTE Confidence: 0.984340156521739

 $00{:}05{:}05{:}05{:}338 \dashrightarrow 00{:}05{:}06.172$ of thyroid cancer.

NOTE Confidence: 0.982275885

 $00:05:06.970 \longrightarrow 00:05:08.650$ When you talk

NOTE Confidence: 0.982275885

 $00:05:08.650 \longrightarrow 00:05:09.770$ about the risk factors,

NOTE Confidence: 0.982275885

 $00{:}05{:}09.770 \dashrightarrow 00{:}05{:}11.768$ a lot of the things you mentioned

NOTE Confidence: 0.982275885

 $00:05:11.768 \longrightarrow 00:05:13.469$ are things that we cannot change.

NOTE Confidence: 0.982275885

00:05:13.470 --> 00:05:16.068 Being a woman, your age,

00:05:16.070 --> 00:05:18.420 your race or ethnicity,

NOTE Confidence: 0.982275885

 $00:05:18.420 \longrightarrow 00:05:21.555$ your family history.

NOTE Confidence: 0.982275885

 $00:05:21.555 \longrightarrow 00:05:25.560$ And the things that are other

NOTE Confidence: 0.982275885

 $00:05:25.560 \longrightarrow 00:05:28.520$ risk factors, exposure to radiation,

NOTE Confidence: 0.982275885

 $00:05:28.520 \longrightarrow 00:05:31.430$ nuclear accidents,

NOTE Confidence: 0.982275885

00:05:31.430 --> 00:05:33.870 thankfully, not many of us, I think,

NOTE Confidence: 0.982275885

 $00:05:33.870 \longrightarrow 00:05:36.450$ can claim to have that,

NOTE Confidence: 0.982275885

 $00:05:36.450 \longrightarrow 00:05:38.162$ and certainly sometimes when

NOTE Confidence: 0.982275885

 $00{:}05{:}38.162 \dashrightarrow 00{:}05{:}40.302$ we're exposed to radiation due

NOTE Confidence: 0.982275885

 $00:05:40.302 \longrightarrow 00:05:42.528$ to CT scans or other things,

NOTE Confidence: 0.982275885

 $00:05:42.530 \longrightarrow 00:05:44.955$ those may be beyond

NOTE Confidence: 0.982275885

 $00:05:44.955 \longrightarrow 00:05:47.380$ our control as well.

NOTE Confidence: 0.982275885

 $00{:}05{:}47.380 \dashrightarrow 00{:}05{:}50.812$ Are there any factors that our audience

NOTE Confidence: 0.982275885

 $00:05:50.812 \longrightarrow 00:05:53.983$ might be interested in that increase

NOTE Confidence: 0.982275885

 $00:05:53.983 \longrightarrow 00:05:56.281$ or decrease your risk of thyroid

 $00:05:56.281 \longrightarrow 00:05:58.309$ cancer that you can control?

NOTE Confidence: 0.982275885

 $00{:}05{:}58.310 \dashrightarrow 00{:}06{:}00.518$ And so I'm thinking here about

NOTE Confidence: 0.982275885

00:06:00.518 --> 00:06:02.940 things like an iodine deficiency

NOTE Confidence: 0.982275885

 $00:06:02.940 \longrightarrow 00:06:06.980$ that we know can have a role to

NOTE Confidence: 0.982275885

 $00:06:06.980 \longrightarrow 00:06:09.230$ play in benign thyroid conditions.

NOTE Confidence: 0.982275885

 $00:06:09.230 \longrightarrow 00:06:12.446$ Any role for that in terms of cancers?

NOTE Confidence: 0.982275885

 $00:06:12.450 \longrightarrow 00:06:16.125$ Any other factors that

NOTE Confidence: 0.982275885

00:06:16.125 --> 00:06:19.640 people could potentially control?

 $00:06:20.060 \longrightarrow 00:06:22.448$ That's very interesting question.

NOTE Confidence: 0.973546919333333

00:06:22.448 --> 00:06:26.722 I do occasionally have a patient

NOTE Confidence: 0.973546919333333

 $00{:}06{:}26.722 \dashrightarrow 00{:}06{:}30.304$ who's interested in modifying their diet

NOTE Confidence: 0.973546919333333

 $00:06:30.304 \longrightarrow 00:06:33.953$ to either combat the existing thyroid

NOTE Confidence: 0.973546919333333

 $00:06:33.953 \longrightarrow 00:06:37.481$ cancer or help their family members

NOTE Confidence: 0.973546919333333

 $00{:}06{:}37.481 \dashrightarrow 00{:}06{:}40.870$ prevent from getting thyroid cancer.

NOTE Confidence: 0.973546919333333

00:06:40.870 --> 00:06:42.970 Iodine deficiency certainly

NOTE Confidence: 0.973546919333333

 $00:06:42.970 \longrightarrow 00:06:47.058$ can be the cause of a goiter,

 $00:06:47.060 \longrightarrow 00:06:48.812$ an enlarged thyroid gland.

NOTE Confidence: 0.973546919333333

 $00:06:48.812 \longrightarrow 00:06:52.160$ But I do not believe there has

NOTE Confidence: 0.973546919333333

 $00:06:52.160 \longrightarrow 00:06:54.676$ been an established linkage

NOTE Confidence: 0.973546919333333

 $00:06:54.676 \longrightarrow 00:06:57.192$ between iodine supplementation and

NOTE Confidence: 0.973546919333333

 $00:06:57.192 \longrightarrow 00:06:59.810$ decreased rate of thyroid cancer.

NOTE Confidence: 0.973546919333333

 $00:06:59.810 \longrightarrow 00:07:03.008$ So at the current time point,

NOTE Confidence: 0.973546919333333

 $00:07:03.010 \longrightarrow 00:07:05.908$ I think detection and appropriate treatment

NOTE Confidence: 0.973546919333333

 $00:07:05.908 \longrightarrow 00:07:09.289$ will be the best course of action

NOTE Confidence: 0.973546919333333

 $00:07:09.290 \longrightarrow 00:07:12.538$ once one is found to have thyroid cancer.

00:07:16.140 --> 00:07:18.270 Getting back to that original statistic,

NOTE Confidence: 0.987855273333333

 $00:07:18.270 \longrightarrow 00:07:20.710$ this tripling of thyroid cancers,

NOTE Confidence: 0.987855273333333

 $00:07:20.710 \longrightarrow 00:07:23.139$ it doesn't seem that there has been

NOTE Confidence: 0.987855273333333

 $00{:}07{:}23.139 \dashrightarrow 00{:}07{:}25.530$ a tripling of nuclear accidents.

NOTE Confidence: 0.987855273333333

 $00{:}07{:}25.530 \dashrightarrow 00{:}07{:}28.686$ If anything, I think our nuclear

NOTE Confidence: 0.987855273333333

 $00{:}07{:}28.686 \dashrightarrow 00{:}07{:}30.790$ exposures have generally declined,

NOTE Confidence: 0.987855273333333

 $00:07:30.790 \longrightarrow 00:07:34.829$ as safety protocols have improved,

 $00:07:34.830 \longrightarrow 00:07:37.427$ one wouldn't think that there

NOTE Confidence: 0.987855273333333

 $00{:}07{:}37.427 \dashrightarrow 00{:}07{:}40.230$ would have been a difference in terms of

NOTE Confidence: 0.987855273333333

 $00:07:40.230 \longrightarrow 00:07:44.270$ age or gender or race over the last

NOTE Confidence: 0.987855273333333

 $00:07:44.270 \longrightarrow 00:07:46.640$ few decades where we've seen this

NOTE Confidence: 0.987855273333333

 $00:07:46.640 \longrightarrow 00:07:49.400$ tripling and so that brings us to

NOTE Confidence: 0.987855273333333

 $00:07:49.400 \longrightarrow 00:07:51.596$ this whole area of of detection,

NOTE Confidence: 0.987855273333333

 $00:07:51.600 \longrightarrow 00:07:54.680$ which you surmise is really the

NOTE Confidence: 0.987855273333333

 $00:07:54.680 \longrightarrow 00:07:58.215$ thing at the driving seat of

NOTE Confidence: 0.987855273333333

 $00:07:58.215 \longrightarrow 00:08:00.865$ this tripling of thyroid cancer.

NOTE Confidence: 0.987855273333333

 $00:08:00.870 \longrightarrow 00:08:02.410$ Has anybody looked at that?

NOTE Confidence: 0.987855273333333

 $00:08:02.410 \longrightarrow 00:08:05.956$ Has the rate at which we are imaging

NOTE Confidence: 0.987855273333333

00:08:05.956 --> 00:08:09.287 people increased at that same proportion?

NOTE Confidence: 0.987855273333333

 $00:08:09.290 \longrightarrow 00:08:12.360$ So in other words we all know that

NOTE Confidence: 0.987855273333333

 $00:08:12.441 \longrightarrow 00:08:15.519$ there's been this burgeoning of technology.

NOTE Confidence: 0.987855273333333

 $00:08:15.520 \longrightarrow 00:08:18.173$ And we seem to do more imaging

NOTE Confidence: 0.987855273333333

00:08:18.173 --> 00:08:20.040 nowadays than we used to.

 $00:08:20.040 \longrightarrow 00:08:22.756$ At least that's how it feels anecdotally.

NOTE Confidence: 0.987855273333333

 $00:08:22.760 \longrightarrow 00:08:24.888$ But has anybody looked at that to see

NOTE Confidence: 0.987855273333333

 $00{:}08{:}24.888 \dashrightarrow 00{:}08{:}26.728$ whether these two trends are parallel?

NOTE Confidence: 0.984154633333333

 $00:08:27.660 \longrightarrow 00:08:29.012$ Yeah, I believe so.

NOTE Confidence: 0.984154633333333

00:08:29.012 --> 00:08:32.480 So in much of thyroid cancer literature,

NOTE Confidence: 0.984154633333333

 $00:08:32.480 \longrightarrow 00:08:37.748$ we always attribute the partial rapid

NOTE Confidence: 0.984154633333333

 $00:08:37.748 \longrightarrow 00:08:42.033$ increase in thyroid cancer being

NOTE Confidence: 0.984154633333333

 $00:08:42.033 \longrightarrow 00:08:45.898$ prevalent to essentially the detection,

NOTE Confidence: 0.984154633333333

 $00:08:45.900 \longrightarrow 00:08:48.980$ in leading to earlier diagnosis,

NOTE Confidence: 0.984154633333333

 $00:08:48.980 \longrightarrow 00:08:52.220$ not necessarily more aggressive treatment,

NOTE Confidence: 0.984154633333333

 $00:08:52.220 \longrightarrow 00:08:56.756$ we have been scaling back down on the

NOTE Confidence: 0.984154633333333

 $00:08:56.760 \longrightarrow 00:09:00.020$ resection of these thyroid cancers.

NOTE Confidence: 0.984154633333333

 $00{:}09{:}00.020 \dashrightarrow 00{:}09{:}03.436$ So not all thyroid cancers lead to surgery,

NOTE Confidence: 0.984154633333333

 $00:09:03.440 \longrightarrow 00:09:07.017$ but it is certainly true that there

NOTE Confidence: 0.984154633333333

00:09:07.017 --> 00:09:10.070 is clear correlation between the

00:09:10.070 --> 00:09:13.230 utilization of imaging studies

NOTE Confidence: 0.984154633333333

 $00{:}09{:}13.230 \dashrightarrow 00{:}09{:}16.390$ in multiple different aspects.

NOTE Confidence: 0.984154633333333

 $00:09:16.390 \longrightarrow 00:09:19.900$ And also perhaps patient awareness

NOTE Confidence: 0.984154633333333

00:09:19.900 --> 00:09:23.467 in clinician exam skills being

NOTE Confidence: 0.984154633333333

00:09:23.467 --> 00:09:27.781 improved lead to detection of the

NOTE Confidence: 0.984154633333333

00:09:27.781 --> 00:09:31.038 thyroid nodules and go down the

NOTE Confidence: 0.984154633333333

 $00:09:31.038 \longrightarrow 00:09:32.818$ pathway of thyroid cancer detection.

NOTE Confidence: 0.980417906923077

00:09:33.130 --> 00:09:34.754 Let's talk a little bit

NOTE Confidence: 0.980417906923077

 $00:09:34.754 \longrightarrow 00:09:35.990$ about that because as you say,

NOTE Confidence: 0.980417906923077

 $00:09:35.990 \longrightarrow 00:09:37.400$ not all thyroid nodules that

NOTE Confidence: 0.980417906923077

00:09:37.400 --> 00:09:38.965 may be picked up incidentally,

NOTE Confidence: 0.980417906923077

 $00:09:38.965 \longrightarrow 00:09:41.575$ either on imaging or on physical

NOTE Confidence: 0.980417906923077

 $00:09:41.575 \longrightarrow 00:09:43.569$ exam are actually a cancer.

NOTE Confidence: 0.980417906923077

00:09:43.570 --> 00:09:46.786 So let's suppose somebody does have

NOTE Confidence: 0.980417906923077

 $00{:}09{:}46.786 \dashrightarrow 00{:}09{:}49.670$ a scan done for whatever reason

NOTE Confidence: 0.980417906923077

 $00{:}09{:}49.670 \dashrightarrow 00{:}09{:}51.548$ and the thyroid nodule is found.

 $00:09:51.550 \longrightarrow 00:09:54.642$ How do we get from incidental thyroid

NOTE Confidence: 0.980417906923077

 $00:09:54.642 \longrightarrow 00:09:58.464$ nodule to making a diagnosis of cancer?

NOTE Confidence: 0.980417906923077

 $00:09:58.470 \longrightarrow 00:09:59.478$ How does that work?

NOTE Confidence: 0.985968668

 $00:09:59.990 \longrightarrow 00:10:02.020$ Yeah, so as we mentioned,

NOTE Confidence: 0.985968668

 $00:10:02.020 \longrightarrow 00:10:05.079$ it is not uncommon that we just

NOTE Confidence: 0.985968668

00:10:05.079 --> 00:10:07.917 stumble upon a thyroid nodule being

NOTE Confidence: 0.985968668

00:10:07.917 --> 00:10:11.819 mentioned on a CT scan that a patient

NOTE Confidence: 0.985968668

00:10:11.819 --> 00:10:15.144 may have gotten for neck pain or

NOTE Confidence: 0.985968668

 $00{:}10{:}15.150 \dashrightarrow 00{:}10{:}20.267$ just to rule out lung nodules etc.

NOTE Confidence: 0.985968668

 $00{:}10{:}20.270 \dashrightarrow 00{:}10{:}23.546$ So after initial detection of the

NOTE Confidence: 0.985968668

00:10:23.546 --> 00:10:27.800 thyroid nodule on a different modality,

NOTE Confidence: 0.985968668

 $00:10:27.800 \longrightarrow 00:10:30.905$ we do a comprehensive neck

NOTE Confidence: 0.985968668

 $00{:}10{:}30.905 \dashrightarrow 00{:}10{:}34.660$ ultrasound as the gold standard exam.

 $00:10:36.570 \longrightarrow 00:10:39.825$ If the patient does not have recent

NOTE Confidence: 0.985968668

00:10:39.825 --> 00:10:42.120 thyroid function that was drawn

NOTE Confidence: 0.985968668

 $00{:}10{:}42.120 \dashrightarrow 00{:}10{:}45.980$ with a routine yearly checkup.

00:10:45.980 --> 00:10:49.670 So after the ultrasound is obtained,

NOTE Confidence: 0.985968668

 $00:10:49.670 \longrightarrow 00:10:52.130$ we can then

NOTE Confidence: 0.985968668

00:10:52.130 --> 00:10:54.770 detect whether the thyroid nodule

NOTE Confidence: 0.985968668

 $00:10:54.770 \longrightarrow 00:10:58.705$ is of the appropriate size and if

NOTE Confidence: 0.985968668

 $00{:}10{:}58.705 \dashrightarrow 00{:}11{:}01.700$ that nodule has specific ultrasound

NOTE Confidence: 0.985968668

 $00:11:01.700 \longrightarrow 00:11:04.756$ characteristics that make us worried

NOTE Confidence: 0.985968668

00:11:04.756 --> 00:11:08.260 about that thyroid nodule being cancerous.

NOTE Confidence: 0.985968668

 $00:11:08.260 \longrightarrow 00:11:10.519$ And if we

NOTE Confidence: 0.985968668

00:11:10.520 --> 00:11:13.785 give that thyroid nodule appropriate

NOTE Confidence: 0.985968668

 $00{:}11{:}13.785 \dashrightarrow 00{:}11{:}18.092$ numbers and if we surmise that the

NOTE Confidence: 0.985968668

 $00:11:18.092 \longrightarrow 00:11:21.476$ nodule is meeting the biopsy criteria,

NOTE Confidence: 0.985968668

 $00:11:21.480 \longrightarrow 00:11:24.455$ then what we usually do is

NOTE Confidence: 0.985968668

 $00{:}11{:}24.455 \dashrightarrow 00{:}11{:}27.252$ a fine needle aspiration biopsy

NOTE Confidence: 0.985968668

 $00:11:27.252 \longrightarrow 00:11:30.787$ under the guidance of ultrasound

NOTE Confidence: 0.985968668

 $00:11:30.790 \longrightarrow 00:11:32.758$ to have our pathologists then take

 $00:11:32.758 \longrightarrow 00:11:35.778$ a look at some of the cell samples

NOTE Confidence: 0.985968668

 $00:11:35.778 \longrightarrow 00:11:37.823$ obtained from their thyroid nodule.

NOTE Confidence: 0.967282023333333

 $00:11:38.280 \longrightarrow 00:11:40.494$ So let's flush that out a little bit.

NOTE Confidence: 0.967282023333333

 $00:11:40.500 \longrightarrow 00:11:41.754$ You mentioned that

NOTE Confidence: 0.967282023333333

 $00:11:41.754 \longrightarrow 00:11:43.844$ there are some size criteria,

NOTE Confidence: 0.967282023333333

00:11:43.850 --> 00:11:45.795 some morphologic criteria that you

NOTE Confidence: 0.967282023333333

00:11:45.795 --> 00:11:48.968 look at in terms of a thyroid nodule

NOTE Confidence: 0.967282023333333

00:11:48.970 --> 00:11:51.690 to kind of gauge your suspicion as to

NOTE Confidence: 0.967282023333333

00:11:51.690 --> 00:11:54.206 whether this could be malignant or not,

NOTE Confidence: 0.967282023333333

 $00:11:54.210 \longrightarrow 00:11:56.010$ tell us a little bit more

NOTE Confidence: 0.967282023333333

 $00{:}11{:}56.010 \dashrightarrow 00{:}11{:}57.510$ about what those criteria are.

NOTE Confidence: 0.9672820233333333

 $00{:}11{:}57.510 \dashrightarrow 00{:}11{:}59.886$ What are the things that make you worried

NOTE Confidence: 0.967282023333333

00:11:59.886 --> 00:12:02.457 that a thyroid nodule could be cancer?

NOTE Confidence: 0.944501742

 $00:12:02.770 \longrightarrow 00:12:06.740$ Yeah, so generally speaking we

NOTE Confidence: 0.944501742

00:12:06.740 --> 00:12:10.710 worry about bigger thyroid nodules.

NOTE Confidence: 0.944501742

 $00:12:10.710 \longrightarrow 00:12:14.930$ That's generally speaking.

00:12:14.940 --> 00:12:16.170 And how big is big grade?

NOTE Confidence: 0.98458436125

 $00{:}12{:}17.810 \dashrightarrow 00{:}12{:}20.615$ We consider anything less than

NOTE Confidence: 0.98458436125

 $00:12:20.615 \longrightarrow 00:12:24.710$ 1 centimeter as kind of

NOTE Confidence: 0.98458436125

 $00:12:24.710 \longrightarrow 00:12:28.072$ microterritory and 1 centimeter or greater

NOTE Confidence: 0.98458436125

 $00:12:28.072 \longrightarrow 00:12:31.380$ at least meets the size criteria.

NOTE Confidence: 0.98458436125

 $00:12:31.380 \longrightarrow 00:12:35.145$ If the thyroid nodule looks worrisome

NOTE Confidence: 0.98458436125

00:12:35.145 --> 00:12:39.265 enough on the ultrasound and some of the

NOTE Confidence: 0.98458436125

 $00{:}12{:}39.265 \dashrightarrow 00{:}12{:}42.488$ worrisome features are the thyroid nodule

NOTE Confidence: 0.98458436125

00:12:42.488 --> 00:12:48.240 being solid rather than mostly fluid,

NOTE Confidence: 0.98458436125

00:12:48.240 --> 00:12:50.920 or mixed solid and fluid,

NOTE Confidence: 0.98458436125

 $00:12:50.920 \longrightarrow 00:12:54.056$ what we call cystic and it has what

NOTE Confidence: 0.98458436125

 $00{:}12{:}54.056 \dashrightarrow 00{:}12{:}56.706$ we call hypoechoic characteristic

NOTE Confidence: 0.98458436125

 $00:12:56.706 \longrightarrow 00:12:59.361$ onto ultrasound microcalcifications

NOTE Confidence: 0.98458436125

 $00:12:59.361 \longrightarrow 00:13:04.455$ irregular borders taller than wide, etc.

NOTE Confidence: 0.98458436125

 $00:13:04.455 \longrightarrow 00:13:08.445$ So we radiologists are very familiar

00:13:08.445 --> 00:13:11.124 with assigning certain

NOTE Confidence: 0.98458436125

 $00:13:11.124 \longrightarrow 00:13:13.974$ points to these thyroid nodules

NOTE Confidence: 0.98458436125

 $00:13:13.974 \longrightarrow 00:13:18.270$ to see if this is thyroid nodule

NOTE Confidence: 0.98458436125

 $00:13:18.270 \longrightarrow 00:13:21.035$ should then proceed to the

NOTE Confidence: 0.98458436125

 $00:13:21.035 \longrightarrow 00:13:23.247$ biopsy stage or

NOTE Confidence: 0.98458436125

00:13:23.250 --> 00:13:25.718 this thyroid nodule looks

NOTE Confidence: 0.98458436125

 $00:13:25.718 \longrightarrow 00:13:28.186$ to be pretty innocuous.

NOTE Confidence: 0.98458436125

 $00:13:28.190 \longrightarrow 00:13:29.910$ Although it is 2 centimeters

NOTE Confidence: 0.98458436125

 $00:13:29.910 \longrightarrow 00:13:31.200$ or three centimeters,

NOTE Confidence: 0.98458436125

 $00:13:31.200 \longrightarrow 00:13:33.540$ and perhaps we can watch it.

NOTE Confidence: 0.985418738333333

 $00{:}13{:}34.390 \dashrightarrow 00{:}13{:}37.038$ And so we're going to pick up on

NOTE Confidence: 0.985418738333333

 $00{:}13{:}37.038 \to 00{:}13{:}38.939$ this conversation about what happens

NOTE Confidence: 0.985418738333333

00:13:38.939 --> 00:13:40.889 once that diagnosis of thyroid

NOTE Confidence: 0.985418738333333

 $00:13:40.889 \longrightarrow 00:13:43.200$ cancer is made right after we take

NOTE Confidence: 0.985418738333333

 $00:13:43.200 \longrightarrow 00:13:45.292$ a short break for a medical minute.

NOTE Confidence: 0.985418738333333

 $00:13:45.292 \longrightarrow 00:13:47.504$ Please stay tuned to learn more about

00:13:47.504 --> 00:13:49.463 the care of patients with thyroid

NOTE Confidence: 0.985418738333333

 $00:13:49.463 \longrightarrow 00:13:51.550$ cancer with my guest doctor Grace Lee.

NOTE Confidence: 0.919608576

00:13:52.210 --> 00:13:54.125 Support for Yale Cancer Answers

NOTE Confidence: 0.919608576

00:13:54.125 --> 00:13:56.040 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.919608576

 $00:13:56.040 \longrightarrow 00:13:58.010$ where an individualized approach to

NOTE Confidence: 0.919608576

00:13:58.010 --> 00:13:59.980 prostate cancer screening is used

NOTE Confidence: 0.919608576

 $00:14:00.044 \longrightarrow 00:14:02.030$ to determine which men are eligible

NOTE Confidence: 0.919608576

 $00:14:02.030 \longrightarrow 00:14:03.990$ and would benefit from screening.

NOTE Confidence: 0.919608576

00:14:03.990 --> 00:14:07.572 To learn more, visit Yale Cancer

NOTE Confidence: 0.919608576

00:14:07.572 --> 00:14:09.960 Center dot org slash screening.

NOTE Confidence: 0.919608576

 $00:14:09.960 \longrightarrow 00:14:11.838$ Genetic testing can be useful for

NOTE Confidence: 0.919608576

 $00:14:11.838 \longrightarrow 00:14:13.673$ people with certain types of cancer

NOTE Confidence: 0.919608576

 $00{:}14{:}13.673 \dashrightarrow 00{:}14{:}15.528$ that seem to run in their families.

NOTE Confidence: 0.919608576

 $00:14:15.530 \longrightarrow 00:14:18.044$ Genetic counseling is a process that

NOTE Confidence: 0.919608576

 $00:14:18.044 \longrightarrow 00:14:20.179$ includes collecting a detailed personal

 $00:14:20.179 \longrightarrow 00:14:22.937$ and family history or risk assessment and

NOTE Confidence: 0.919608576

 $00:14:22.937 \longrightarrow 00:14:25.478$ a discussion of genetic testing options.

NOTE Confidence: 0.919608576

 $00:14:25.480 \longrightarrow 00:14:27.794$ Only about 5 to 10% of all

NOTE Confidence: 0.919608576

 $00:14:27.794 \longrightarrow 00:14:28.820$ cancers are inherited,

NOTE Confidence: 0.919608576

 $00:14:28.820 \longrightarrow 00:14:30.880$ and genetic testing is not

NOTE Confidence: 0.919608576

 $00{:}14{:}30.880 \dashrightarrow 00{:}14{:}32.116$ recommended for everyone.

NOTE Confidence: 0.919608576

 $00:14:32.120 \longrightarrow 00:14:34.442$ Individuals who have a personal and

NOTE Confidence: 0.919608576

 $00:14:34.442 \longrightarrow 00:14:36.510$ or family history that includes

NOTE Confidence: 0.919608576

00:14:36.510 --> 00:14:38.735 cancer at unusually early ages,

NOTE Confidence: 0.919608576

 $00:14:38.740 \longrightarrow 00:14:39.422$ multiple relatives

NOTE Confidence: 0.919608576

 $00:14:39.422 \longrightarrow 00:14:41.809$ on the same side of the family

NOTE Confidence: 0.919608576

 $00:14:41.809 \longrightarrow 00:14:43.210$ with the same cancer,

NOTE Confidence: 0.919608576

 $00:14:43.210 \longrightarrow 00:14:45.040$ more than one diagnosis of

NOTE Confidence: 0.919608576

 $00:14:45.040 \longrightarrow 00:14:46.870$ cancer in the same individual,

NOTE Confidence: 0.919608576

00:14:46.870 --> 00:14:49.677 rare cancers or family history of a

NOTE Confidence: 0.919608576

 $00:14:49.677 \longrightarrow 00:14:51.992$ known altered cancer predisposing gene

 $00:14:51.992 \longrightarrow 00:14:55.106$ could be candidates for genetic testing.

NOTE Confidence: 0.919608576

 $00{:}14{:}55.110 \dashrightarrow 00{:}14{:}57.195$ Resources for genetic counseling and

NOTE Confidence: 0.919608576

00:14:57.195 --> 00:14:59.280 testing are available at federally

NOTE Confidence: 0.919608576

00:14:59.344 --> 00:15:00.577 designated comprehensive cancer

NOTE Confidence: 0.919608576

 $00{:}15{:}00.577 \dashrightarrow 00{:}15{:}03.043$ centers such as Yale Cancer Center

NOTE Confidence: 0.919608576

 $00:15:03.043 \longrightarrow 00:15:04.988$ and Smilow Cancer Hospital.

NOTE Confidence: 0.919608576

 $00:15:04.990 \longrightarrow 00:15:08.050$ More information is available at

NOTE Confidence: 0.919608576

 $00:15:08.050 \longrightarrow 00:15:09.346$ yale cancercenter.org. You're listening

NOTE Confidence: 0.919608576

 $00:15:09.346 \longrightarrow 00:15:11.074$ to Connecticut Public Radio.

NOTE Confidence: 0.902571371666667

 $00:15:11.580 \dashrightarrow 00:15:14.160$ Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.902571371666667

 $00{:}15{:}14.160 \dashrightarrow 00{:}15{:}16.653$ This is doctor Anees Chagpar and I'm

NOTE Confidence: 0.902571371666667

 $00:15:16.653 \longrightarrow 00:15:19.097$ joined tonight by my guest Doctor Grace Lee.

NOTE Confidence: 0.902571371666667

 $00{:}15{:}19.100 \dashrightarrow 00{:}15{:}21.578$ We're talking about the care of

NOTE Confidence: 0.902571371666667

 $00{:}15{:}21.578 \dashrightarrow 00{:}15{:}23.703$ patients with thyroid cancer in

NOTE Confidence: 0.902571371666667

 $00:15:23.703 \longrightarrow 00:15:26.079$ honor of Thyroid Cancer Awareness

00:15:26.079 --> 00:15:27.840 Month and right before the break,

NOTE Confidence: 0.902571371666667

 $00{:}15{:}27.840 \dashrightarrow 00{:}15{:}30.582$ Grace was telling us this amazing

NOTE Confidence: 0.902571371666667

 $00:15:30.582 \longrightarrow 00:15:32.965$ statistic that thyroid cancers have

NOTE Confidence: 0.902571371666667

00:15:32.965 --> 00:15:35.345 actually tripled in recent history

NOTE Confidence: 0.902571371666667

 $00:15:35.350 \longrightarrow 00:15:38.213$ in large part due to an increase

NOTE Confidence: 0.902571371666667

 $00:15:38.213 \longrightarrow 00:15:39.440$ in standard imaging.

NOTE Confidence: 0.902571371666667

 $00:15:39.440 \longrightarrow 00:15:41.860$ So we're stumbling upon these

NOTE Confidence: 0.902571371666667

00:15:41.860 --> 00:15:43.579 incidental thyroid nodules,

NOTE Confidence: 0.902571371666667

00:15:43.579 --> 00:15:46.444 which, if they're large enough,

NOTE Confidence: 0.902571371666667

 $00:15:46.450 \longrightarrow 00:15:49.180$ and if they have certain

NOTE Confidence: 0.902571371666667

 $00{:}15{:}49.180 \dashrightarrow 00{:}15{:}51.364$ morphologic features on ultrasound,

NOTE Confidence: 0.902571371666667

 $00{:}15{:}51.370 \to 00{:}15{:}55.024$ are warranting a biopsy and that biopsy

NOTE Confidence: 0.902571371666667

 $00:15:55.024 \longrightarrow 00:15:58.070$ can sometimes reveal thyroid cancers.

NOTE Confidence: 0.902571371666667 00:15:58.070 --> 00:15:59.910 So Grace, NOTE Confidence: 0.902571371666667

 $00:15:59.910 \longrightarrow 00:16:03.090$ before the break you were mentioning that

NOTE Confidence: 0.902571371666667

 $00:16:03.090 \longrightarrow 00:16:06.835$ thyroid cancer is not a uniform disease.

 $00:16:06.840 \longrightarrow 00:16:08.277$ It's not homogeneous.

NOTE Confidence: 0.902571371666667

 $00{:}16{:}08.277 \dashrightarrow 00{:}16{:}12.110$ Not all thyroid cancers are treated the same.

NOTE Confidence: 0.902571371666667

 $00:16:12.110 \longrightarrow 00:16:14.927$ So tell us a little bit more about that.

NOTE Confidence: 0.902571371666667 00:16:14.930 --> 00:16:16.166 First of all, NOTE Confidence: 0.902571371666667

 $00:16:16.166 \longrightarrow 00:16:19.050$ are there different kinds of thyroid cancer?

NOTE Confidence: 0.902571371666667

 $00:16:19.050 \longrightarrow 00:16:21.310$ And second of all,

NOTE Confidence: 0.902571371666667

00:16:21.310 --> 00:16:24.974 how does that impact what you do next?

NOTE Confidence: 0.902571371666667 00:16:24.974 --> 00:16:25.676 There are

NOTE Confidence: 0.9869247375

 $00:16:25.690 \longrightarrow 00:16:28.714$ about four different major

NOTE Confidence: 0.9869247375

 $00:16:28.714 \longrightarrow 00:16:31.738$ types of thyroid cancers.

NOTE Confidence: 0.9869247375

 $00:16:31.740 \longrightarrow 00:16:35.450$ The good news is that the most

NOTE Confidence: 0.9869247375

 $00{:}16{:}35.450 \dashrightarrow 00{:}16{:}38.298$ common thyroid cancer known as

NOTE Confidence: 0.9869247375

 $00{:}16{:}38.298 \operatorname{--}{>} 00{:}16{:}40.814$ papillary thyroid cancer actually

NOTE Confidence: 0.9869247375

 $00{:}16{:}40.814 \dashrightarrow 00{:}16{:}43.330$ carries the best prognosis.

NOTE Confidence: 0.9869247375

 $00:16:43.330 \longrightarrow 00:16:48.244$ So most people, about 90% of the

 $00:16:48.244 \longrightarrow 00:16:50.776$ patients that I treat come in

NOTE Confidence: 0.9869247375

 $00:16:50.776 \longrightarrow 00:16:53.510$ with papillary thyroid cancer,

NOTE Confidence: 0.9869247375

 $00:16:53.510 \longrightarrow 00:16:58.103$ and the rest, 10% comprise of

NOTE Confidence: 0.9869247375

00:16:58.103 --> 00:17:01.147 other follicular medullary or

NOTE Confidence: 0.9869247375

 $00:17:01.147 \longrightarrow 00:17:03.430$ anaplastic thyroid cancers.

NOTE Confidence: 0.9869247375

 $00:17:03.430 \longrightarrow 00:17:06.188$ And other good news is that seven

NOTE Confidence: 0.9869247375

00:17:06.188 --> 00:17:09.284 out of those ten patients recently

NOTE Confidence: 0.9869247375

 $00:17:09.284 \longrightarrow 00:17:12.674$ diagnosed with thyroid cancer come in

NOTE Confidence: 0.9869247375

 $00:17:12.674 \dashrightarrow 00:17:15.978$ with the cancer that is well behaving,

NOTE Confidence: 0.9869247375

00:17:15.980 --> 00:17:19.220 meaning their cancer has not actually

NOTE Confidence: 0.9869247375

 $00{:}17{:}19.220 \dashrightarrow 00{:}17{:}22.210$ spread outside of the thyroid.

NOTE Confidence: 0.9869247375

 $00:17:22.210 \longrightarrow 00:17:25.066$ So most of the people who get

NOTE Confidence: 0.9869247375

00:17:25.066 --> 00:17:27.719 the diagnosis of thyroid cancer,

NOTE Confidence: 0.9869247375

00:17:27.720 --> 00:17:30.176 although it is quite terrifying,

NOTE Confidence: 0.9869247375

 $00:17:30.176 \longrightarrow 00:17:33.246$ should be reassured that as

NOTE Confidence: 0.9869247375

 $00:17:33.246 \longrightarrow 00:17:35.649$ long as we treat them

 $00:17:35.650 \longrightarrow 00:17:39.358$ the right way they're going to

NOTE Confidence: 0.9869247375

 $00:17:39.358 \longrightarrow 00:17:42.479$ be enjoying excellent prognosis.

NOTE Confidence: 0.983584356

 $00:17:42.870 \longrightarrow 00:17:44.816$ Tell us a little bit

NOTE Confidence: 0.983584356

 $00{:}17{:}44.816 --> 00{:}17{:}47.380$ more about that, I mean

NOTE Confidence: 0.983584356

 $00:17:47.380 \longrightarrow 00:17:49.500$ 90% of patients have papillary

NOTE Confidence: 0.983584356

 $00:17:49.500 \longrightarrow 00:17:52.460$ cancers which have a good prognosis.

NOTE Confidence: 0.983584356

 $00:17:52.460 \longrightarrow 00:17:57.158$ Of those, 70% are well behaved,

NOTE Confidence: 0.983584356

 $00:17:57.160 \longrightarrow 00:17:59.144$ but these patients still

NOTE Confidence: 0.983584356

00:17:59.144 --> 00:18:00.602 require treatment, right?

NOTE Confidence: 0.983584356

00:18:00.602 --> 00:18:03.503 Or is it that thyroid cancer has

NOTE Confidence: 0.983584356

 $00:18:03.503 \longrightarrow 00:18:05.960$ now gone the way of other cancers

NOTE Confidence: 0.983584356

00:18:06.031 --> 00:18:07.986 in terms of watchful waiting?

NOTE Confidence: 0.967676351666667

 $00:18:08.660 \longrightarrow 00:18:13.148$ That's a hotly debated

NOTE Confidence: 0.967676351666667

 $00:18:13.150 \longrightarrow 00:18:17.795$ very individualized choice, but the

NOTE Confidence: 0.967676351666667

 $00:18:17.795 \longrightarrow 00:18:22.440$ mainstay treatment for thyroid cancer,

 $00:18:22.440 \longrightarrow 00:18:25.280$ first and foremost is surgical,

NOTE Confidence: 0.967676351666667

 $00:18:25.280 \longrightarrow 00:18:28.034$ or if the cancer has gone

NOTE Confidence: 0.967676351666667

 $00:18:28.034 \longrightarrow 00:18:29.870$ outside of the thyroid,

NOTE Confidence: 0.967676351666667

 $00:18:29.870 \longrightarrow 00:18:34.414$ then we would treat by removing the entire

NOTE Confidence: 0.967676351666667

 $00:18:34.414 \longrightarrow 00:18:39.195$ thyroid as well as the involved lymph nodes.

NOTE Confidence: 0.967676351666667

00:18:39.200 --> 00:18:42.956 Watchful waiting in the thyroid world,

NOTE Confidence: 0.967676351666667

 $00:18:42.960 \longrightarrow 00:18:45.860$ we call that active surveillance.

NOTE Confidence: 0.967676351666667

00:18:45.860 --> 00:18:51.296 We can sometimes employ that approach,

NOTE Confidence: 0.967676351666667

 $00:18:51.300 \longrightarrow 00:18:53.772$ which is another right answer to

NOTE Confidence: 0.967676351666667

 $00:18:53.772 \longrightarrow 00:18:55.420$ this thyroid cancer management.

NOTE Confidence: 0.967676351666667

 $00{:}18{:}55.420 \dashrightarrow 00{:}18{:}58.666$ We can go active surveillance route

NOTE Confidence: 0.967676351666667

00:18:58.666 --> 00:19:01.560 if the papillary thyroid cancer,

NOTE Confidence: 0.967676351666667

 $00:19:01.560 \longrightarrow 00:19:03.385$ the well behaving thyroid cancer

NOTE Confidence: 0.967676351666667

 $00:19:03.385 \longrightarrow 00:19:06.259$ happens to be less than one centimeter.

NOTE Confidence: 0.967676351666667

 $00:19:06.260 \longrightarrow 00:19:09.684$ So if there is no risk of this

NOTE Confidence: 0.967676351666667

 $00:19:09.690 \longrightarrow 00:19:12.840$ cancer invading into the nerve or

 $00:19:12.840 \longrightarrow 00:19:16.044$ the cancer going outside of the

NOTE Confidence: 0.967676351666667

 $00:19:16.044 \longrightarrow 00:19:19.062$ thyroid is well cushioned by normal

NOTE Confidence: 0.967676351666667

 $00{:}19{:}19.062 \dashrightarrow 00{:}19{:}22.340$ thyroid and the patient is very

NOTE Confidence: 0.967676351666667

 $00:19:22.340 \longrightarrow 00:19:25.962$ motivated and reliable to comply with

NOTE Confidence: 0.967676351666667

00:19:25.962 --> 00:19:28.970 this active surveillance program.

NOTE Confidence: 0.967676351666667

00:19:28.970 --> 00:19:32.060 We can certainly go that route,

NOTE Confidence: 0.967676351666667

 $00:19:32.060 \longrightarrow 00:19:35.546$ but any thyroid cancer that is between

NOTE Confidence: 0.967676351666667

 $00{:}19{:}35.546 \dashrightarrow 00{:}19{:}38.289$ one centimeter to 4 centimeter

00:19:39.214 --> 00:19:42.448 can go either half of the thyroid

NOTE Confidence: 0.967676351666667

 $00:19:42.448 \longrightarrow 00:19:45.674$ that's containing that cancer or the

NOTE Confidence: 0.967676351666667

 $00{:}19{:}45.674 \dashrightarrow 00{:}19{:}48.734$ entire thyroid to be removed.

NOTE Confidence: 0.967676351666667

 $00:19:48.740 \longrightarrow 00:19:51.530$ So there are multiple right answers.

NOTE Confidence: 0.985031559230769

 $00:20:02.500 \longrightarrow 00:20:03.851$ Let me just pick up

NOTE Confidence: 0.985031559230769

 $00:20:03.851 \longrightarrow 00:20:05.298$ on a couple of things there.

NOTE Confidence: 0.985031559230769

 $00:20:05.300 \longrightarrow 00:20:07.532$ So the first thing is in

NOTE Confidence: 0.985031559230769

00:20:07.532 --> 00:20:09.020 terms of active surveillance.

00:20:09.020 --> 00:20:11.582 This is for people who have papillary

NOTE Confidence: 0.985031559230769

 $00{:}20{:}11.582 \dashrightarrow 00{:}20{:}13.574$ cancers that are well differentiated

NOTE Confidence: 0.985031559230769

 $00{:}20{:}13.574 \dashrightarrow 00{:}20{:}16.052$ that are less than one centimeter.

 $00:20:20.220 \longrightarrow 00:20:22.500$ What does active surveillance

NOTE Confidence: 0.985031559230769

 $00:20:22.500 \longrightarrow 00:20:23.640$ actually entail?

NOTE Confidence: 0.985031559230769

 $00:20:23.640 \longrightarrow 00:20:26.174$ I mean, is this an ultrasound

NOTE Confidence: 0.985031559230769

 $00:20:26.174 \longrightarrow 00:20:29.086$ every six months to make sure that

NOTE Confidence: 0.985031559230769

00:20:29.086 --> 00:20:31.266 this thyroid nodule isn't growing?

NOTE Confidence: 0.985031559230769

00:20:31.270 --> 00:20:33.034 Is it blood work?

NOTE Confidence: 0.985031559230769

 $00:20:33.034 \longrightarrow 00:20:35.239$ Is it CT scans?

NOTE Confidence: 0.985031559230769

 $00:20:35.240 \longrightarrow 00:20:37.110$ What exactly does that entail?

NOTE Confidence: 0.989687575714286

00:20:37.840 --> 00:20:40.480 Great question. Yes,

NOTE Confidence: 0.989687575714286

 $00:20:40.480 \longrightarrow 00:20:48.700$ it would mean actively monitoring the size

NOTE Confidence: 0.989687575714286

 $00:20:48.700 \longrightarrow 00:20:52.732$ or the growth changes of that biopsy

NOTE Confidence: 0.989687575714286

00:20:52.732 --> 00:20:55.910 known micro papillary thyroid cancer

NOTE Confidence: 0.989687575714286

 $00{:}20{:}55.910 \dashrightarrow 00{:}20{:}59.220$ and is some clinician dependent,

 $00:20:59.220 \longrightarrow 00:21:02.376$ but usually about every six months

NOTE Confidence: 0.989687575714286

 $00:21:02.376 \longrightarrow 00:21:06.382$ to a year ultrasound exam and the

NOTE Confidence: 0.989687575714286

 $00:21:06.382 \longrightarrow 00:21:10.648$ thyroid cancer is not something that

NOTE Confidence: 0.989687575714286

00:21:10.648 --> 00:21:13.830 we follow on laboratory values.

NOTE Confidence: 0.989687575714286

 $00:21:13.830 \longrightarrow 00:21:15.870$ So it's heavily

NOTE Confidence: 0.989687575714286

 $00:21:15.870 \longrightarrow 00:21:19.698$ image independent and sometimes even a

NOTE Confidence: 0.989687575714286

00:21:19.698 --> 00:21:24.560 neck CT is utilized to pick up on lymph

NOTE Confidence: 0.989687575714286

 $00{:}21{:}24.560 \dashrightarrow 00{:}21{:}29.680$ node spread a little bit more closely.

NOTE Confidence: 0.989687575714286

 $00:21:29.680 \longrightarrow 00:21:33.088$ It is what's called a wolf in sheep

NOTE Confidence: 0.989687575714286

 $00:21:33.088 \longrightarrow 00:21:36.708$ clothing by one of my mentors because

NOTE Confidence: 0.989687575714286

00:21:36.708 --> 00:21:40.206 even micro papillary cancer can spread to

NOTE Confidence: 0.989687575714286

 $00:21:40.206 \longrightarrow 00:21:43.370$ nearby lymph nodes in the thyroid cancer world,

NOTE Confidence: 0.989687575714286

 $00{:}21{:}43.370 \dashrightarrow 00{:}21{:}46.856$ even the lymphatic spread does not

NOTE Confidence: 0.989687575714286

 $00:21:46.856 \longrightarrow 00:21:49.180$ necessarily mean worse prognosis.

NOTE Confidence: 0.989687575714286

 $00:21:49.180 \longrightarrow 00:21:51.990$ However, it is more advanced

 $00:21:51.990 \longrightarrow 00:21:54.346$ or at least local,

NOTE Confidence: 0.989687575714286

00:21:54.346 --> 00:21:56.344 regionally advanced disease.

NOTE Confidence: 0.989687575714286

 $00:21:56.344 \longrightarrow 00:21:59.674$ So we treat those folks

NOTE Confidence: 0.989687575714286

 $00:21:59.680 \longrightarrow 00:22:02.865$ almost as equally as someone who has

NOTE Confidence: 0.989687575714286

 $00:22:02.865 \longrightarrow 00:22:06.246$ bigger cancer and the folks that I'm

NOTE Confidence: 0.989687575714286

 $00{:}22{:}06.246 \dashrightarrow 00{:}22{:}09.132$ talking about are patients under active

NOTE Confidence: 0.989687575714286

00:22:09.217 --> 00:22:13.970 surveillance and by watching them carefully,

NOTE Confidence: 0.989687575714286

 $00:22:13.970 \longrightarrow 00:22:15.530$ it may earn them,

NOTE Confidence: 0.989687575714286

 $00{:}22{:}15.530 \dashrightarrow 00{:}22{:}18.894$ or it may buy them an extra five years

NOTE Confidence: 0.989687575714286

00:22:18.894 --> 00:22:22.654 extra 10 years with their own thyroid.

NOTE Confidence: 0.98968757571428600:22:22.654 --> 00:22:26.200 And surgical

NOTE Confidence: 0.989687575714286

 $00:22:26.307 \longrightarrow 00:22:29.727$ treatment always is an option.

NOTE Confidence: 0.989687575714286

00:22:29.730 --> 00:22:31.005 But generally speaking,

NOTE Confidence: 0.989687575714286

 $00:22:31.005 \longrightarrow 00:22:33.980$ if the size of that micro cancer

NOTE Confidence: 0.989687575714286

 $00:22:34.057 \longrightarrow 00:22:36.407$ changes by about 3 millimeters,

NOTE Confidence: 0.989687575714286

 $00:22:36.410 \longrightarrow 00:22:38.246$ we say, well, OK.

00:22:38.246 --> 00:22:41.000 I think it's time to intervene,

NOTE Confidence: 0.989687575714286

 $00:22:41.000 \longrightarrow 00:22:43.688$ and most of the studies on

NOTE Confidence: 0.989687575714286

00:22:43.688 --> 00:22:45.993 active surveillance comes out of

NOTE Confidence: 0.989687575714286

00:22:45.993 --> 00:22:48.537 Japan and their long term result

NOTE Confidence: 0.989687575714286

 $00{:}22{:}48.537 \dashrightarrow 00{:}22{:}50.700$ is actually quite excellent.

00:22:51.270 --> 00:22:52.594 So you really are watching

NOTE Confidence: 0.9864802725

 $00:22:52.594 \longrightarrow 00:22:53.918$ these people very closely.

NOTE Confidence: 0.9864802725

00:22:53.920 --> 00:22:56.608 I mean, even 3 millimeters doesn't sound

NOTE Confidence: 0.9864802725

00:22:56.608 --> 00:22:59.070 like a whole lot to the people

NOTE Confidence: 0.9864802725

 $00:22:59.070 \longrightarrow 00:23:00.990$ who are listening to our show today,

NOTE Confidence: 0.9864802725

 $00:23:00.990 \longrightarrow 00:23:03.770$ I'm sure, but really

NOTE Confidence: 0.9864802725

 $00:23:03.770 \longrightarrow 00:23:07.910$ that is going to trigger you moving to

NOTE Confidence: 0.9864802725

 $00{:}23{:}07.910 \dashrightarrow 00{:}23{:}10.110$ a more aggressive surgical approach

NOTE Confidence: 0.9864802725

 $00:23:10.110 \longrightarrow 00:23:12.749$ as opposed to active surveillance.

NOTE Confidence: 0.9864802725

 $00:23:12.750 \longrightarrow 00:23:14.508$ My next question has to do

NOTE Confidence: 0.9864802725

 $00:23:14.508 \longrightarrow 00:23:15.680$ with that surgical approach.

00:23:15.680 --> 00:23:18.151 You mentioned that for people who have

NOTE Confidence: 0.9864802725

 $00:23:18.151 \longrightarrow 00:23:21.008$ larger tumors, so larger than one centimeter,

NOTE Confidence: 0.9864802725

00:23:21.010 --> 00:23:24.804 you could do a partial thyroidectomy,

NOTE Confidence: 0.9864802725

 $00:23:24.810 \longrightarrow 00:23:27.113$ take out just that part of the

NOTE Confidence: 0.9864802725

 $00:23:27.113 \longrightarrow 00:23:28.950$ thyroid that had the cancer.

NOTE Confidence: 0.9864802725

 $00:23:28.950 \longrightarrow 00:23:31.379$ Or you could take out the whole

NOTE Confidence: 0.9864802725

00:23:31.379 --> 00:23:33.998 thyroid and you said this

NOTE Confidence: 0.9864802725

 $00:23:33.998 \longrightarrow 00:23:36.711$ is really a decision that's made by

NOTE Confidence: 0.9864802725

00:23:36.711 --> 00:23:38.985 the team and is personalized

NOTE Confidence: 0.9864802725

 $00:23:38.990 \longrightarrow 00:23:43.990$ what factors go into deciding what kind

NOTE Confidence: 0.9864802725

00:23:43.990 --> 00:23:46.510 of an operation a patient should have?

 $00:23:47.080 \longrightarrow 00:23:49.075$ One would think that it's a big

NOTE Confidence: 0.9864802725

 $00:23:49.075 \longrightarrow 00:23:51.308$ difference between having only part of your

NOTE Confidence: 0.9864802725

 $00{:}23{:}51.310 \dashrightarrow 00{:}23{:}53.185$ thyroid removed and having your

NOTE Confidence: 0.9864802725

 $00:23:53.185 \longrightarrow 00:23:54.310$ whole thyroid removed?

NOTE Confidence: 0.986218198235294

 $00:23:54.880 \longrightarrow 00:23:57.528$ Yes, this is a discussion

00:23:57.528 --> 00:24:00.837 that I get to have multiple times a week,

NOTE Confidence: 0.986218198235294

 $00:24:00.840 \longrightarrow 00:24:04.592$ so I usually talk about the benefits first

NOTE Confidence: 0.986218198235294

00:24:04.592 --> 00:24:08.639 of only removing half of the thyroid and

NOTE Confidence: 0.986218198235294

 $00:24:08.640 \longrightarrow 00:24:12.805$ this is a change that the American

NOTE Confidence: 0.986218198235294

 $00:24:12.805 \longrightarrow 00:24:14.590$ Thyroid Association instituted

NOTE Confidence: 0.986218198235294

 $00:24:14.687 \longrightarrow 00:24:18.050$ in 2015 because there is such a

NOTE Confidence: 0.986218198235294

 $00:24:18.050 \longrightarrow 00:24:20.535$ increase in the prevalence of

NOTE Confidence: 0.986218198235294

 $00{:}24{:}20.535 \dashrightarrow 00{:}24{:}24.302$ thyroid cancers, so perhaps a less

NOTE Confidence: 0.986218198235294

 $00{:}24{:}24.302 \dashrightarrow 00{:}24{:}26.990$ aggressive approach is warranted,

NOTE Confidence: 0.986218198235294

00:24:26.990 --> 00:24:29.814 as I think what the experts were thinking,

NOTE Confidence: 0.986218198235294

 $00{:}24{:}29.820 \dashrightarrow 00{:}24{:}32.508$ so the benefit of only removing half

NOTE Confidence: 0.986218198235294

 $00:24:32.508 \longrightarrow 00:24:34.890$ of the thyroid that contains cancer

NOTE Confidence: 0.986218198235294

 $00{:}24{:}34.890 \dashrightarrow 00{:}24{:}38.055$ is that there is a pretty good chance

NOTE Confidence: 0.986218198235294

 $00:24:38.055 \longrightarrow 00:24:40.449$ that the remaining thyroid may be

NOTE Confidence: 0.986218198235294

00:24:40.449 --> 00:24:44.615 able to pick up the missing half and

00:24:44.615 --> 00:24:48.590 still give you enough thyroid hormone.

 $00:24:50.030 \longrightarrow 00:24:53.390$ So if you lose the entire thyroid,

NOTE Confidence: 0.986218198235294

 $00:24:53.390 \longrightarrow 00:24:56.974$ you will have to take a thyroid

NOTE Confidence: 0.986218198235294

 $00:24:56.974 \longrightarrow 00:24:59.350$ hormone supplementation pill everyday.

NOTE Confidence: 0.986218198235294

00:24:59.350 --> 00:25:03.220 But if you have at least half of a thyroid,

NOTE Confidence: 0.986218198235294

 $00:25:03.220 \longrightarrow 00:25:04.273$ that is normal

NOTE Confidence: 0.986218198235294

00:25:04.273 --> 00:25:05.326 remaining in you,

NOTE Confidence: 0.986218198235294

 $00:25:05.330 \longrightarrow 00:25:07.906$ there is a pretty good chance that you

NOTE Confidence: 0.986218198235294

00:25:07.906 --> 00:25:11.209 may be able to avoid the medication aspect,

NOTE Confidence: 0.986218198235294

 $00:25:11.210 \longrightarrow 00:25:13.990$ so that's one plus.

NOTE Confidence: 0.986218198235294

 $00:25:13.990 \longrightarrow 00:25:18.160$ And although the thyroid surgery is

NOTE Confidence: 0.986218198235294

00:25:18.160 --> 00:25:22.240 very safe when done in expert hands and

NOTE Confidence: 0.986218198235294

 $00:25:22.240 \longrightarrow 00:25:26.780$ known to have very low complication rate it

NOTE Confidence: 0.986218198235294

 $00:25:26.780 \longrightarrow 00:25:29.953$ will double the amount of thyroid

NOTE Confidence: 0.986218198235294

 $00{:}25{:}29.953 \dashrightarrow 00{:}25{:}32.868$ resection and obviously put you at

NOTE Confidence: 0.986218198235294

 $00:25:32.868 \longrightarrow 00:25:36.740$ double the risk of complications,

 $00:25:36.740 \longrightarrow 00:25:39.680$ so those are some of the things

NOTE Confidence: 0.986218198235294

 $00:25:39.680 \longrightarrow 00:25:40.940$ that we discuss.

NOTE Confidence: 0.986218198235294

 $00:25:40.940 \longrightarrow 00:25:45.115$ Obviously if one thyroid nodule

NOTE Confidence: 0.986218198235294 00:25:45.115 --> 00:25:47.620 was biopsied

NOTE Confidence: 0.986218198235294

 $00:25:47.620 \longrightarrow 00:25:51.130$ happens to have some genetic mutations,

NOTE Confidence: 0.986218198235294

00:25:51.130 --> 00:25:55.848 such as a brief V600 E mutation.

NOTE Confidence: 0.986218198235294

 $00:25:55.850 \longrightarrow 00:25:58.725$ Or if the patient has

NOTE Confidence: 0.986218198235294

00:25:58.725 --> 00:25:59.875 Hashimoto's thyroiditis,

NOTE Confidence: 0.986218198235294

 $00:25:59.880 \longrightarrow 00:26:02.880$ has a family history of thyroid cancer,

NOTE Confidence: 0.986218198235294

 $00{:}26{:}02.880 \dashrightarrow 00{:}26{:}05.805$ or has another sizable nodule

NOTE Confidence: 0.986218198235294

 $00:26:05.805 \longrightarrow 00:26:08.145$ on the other side,

NOTE Confidence: 0.986218198235294

 $00:26:08.150 \longrightarrow 00:26:10.940$ then maybe it's better for us

NOTE Confidence: 0.986218198235294

 $00:26:10.940 \longrightarrow 00:26:13.600$ to do an up front

NOTE Confidence: 0.986218198235294

 $00:26:13.600 \longrightarrow 00:26:16.750$ total removal of the thyroid so

NOTE Confidence: 0.986218198235294

 $00:26:16.750 \longrightarrow 00:26:19.732$ we can catch perhaps multiple

NOTE Confidence: 0.986218198235294

 $00:26:19.732 \longrightarrow 00:26:22.308$ spots of thyroid cancer,

 $00:26:22.310 \longrightarrow 00:26:25.448$ which is a pretty well known

NOTE Confidence: 0.986218198235294

 $00:26:25.448 \longrightarrow 00:26:28.460$ phenomenon in thyroid cancer patients.

NOTE Confidence: 0.986218198235294

 $00:26:28.460 \longrightarrow 00:26:31.449$ So those are some of the considerations

NOTE Confidence: 0.986218198235294

 $00:26:31.449 \longrightarrow 00:26:33.883$ when we discuss should we take

NOTE Confidence: 0.986218198235294

 $00:26:33.883 \longrightarrow 00:26:36.668$ out half or the entire thyroid?

NOTE Confidence: 0.986218198235294

00:26:36.668 --> 00:26:38.219 And of course,

NOTE Confidence: 0.986218198235294

 $00:26:38.220 \longrightarrow 00:26:41.508$ if the patient happens to have

NOTE Confidence: 0.986218198235294

00:26:41.510 --> 00:26:43.422 the lymph node spread

NOTE Confidence: 0.986218198235294

00:26:43.422 --> 00:26:45.334 already outside the thyroid

NOTE Confidence: 0.986218198235294

 $00:26:45.334 \longrightarrow 00:26:48.077$ and then the discussion is OK,

NOTE Confidence: 0.986218198235294

 $00:26:48.080 \longrightarrow 00:26:51.352$ we should just go ahead and remove the

NOTE Confidence: 0.986218198235294

 $00:26:51.352 \longrightarrow 00:26:53.641$ entire thyroid and the compartments

NOTE Confidence: 0.986218198235294

 $00{:}26{:}53.641 \dashrightarrow 00{:}26{:}56.860$ where the diseased lymph nodes are and

NOTE Confidence: 0.984341302727273

 $00:26:56.870 \longrightarrow 00:26:59.845$ so it sounds like if the thyroid

NOTE Confidence: 0.984341302727273

 $00:26:59.845 \longrightarrow 00:27:01.860$ is otherwise pretty healthy,

 $00:27:01.860 \longrightarrow 00:27:05.230$ no Hashimoto's, no other nodules

NOTE Confidence: 0.984341302727273

 $00{:}27{:}05.230 \dashrightarrow 00{:}27{:}09.715$ and the thyroid cancer itself has

NOTE Confidence: 0.984341302727273

 $00:27:09.715 \longrightarrow 00:27:13.110$ not spread to lymph nodes.

NOTE Confidence: 0.984341302727273

00:27:13.110 --> 00:27:15.497 But still is more than one centimeter.

NOTE Confidence: 0.984341302727273

00:27:15.500 --> 00:27:17.290 It sounds like your general

NOTE Confidence: 0.984341302727273

 $00:27:17.290 \longrightarrow 00:27:19.080$ recommendation is a partial thyroidectomy.

NOTE Confidence: 0.984341302727273

 $00:27:19.080 \longrightarrow 00:27:19.689$ Is that right?

NOTE Confidence: 0.9889725425

 $00:27:20.290 \longrightarrow 00:27:21.850$ That's right.

 $00:27:24.780 \longrightarrow 00:27:26.748$ So far we've been

NOTE Confidence: 0.985249704

00:27:26.748 --> 00:27:28.060 talking about papillary cancers,

NOTE Confidence: 0.985249704

 $00:27:28.060 \longrightarrow 00:27:29.876$ if it was one of the other kinds,

NOTE Confidence: 0.985249704

 $00:27:29.880 \longrightarrow 00:27:31.880$ the follicular, the medullary,

NOTE Confidence: 0.985249704

 $00:27:31.880 \longrightarrow 00:27:32.880$ the anaplastic,

NOTE Confidence: 0.985249704

 $00:27:32.880 \longrightarrow 00:27:34.806$ that 10% that we were talking

NOTE Confidence: 0.985249704

 $00:27:34.806 \longrightarrow 00:27:36.999$ about at the top of the show,

NOTE Confidence: 0.985249704

 $00:27:37.000 \longrightarrow 00:27:38.350$ does that change your mind?

 $00:27:38.900 \longrightarrow 00:27:42.508$ Yes, so in the case of medullary thyroid

NOTE Confidence: 0.96064595

 $00{:}27{:}42.508 {\:\dashrightarrow\:} 00{:}27{:}44.820$ cancer, thank goodness is pretty rare,

NOTE Confidence: 0.96064595

 $00:27:44.820 \longrightarrow 00:27:50.156$ but there is a genetic disposition and the

NOTE Confidence: 0.96064595

 $00:27:50.160 \longrightarrow 00:27:53.520$ cancer itself portends to worse prognosis.

NOTE Confidence: 0.96064595

 $00:27:53.520 \longrightarrow 00:27:57.280$ We would be doing at minimum total thyroid

NOTE Confidence: 0.96064595

 $00:27:57.280 \longrightarrow 00:28:00.541$ surgery and what's called central neck

NOTE Confidence: 0.96064595

 $00:28:00.541 \longrightarrow 00:28:03.883$ lymph node dissection from the get go.

NOTE Confidence: 0.96064595

 $00:28:03.890 \longrightarrow 00:28:06.620$ So the extent that we talk

NOTE Confidence: 0.96064595

 $00{:}28{:}06.620 {\:{\mbox{--}}\!>}\ 00{:}28{:}09.147$ about for different types of

NOTE Confidence: 0.96064595

00:28:09.147 --> 00:28:11.599 thyroid cancer very drastically.

NOTE Confidence: 0.96064595

 $00:28:11.600 \longrightarrow 00:28:14.197$ And of course in the case of

NOTE Confidence: 0.96064595

00:28:14.197 --> 00:28:15.310 anaplastic thyroid cancer,

NOTE Confidence: 0.96064595

00:28:15.310 --> 00:28:19.076 if the patient is a surgical candidate,

NOTE Confidence: 0.96064595

 $00:28:19.080 \longrightarrow 00:28:22.713$ then we can certainly attempt to reset

NOTE Confidence: 0.96064595

 $00:28:22.713 \longrightarrow 00:28:26.369$ or debulk the bulk of the disease.

NOTE Confidence: 0.96064595

 $00:28:26.370 \longrightarrow 00:28:29.345$ But the unfortunate part is that anaplastic

 $00:28:29.345 \longrightarrow 00:28:31.810$ thyroid cancer is often incurable.

NOTE Confidence: 0.946921079333333

 $00{:}28{:}32.530 \dashrightarrow 00{:}28{:}34.833$ Doctor Grace Lee is an assistant professor

NOTE Confidence: 0.946921079333333

 $00:28:34.833 \longrightarrow 00:28:37.528$ of surgery at the Yale School of Medicine.

NOTE Confidence: 0.946921079333333

 $00:28:37.530 \longrightarrow 00:28:39.190$ If you have questions,

NOTE Confidence: 0.946921079333333

 $00:28:39.190 \longrightarrow 00:28:41.265$ the addresses cancer answers at

NOTE Confidence: 0.946921079333333

00:28:41.270 --> 00:28:43.826 yale.edu and past editions of the

NOTE Confidence: 0.946921079333333

00:28:43.826 --> 00:28:46.345 program are available in audio and

NOTE Confidence: 0.946921079333333

 $00:28:46.345 \longrightarrow 00:28:47.774$ written form at yale cancercenter.org.

NOTE Confidence: 0.946921079333333

 $00{:}28{:}47.774 \dashrightarrow 00{:}28{:}50.366$ We hope you'll join us next week to

NOTE Confidence: 0.946921079333333

 $00:28:50.366 \longrightarrow 00:28:52.338$ learn more about the fight against

NOTE Confidence: 0.946921079333333

 $00:28:52.338 \longrightarrow 00:28:53.933$ cancer here on Connecticut Public

NOTE Confidence: 0.946921079333333

 $00:28:53.984 \longrightarrow 00:28:55.499$ radio funding for Yale Cancer

NOTE Confidence: 0.946921079333333

 $00:28:55.499 \longrightarrow 00:28:57.014$ Answers is provided by Smilow

NOTE Confidence: 0.946921079333333

 $00:28:57.020 \longrightarrow 00:29:00.000$ Cancer Hospital and AstraZeneca.