WEBVTT

00:00:00.000 --> 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 --> 00:00:07.378 Hospital and AstraZeneca.

NOTE Confidence: 0.953102473571429

00:00:07.380 --> 00:00:08.684 Welcome to Yale Cancer

NOTE Confidence: 0.953102473571429

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

NOTE Confidence: 0.953102473571429

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

NOTE Confidence: 0.953102473571429

 $00{:}00{:}12.447 \dashrightarrow 00{:}00{:}14.476$ features the latest information on

NOTE Confidence: 0.953102473571429

 $00:00:14.476 \longrightarrow 00:00:17.194$ cancer care by welcoming oncologists and

NOTE Confidence: 0.953102473571429

 $00:00:17.194 \longrightarrow 00:00:19.768$ specialists who are on the forefront of

NOTE Confidence: 0.953102473571429

00:00:19.768 --> 00:00:22.102 the battle to fight cancer. This week,

NOTE Confidence: 0.953102473571429

 $00:00:22.102 \rightarrow 00:00:23.932$ it's a conversation about thyroid

NOTE Confidence: 0.953102473571429

 $00:00:23.932 \longrightarrow 00:00:25.669$ 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

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

00:00:31.219 --> 00:00:33.267 a professor of surgical oncology.

NOTE Confidence: 0.984242213

00:00:34.380 -> 00:00:36.186 Grace, maybe we can start off by

NOTE Confidence: 0.984242213

 $00{:}00{:}36.186 \dashrightarrow 00{:}00{:}38.136$ you telling us a little bit about

NOTE Confidence: 0.984242213

 $00:00:38.136 \rightarrow 00:00:40.040$ 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

 $00:00:43.038 \longrightarrow 00:00:45.030$ remove the thyroid, parathyroid in NOTE Confidence: 0.974203992222222

 $00{:}00{:}45.120 \dashrightarrow 00{:}00{:}48.335$ 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 --> 00:00:54.923 interest include different

NOTE Confidence: 0.974203992222222

 $00:00:54.923 \rightarrow 00:00:56.597$ minimally invasive techniques

NOTE Confidence: 0.974203992222222

 $00:00:56.597 \rightarrow 00:00:59.292$ and new imaging techniques for

NOTE Confidence: 0.974203992222222

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

NOTE Confidence: 0.970094495

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

NOTE Confidence: 0.970094495

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

NOTE Confidence: 0.970094495

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

- NOTE Confidence: 0.970094495
- 00:01:07.260 --> 00:01:08.496 cancer awareness month.
- NOTE Confidence: 0.970094495
- $00{:}01{:}08{.}500 \dashrightarrow 00{:}01{:}10{.}988$ So tell us a little bit more about
- NOTE Confidence: 0.970094495
- $00:01:10.988 \rightarrow 00:01:12.780$ 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
- $00:01:14.940 \rightarrow 00:01:17.236$ 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
- $00:01:23.230 \longrightarrow 00:01:26.314$ 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
- $00:01:32.001 \rightarrow 00:01:34.587$ all the new cancers being diagnosed,
- NOTE Confidence: 0.769741365
- $00{:}01{:}34{.}590 \dashrightarrow 00{:}01{:}37{.}240$ 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 guess timate at about 2000 so
- NOTE Confidence: 0.769741365
- $00:01:43.035 \longrightarrow 00:01:46.485$ it is not as prevalent as
- NOTE Confidence: 0.769741365

00:01:46.485 --> 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

 $00:01:52.804 \dashrightarrow 00:01:55.195$ diagnoses of thyroid cancers have NOTE Confidence: 0.769741365

 $00:01:55.195 \rightarrow 00:01:57.709$ 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 --> 00:02:02.660 increasing cancers in the US

NOTE Confidence: 0.769741365

00:02:02.660 --> 00:02:04.724 but we believe that much of

NOTE Confidence: 0.769741365

 $00{:}02{:}04.724 \dashrightarrow 00{:}02{:}06.967$ 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

 $00{:}02{:}13.950 \dashrightarrow 00{:}02{:}17.800$ various diagnostic imaging to further

NOTE Confidence: 0.769741365

 $00:02:17.800 \rightarrow 00:02:21.232$ 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

 $00:02:24.037 \rightarrow 00:02:27.014$ nodules while we are just looking

- NOTE Confidence: 0.769741365
- $00:02:27.014 \rightarrow 00:02:29.780$ 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
- $00:02:34.965 \rightarrow 00:02:37.630$ 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
- $00:02:43.220 \rightarrow 00:02:46.104$ Pet CT to survey and other cancers
- NOTE Confidence: 0.769741365
- $00{:}02{:}46{.}104 \dashrightarrow 00{:}02{:}48{.}948$ 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
- $00:02:50.518 \longrightarrow 00:02:52.086$ to examine narrowing of
- NOTE Confidence: 0.769741365
- $00:02:52.086 \rightarrow 00:02:53.430$ the carotid arteries.
- NOTE Confidence: 0.98001511
- 00:02:53.800 --> 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
- $00:02:58.817 \rightarrow 00:03:03.192$ of a tripling in the rate of thyroid
- NOTE Confidence: 0.98001511
- $00:03:03.192 \rightarrow 00:03:06.980$ cancers to be really quite an awesome,
- NOTE Confidence: 0.98001511

 $00{:}03{:}06{.}980 \dashrightarrow 00{:}03{:}10{.}766$ not in the sense of a wesome 'awesome' but a wesome

NOTE Confidence: 0.98001511

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

 $00:03:17.004 \rightarrow 00:03:20.420$ 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

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

NOTE Confidence: 0.98001511

 $00:03:33.976 \rightarrow 00:03:36.230$ 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

 $00:03:41.027 \rightarrow 00:03:43.757$ 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 --> 00:03:50.446 so there have been many studies that have NOTE Confidence: 0.983482328

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

NOTE Confidence: 0.983482328

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

NOTE Confidence: 0.983482328

 $00:03:56.930 \longrightarrow 00:03:58.964$ Why we are catching

- NOTE Confidence: 0.983482328
- $00:03:58.964 \rightarrow 00:04:00.730$ 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
- $00:04:03.943 \rightarrow 00:04:06.520$ 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 --> 00:04:18.710 extreme distribution of ages,
- NOTE Confidence: 0.983482328
- $00:04:18.710 \longrightarrow 00:04:22.210$ such as pediatric population versus
- NOTE Confidence: 0.983482328
- $00:04:22.210 \longrightarrow 00:04:25.420$ 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
- $00:04:27.880 \rightarrow 00:04:30.160$ prior radiation treatment to the
- NOTE Confidence: 0.984340156521739
- $00{:}04{:}30{.}160 \dashrightarrow 00{:}04{:}34{.}094$ head and neck area as a child or
- NOTE Confidence: 0.984340156521739
- $00:04:34.094 \rightarrow 00:04:36.186$ having had environmental radiation
- NOTE Confidence: 0.984340156521739
- 00:04:36.186 --> 00:04:39.450 exposure such as a nuclear accident.
- NOTE Confidence: 0.984340156521739
- $00:04:39.450 \rightarrow 00:04:41.988$ And having a family member with
- NOTE Confidence: 0.984340156521739

00:04:41.988 --> 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

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

NOTE Confidence: 0.984340156521739

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

NOTE Confidence: 0.984340156521739

 $00:04:51.390 \rightarrow 00:04:53.666$ 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

 $00:04:57.178 \longrightarrow 00:04:59.848$ 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

 $00{:}05{:}01.758 \dashrightarrow 00{:}05{:}03.666$ benign nodules,

NOTE Confidence: 0.984340156521739

 $00{:}05{:}03{.}670 \dashrightarrow 00{:}05{:}05{.}338$ we are also seeing the increase

NOTE Confidence: 0.984340156521739

 $00:05:05.338 \longrightarrow 00:05:06.172$ 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

 $00{:}05{:}11.768 \dashrightarrow 00{:}05{:}13.469$ are things that we cannot change.

NOTE Confidence: 0.982275885

 $00:05:13.470 \longrightarrow 00:05:16.068$ Being a woman, your age,

- NOTE Confidence: 0.982275885
- 00:05:16.070 --> 00:05:18.420 your race or ethnicity,
- NOTE Confidence: 0.982275885
- 00:05:18.420 --> 00:05:21.555 your family history.
- NOTE Confidence: 0.982275885
- 00:05:21.555 --> 00:05:25.560 And the things that are other
- NOTE Confidence: 0.982275885
- $00:05:25.560 \rightarrow 00:05:28.520$ 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 > 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
- $00{:}05{:}44.955 \dashrightarrow 00{:}05{:}47.380$ our control as well.
- NOTE Confidence: 0.982275885
- $00:05:47.380 \longrightarrow 00:05:50.812$ Are there any factors that our audience
- NOTE Confidence: 0.982275885
- $00{:}05{:}50{.}812 \dashrightarrow 00{:}05{:}53{.}983$ might be interested in that increase
- NOTE Confidence: 0.982275885
- 00:05:53.983 --> 00:05:56.281 or decrease your risk of thyroid
- NOTE Confidence: 0.982275885

NOTE Confidence: 0.982275885 $00{:}05{:}58{.}310 \dashrightarrow 00{:}06{:}00{.}518$ And so I'm thinking here about NOTE Confidence: 0.982275885 $00:06:00.518 \rightarrow 00:06:02.940$ 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 $00:06:06.980 \rightarrow 00:06:09.230$ play in benign thyroid conditions. NOTE Confidence: 0.982275885 $00:06:09.230 \rightarrow 00:06:12.446$ 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 $00:06:16.125 \rightarrow 00:06:19.640$ people could potentially control? $00:06:20.060 \rightarrow 00:06:22.448$ 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 $00:06:26.722 \rightarrow 00:06:30.304$ who's interested in modifying their diet NOTE Confidence: 0.973546919333333 $00:06:30.304 \rightarrow 00:06:33.953$ to either combat the existing thyroid NOTE Confidence: 0.973546919333333 $00:06:33.953 \rightarrow 00:06:37.481$ cancer or help their family members NOTE Confidence: 0.973546919333333 $00:06:37.481 \rightarrow 00:06:40.870$ 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, NOTE Confidence: 0.973546919333333 10

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

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

NOTE Confidence: 0.973546919333333

 $00{:}06{:}48.812 \dashrightarrow 00{:}06{:}52.160$ But I do not believe there has

NOTE Confidence: 0.973546919333333

 $00{:}06{:}52.160 \dashrightarrow 00{:}06{:}54.676$ been an established linkage

NOTE Confidence: 0.973546919333333

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

NOTE Confidence: 0.973546919333333

 $00{:}06{:}57{.}192 \dashrightarrow 00{:}06{:}59{.}810$ 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

 $00{:}07{:}03.010 \dashrightarrow 00{:}07{:}05.908$ I think detection and appropriate treatment

NOTE Confidence: 0.973546919333333

 $00{:}07{:}05{.}908 \dashrightarrow 00{:}07{:}09{.}289$ will be the best course of action

NOTE Confidence: 0.973546919333333

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

 $00:07:16.140 \dashrightarrow 00:07:18.270$ Getting back to that original statistic,

NOTE Confidence: 0.987855273333333

00:07:18.270 --> 00:07:20.710 this tripling of thyroid cancers,

NOTE Confidence: 0.987855273333333

 $00{:}07{:}20.710 \dashrightarrow 00{:}07{:}23.139$ 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

 $00:07:25.530 \longrightarrow 00:07:28.686$ 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

 $00{:}07{:}30.790 \dashrightarrow 00{:}07{:}34.829$ 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

 $00{:}07{:}44.270 \dashrightarrow 00{:}07{:}46.640$ few decades where we've seen this

NOTE Confidence: 0.987855273333333

 $00:07:46.640 \dashrightarrow 00:07:49.400$ 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

 $00{:}07{:}51.600 \dashrightarrow 00{:}07{:}54.680$ 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

 $00:07:58.215 \dashrightarrow 00:08:00.865$ 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

 $00:08:05.956 \rightarrow 00:08:09.287$ people increased at that same proportion?

NOTE Confidence: 0.987855273333333

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

NOTE Confidence: 0.987855273333333

 $00:08:12.441 \rightarrow 00:08:15.519$ 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

 $00:08:18.173 \longrightarrow 00:08:20.040$ now adays 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

 $00:08:22.760 \dashrightarrow 00:08:24.888$ 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

 $00{:}08{:}27.660 \dashrightarrow 00{:}08{:}29.012$ Yeah, I believe so.

NOTE Confidence: 0.984154633333333

 $00:08:29.012 \rightarrow 00:08:32.480$ 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 --> 00:08:42.033 increase in thyroid cancer being

NOTE Confidence: 0.984154633333333

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

NOTE Confidence: 0.984154633333333

00:08:45.900 --> 00:08:48.980 in leading to earlier diagnosis,

NOTE Confidence: 0.984154633333333

00:08:48.980 --> 00:08:52.220 not necessarily more aggressive treatment,

NOTE Confidence: 0.984154633333333

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

NOTE Confidence: 0.984154633333333

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

NOTE Confidence: 0.984154633333333

 $00:09:00.020 \rightarrow 00:09:03.436$ 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

 $00{:}09{:}07{.}017 \dashrightarrow 00{:}09{:}10{.}070$ 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

 $00:09:16.390 \dashrightarrow 00:09:19.900$ 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

 $00:09:27.781 \rightarrow 00:09:31.038$ thyroid nodules and go down the

NOTE Confidence: 0.984154633333333

 $00:09:31.038 \rightarrow 00:09:32.818$ 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

 $00{:}09{:}34.754 \dashrightarrow 00{:}09{:}35.990$ 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 - 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

 $00:09:43.570 \rightarrow 00:09:46.786$ 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

 $00:09:49.670 \longrightarrow 00:09:51.548$ and the thyroid nodule is found.

- NOTE Confidence: 0.980417906923077
- $00:09:51.550 \rightarrow 00:09:54.642$ How do we get from incidental thyroid
- NOTE Confidence: 0.980417906923077
- $00:09:54.642 \rightarrow 00:09:58.464$ 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
- $00:09:59.990 \rightarrow 00:10:02.020$ 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
- $00{:}10{:}05{.}079 \dashrightarrow 00{:}10{:}07{.}917$ stumble upon a thyroid nodule being
- NOTE Confidence: 0.985968668
- $00:10:07.917 \longrightarrow 00:10:11.819$ mentioned on a CT scan that a patient
- NOTE Confidence: 0.985968668
- $00:10:11.819 \rightarrow 00:10:15.144$ 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
- $00:10:23.546 \rightarrow 00:10:27.800$ thyroid nodule on a different modality,
- NOTE Confidence: 0.985968668
- $00{:}10{:}27.800 \dashrightarrow 00{:}10{:}30.905$ we do a comprehensive neck
- NOTE Confidence: 0.985968668
- $00:10:30.905 \longrightarrow 00:10:34.660$ ultrasound as the gold standard exam.
- $00{:}10{:}36{.}570 \dashrightarrow 00{:}10{:}39{.}825$ 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
- $00:10:42.120 \longrightarrow 00:10:45.980$ with a routine yearly checkup.

- NOTE Confidence: 0.985968668
- 00:10:45.980 --> 00:10:49.670 So after the ultrasound is obtained,

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

NOTE Confidence: 0.985968668

 $00:10:52.130 \longrightarrow 00:10:54.770$ 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

 $00{:}11{:}01{.}700 \dashrightarrow 00{:}11{:}04{.}756$ characteristics that make us worried

NOTE Confidence: 0.985968668

 $00:11:04.756 \rightarrow 00:11:08.260$ about that thyroid nodule being cancerous.

NOTE Confidence: 0.985968668

 $00{:}11{:}08{.}260 \dashrightarrow 00{:}11{:}10{.}519$ And if we

NOTE Confidence: 0.985968668

 $00:11:10.520 \rightarrow 00:11:13.785$ 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

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

NOTE Confidence: 0.985968668

 $00{:}11{:}21{.}480 \dashrightarrow 00{:}11{:}24{.}455$ then what we usually do is

NOTE Confidence: 0.985968668

00:11:24.455 --> 00:11:27.252 a fine needle aspiration biopsy

NOTE Confidence: 0.985968668

 $00{:}11{:}27{.}252 \dashrightarrow 00{:}11{:}30{.}787$ under the guidance of ultrasound

NOTE Confidence: 0.985968668

 $00{:}11{:}30.790 \dashrightarrow 00{:}11{:}32.758$ to have our pathologists then take

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

NOTE Confidence: 0.985968668

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

NOTE Confidence: 0.967282023333333

 $00:11:38.280 \dashrightarrow 00:11:40.494$ 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

 $00{:}11{:}43.850 \dashrightarrow 00{:}11{:}45.795$ 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

 $00:11:48.970 \rightarrow 00:11:51.690$ to kind of gauge your suspicion as to

NOTE Confidence: 0.967282023333333

 $00:11:51.690 \rightarrow 00:11:54.206$ 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: 0.967282023333333

 $00{:}11{:}57{.}510 \dashrightarrow 00{:}11{:}59{.}886$ What are the things that make you worried

NOTE Confidence: 0.967282023333333

 $00:11:59.886 \longrightarrow 00:12:02.457$ that a thyroid nodule could be cancer?

NOTE Confidence: 0.944501742

00:12:02.770 --> 00:12:06.740 Yeah, so generally speaking we

NOTE Confidence: 0.944501742

 $00:12:06.740 \rightarrow 00:12:10.710$ worry about bigger thyroid nodules.

NOTE Confidence: 0.944501742

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

- NOTE Confidence: 0.915846776
- 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 --> 00:12:24.710 1 centimeter as kind of
- NOTE Confidence: 0.98458436125
- $00:12:24.710 \rightarrow 00:12:28.072$ microterritory and 1 centimeter or greater
- NOTE Confidence: 0.98458436125
- $00{:}12{:}28.072 \dashrightarrow 00{:}12{:}31.380$ 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
- $00:12:35.145 \rightarrow 00:12:39.265$ 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
- $00:12:50.920 \rightarrow 00:12:54.056$ what we call cystic and it has what
- NOTE Confidence: 0.98458436125
- $00:12:54.056 \longrightarrow 00:12:56.706$ we call hypoechoic characteristic
- NOTE Confidence: 0.98458436125
- 00:12:56.706 --> 00:12:59.361 onto ultrasound microcalcifications
- NOTE Confidence: 0.98458436125
- $00{:}12{:}59{.}361 \dashrightarrow 00{:}13{:}04{.}455$ irregular borders taller than wide, etc.
- NOTE Confidence: 0.98458436125
- $00{:}13{:}04{.}455 \dashrightarrow 00{:}13{:}08{.}445$ So we radiologists are very familiar
- NOTE Confidence: 0.98458436125

 $00:13:08.445 \longrightarrow 00:13:11.124$ 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 --> 00:13:23.247 biopsy stage or

NOTE Confidence: 0.98458436125

 $00:13:23.250 \longrightarrow 00:13:25.718$ 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 --> 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 --> 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

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

NOTE Confidence: 0.985418738333333

 $00{:}13{:}43.200 \dashrightarrow 00{:}13{:}45.292$ a short break for a medical minute.

NOTE Confidence: 0.985418738333333

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

- NOTE Confidence: 0.985418738333333
- $00:13:47.504 \rightarrow 00:13:49.463$ the care of patients with thyroid
- NOTE Confidence: 0.985418738333333
- $00:13:49.463 \rightarrow 00:13:51.550$ 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
- $00{:}13{:}56{.}040 \dashrightarrow 00{:}13{:}58{.}010$ where an individualized approach to
- NOTE Confidence: 0.919608576
- $00{:}13{:}58.010 \dashrightarrow 00{:}13{:}59.980$ prostate cancer screening is used
- NOTE Confidence: 0.919608576
- $00:14:00.044 \rightarrow 00:14:02.030$ to determine which men are eligible
- NOTE Confidence: 0.919608576
- $00:14:02.030 \rightarrow 00:14:03.990$ 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 --> 00:14:13.673 people with certain types of cancer NOTE α
- 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 --> 00:14:18.044 Genetic counseling is a process that
- NOTE Confidence: 0.919608576
- 00:14:18.044 --> 00:14:20.179 includes collecting a detailed personal NOTE Confidence: 0.919608576

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

NOTE Confidence: 0.919608576

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

NOTE Confidence: 0.919608576

 $00{:}14{:}25{.}480 \dashrightarrow 00{:}14{:}27{.}794$ 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

 $00:14:30.880 \longrightarrow 00:14:32.116$ recommended for everyone.

NOTE Confidence: 0.919608576

 $00{:}14{:}32{.}120 \dashrightarrow 00{:}14{:}34{.}442$ 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

 $00{:}14{:}36{.}510 \dashrightarrow 00{:}14{:}38{.}735$ 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

 $00:14:41.809 \rightarrow 00:14:43.210$ 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

 $00:14:46.870 \longrightarrow 00:14:49.677$ rare cancers or family history of a

NOTE Confidence: 0.919608576

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

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

NOTE Confidence: 0.919608576

 $00{:}14{:}55{.}110$ --> $00{:}14{:}57{.}195$ Resources for genetic counseling and

NOTE Confidence: 0.919608576

 $00:14:57.195 \rightarrow 00:14:59.280$ testing are available at federally

NOTE Confidence: 0.919608576

 $00{:}14{:}59{.}344 \dashrightarrow 00{:}15{:}00{.}577$ 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

 $00{:}15{:}04{.}990 \dashrightarrow 00{:}15{:}08{.}050$ More information is available at

NOTE Confidence: 0.919608576

00:15:08.050 --> 00:15:09.346 yalecancercenter.org. You're listening

NOTE Confidence: 0.919608576

 $00{:}15{:}09{.}346 \dashrightarrow 00{:}15{:}11.074$ 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: 0.9025713716666667

00:15:14.160 --> 00:15:16.653 This is doctor Anees Chagpar and I'm

NOTE Confidence: 0.902571371666667

 $00:15:16.653 \rightarrow 00:15:19.097$ joined to night 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 thy roid cancer in

NOTE Confidence: 0.902571371666667

00:15:23.703 --> 00:15:26.079 honor of Thyroid Cancer Awareness

 $00:15:26.079 \rightarrow 00:15:27.840$ Month and right before the break,

NOTE Confidence: 0.902571371666667

00:15:27.840 --> 00:15:30.582 Grace was telling us this amazing

NOTE Confidence: 0.902571371666667

 $00{:}15{:}30{.}582 \dashrightarrow 00{:}15{:}32{.}965$ statistic that thy roid cancers have

NOTE Confidence: 0.9025713716666667

 $00{:}15{:}32{.}965 \dashrightarrow 00{:}15{:}35{.}345$ actually tripled in recent history

NOTE Confidence: 0.902571371666667

 $00{:}15{:}35{.}350 \dashrightarrow 00{:}15{:}38{.}213$ 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: 0.9025713716666667

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

NOTE Confidence: 0.9025713716666667

 $00{:}15{:}49{.}180 \dashrightarrow 00{:}15{:}51{.}364$ morphologic features on ultrasound,

NOTE Confidence: 0.9025713716666667

 $00{:}15{:}51{.}370 \dashrightarrow 00{:}15{:}55{.}024$ are warranting a biopsy and that biopsy

NOTE Confidence: 0.9025713716666667

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

NOTE Confidence: 0.9025713716666667

 $00:15:58.070 \longrightarrow 00:15:59.910$ So Grace,

NOTE Confidence: 0.902571371666667

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

NOTE Confidence: 0.9025713716666667

 $00{:}16{:}03.090 \dashrightarrow 00{:}16{:}06.835$ thyroid cancer is not a uniform disease.

- NOTE Confidence: 0.9025713716666667
- $00:16:06.840 \longrightarrow 00:16:08.277$ 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
- $00{:}16{:}12.110 \dashrightarrow 00{:}16{:}14.927$ So tell us a little bit more about that.
- NOTE Confidence: 0.9025713716666667
- 00:16:14.930 --> 00:16:16.166 First of all,
- NOTE Confidence: 0.9025713716666667
- $00:16:16.166 \rightarrow 00:16:19.050$ are there different kinds of thyroid cancer?
- NOTE Confidence: 0.902571371666667
- 00:16:19.050 --> 00:16:21.310 And second of all,
- NOTE Confidence: 0.9025713716666667
- $00:16:21.310 \longrightarrow 00:16:24.974$ how does that impact what you do next?
- NOTE Confidence: 0.902571371666667
- $00{:}16{:}24.974 \dashrightarrow 00{:}16{:}25.676$ There are
- NOTE Confidence: 0.9869247375
- $00:16:25.690 \longrightarrow 00:16:28.714$ about four different major
- NOTE Confidence: 0.9869247375
- $00:16:28.714 \rightarrow 00:16:31.738$ 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 thy roid cancer known as
- NOTE Confidence: 0.9869247375
- $00:16:38.298 \rightarrow 00:16:40.814$ papillary thyroid cancer actually
- NOTE Confidence: 0.9869247375
- 00:16:40.814 --> 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
- NOTE Confidence: 0.9869247375

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

NOTE Confidence: 0.9869247375

00:16:50.776 --> 00:16:53.510 with papillary thyroid cancer,

NOTE Confidence: 0.9869247375

00:16:53.510 --> 00:16:58.103 and the rest, 10% comprise of

NOTE Confidence: 0.9869247375

 $00:16:58.103 \longrightarrow 00:17:01.147$ 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

 $00{:}17{:}09{.}284 \dashrightarrow 00{:}17{:}12.674$ diagnosed with thy roid 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

 $00:17:15.980 \dashrightarrow 00:17:19.220$ meaning their cancer has not actually NOTE Confidence: 0.9869247375

1011 Connuclice: 0.5005241515

 $00{:}17{:}19{.}220 \dashrightarrow 00{:}17{:}22{.}210$ spread outside of the thyroid.

NOTE Confidence: 0.9869247375

 $00{:}17{:}22{.}210 \dashrightarrow 00{:}17{:}25{.}066$ So most of the people who get

NOTE Confidence: 0.9869247375

 $00:17:25.066 \rightarrow 00:17:27.719$ 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

 $00{:}17{:}30{.}176 \dashrightarrow 00{:}17{:}33{.}246$ should be reassured that as

NOTE Confidence: 0.9869247375

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

- NOTE Confidence: 0.9869247375
- $00:17:35.650 \longrightarrow 00:17:39.358$ the right way they're going to
- NOTE Confidence: 0.9869247375
- $00:17:39.358 \rightarrow 00:17:42.479$ be enjoying excellent prognosis.
- NOTE Confidence: 0.983584356
- $00{:}17{:}42.870 \dashrightarrow 00{:}17{:}44.816$ Tell us a little bit
- NOTE Confidence: 0.983584356
- $00{:}17{:}44.816 \dashrightarrow 00{:}17{:}47.380$ more about that, I mean
- NOTE Confidence: 0.983584356
- 00:17:47.380 --> 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 --> 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
- $00:18:00.602 \rightarrow 00:18:03.503$ Or is it that thyroid cancer has
- NOTE Confidence: 0.983584356
- $00:18:03.503 \rightarrow 00:18:05.960$ 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: 0.9676763516666667
- $00{:}18{:}08.660 \dashrightarrow 00{:}18{:}13.148$ That's a hotly debated
- NOTE Confidence: 0.9676763516666667
- 00:18:13.150 --> 00:18:17.795 very individualized choice, but the
- NOTE Confidence: 0.9676763516666667
- $00{:}18{:}17.795 \dashrightarrow 00{:}18{:}22.440$ mainstay treatment for thyroid cancer,
- NOTE Confidence: 0.967676351666667

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

NOTE Confidence: 0.9676763516666667

 $00{:}18{:}25{.}280 \dashrightarrow 00{:}18{:}28{.}034$ or if the cancer has gone

NOTE Confidence: 0.9676763516666667

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

NOTE Confidence: 0.9676763516666667

 $00:18:29.870 \rightarrow 00:18:34.414$ 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: 0.9676763516666667

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

NOTE Confidence: 0.967676351666667

 $00{:}18{:}42.960 \dashrightarrow 00{:}18{:}45.860$ we call that active surveillance.

NOTE Confidence: 0.967676351666667

 $00:18:45.860 \rightarrow 00:18:51.296$ We can sometimes employ that approach,

NOTE Confidence: 0.9676763516666667

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

NOTE Confidence: 0.9676763516666667

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

NOTE Confidence: 0.967676351666667

 $00:18:55.420 \rightarrow 00:18:58.666$ We can go active surveillance route

NOTE Confidence: 0.9676763516666667

 $00:18:58.666 \rightarrow 00:19:01.560$ if the papillary thyroid cancer,

NOTE Confidence: 0.9676763516666667

00:19:01.560 - 00:19:03.385 the well behaving thyroid cancer

NOTE Confidence: 0.9676763516666667

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

NOTE Confidence: 0.9676763516666667

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

NOTE Confidence: 0.9676763516666667

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

- NOTE Confidence: 0.9676763516666667
- $00:19:12.840 \longrightarrow 00:19:16.044$ the cancer going outside of the
- NOTE Confidence: 0.9676763516666667
- $00:19:16.044 \rightarrow 00:19:19.062$ thyroid is well cushioned by normal
- NOTE Confidence: 0.9676763516666667
- $00:19:19.062 \longrightarrow 00:19:22.340$ thyroid and the patient is very
- NOTE Confidence: 0.9676763516666667
- $00:19:22.340 \longrightarrow 00:19:25.962$ motivated and reliable to comply with
- NOTE Confidence: 0.9676763516666667
- $00{:}19{:}25{.}962 \dashrightarrow 00{:}19{:}28{.}970$ this active surveillance program.
- NOTE Confidence: 0.967676351666667
- $00:19:28.970 \longrightarrow 00:19:32.060$ We can certainly go that route,
- NOTE Confidence: 0.9676763516666667
- $00:19:32.060 \longrightarrow 00:19:35.546$ but any thyroid cancer that is between
- NOTE Confidence: 0.967676351666667
- $00:19:35.546 \longrightarrow 00:19:38.289$ one centimeter to 4 centimeter
- $00:19:39.214 \rightarrow 00:19:42.448$ can go either half of the thyroid
- NOTE Confidence: 0.9676763516666667
- $00{:}19{:}42{.}448 \dashrightarrow 00{:}19{:}45{.}674$ that's containing that cancer or the
- NOTE Confidence: 0.9676763516666667
- $00:19:45.674 \longrightarrow 00:19:48.734$ entire thyroid to be removed.
- NOTE Confidence: 0.9676763516666667
- $00:19:48.740 \longrightarrow 00:19:51.530$ So there are multiple right answers.
- NOTE Confidence: 0.985031559230769
- 00:20:02.500 --> 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
- $00{:}20{:}07{.}532 \dashrightarrow 00{:}20{:}09{.}020$ terms of active surveillance.

 $00:20:09.020 \rightarrow 00:20:11.582$ 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.

 $00:20:20.220 \rightarrow 00:20:22.500$ 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 --> 00:20:26.174 I mean, is this an ultrasound

NOTE Confidence: 0.985031559230769

 $00:20:26.174 \rightarrow 00:20:29.086$ 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

 $00:20:31.270 \longrightarrow 00:20:33.034$ 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

 $00:20:37.840 \longrightarrow 00:20:40.480$ Great question. Yes,

NOTE Confidence: 0.989687575714286

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

NOTE Confidence: 0.989687575714286

00:20:48.700 - 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 - > 00:20:59.220 and is some clinician dependent,

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

NOTE Confidence: 0.989687575714286

 $00{:}21{:}02{.}376 \dashrightarrow 00{:}21{:}06{.}382$ 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

 $00:21:10.648 \rightarrow 00:21:13.830$ 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

 $00{:}21{:}15.870 \dashrightarrow 00{:}21{:}19.698$ 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 --> 00:21:33.088 It is what's called a wolf in sheep

NOTE Confidence: 0.989687575714286

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

NOTE Confidence: 0.989687575714286

 $00:21:36.708 \rightarrow 00:21:40.206$ even micro papillary cancer can spread to

NOTE Confidence: 0.989687575714286

00:21:40.206 --> 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

 $00{:}21{:}46.856 \dashrightarrow 00{:}21{:}49.180$ necessarily mean worse prognosis.

NOTE Confidence: 0.989687575714286

00:21:49.180 --> 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
- $00{:}21{:}56{.}344 \dashrightarrow 00{:}21{:}59{.}674$ So we treat those folks
- NOTE Confidence: 0.989687575714286
- $00:21:59.680 \rightarrow 00:22:02.865$ almost as equally as someone who has
- NOTE Confidence: 0.989687575714286
- $00{:}22{:}02{.}865 \dashrightarrow 00{:}22{:}06{.}246$ 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
- $00:22:13.970 \rightarrow 00:22:15.530$ 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
- $00:22:18.894 \rightarrow 00:22:22.654$ extra 10 years with their own thyroid.
- NOTE Confidence: 0.989687575714286
- $00:22:22.654 \longrightarrow 00:22:26.200$ 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 --> 00:22:33.980 if the size of that micro cancer
- NOTE Confidence: 0.989687575714286
- $00:22:34.057 \rightarrow 00:22:36.407$ changes by about 3 millimeters,
- NOTE Confidence: 0.989687575714286
- $00:22:36.410 \longrightarrow 00:22:38.246$ we say, well, OK.

- NOTE Confidence: 0.989687575714286
- 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
- $00{:}22{:}43.688 \dashrightarrow 00{:}22{:}45.993$ 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
- $00:22:48.537 \rightarrow 00:22:50.700$ is actually quite excellent.
- $00:22:51.270 \longrightarrow 00:22:52.594$ So you really are watching
- NOTE Confidence: 0.9864802725
- $00:22:52.594 \rightarrow 00:22:53.918$ 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
- $00:22:59.070 \rightarrow 00:23:00.990$ who are listening to our show today,
- NOTE Confidence: 0.9864802725
- 00:23:00.990 --> 00:23:03.770 I'm sure, but really
- NOTE Confidence: 0.9864802725
- $00:23:03.770 \rightarrow 00:23:07.910$ that is going to trigger you moving to
- NOTE Confidence: 0.9864802725
- $00:23:07.910 \rightarrow 00:23:10.110$ a more aggressive surgical approach
- NOTE Confidence: 0.9864802725
- $00:23:10.110 \rightarrow 00:23:12.749$ 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
- $00:23:14.508 \rightarrow 00:23:15.680$ with that surgical approach.

- NOTE Confidence: 0.9864802725
- $00:23:15.680 \longrightarrow 00:23:18.151$ You mentioned that for people who have

 $00{:}23{:}18{.}151 \dashrightarrow 00{:}23{:}21{.}008$ larger tumors, so larger than one centimeter,

NOTE Confidence: 0.9864802725

 $00:23:21.010 \rightarrow 00:23:24.804$ 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

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

NOTE Confidence: 0.9864802725

 $00{:}23{:}36{.}711 \dashrightarrow 00{:}23{:}38{.}985$ the team and is personalized

NOTE Confidence: 0.9864802725

 $00{:}23{:}38{.}990 \dashrightarrow 00{:}23{:}43{.}990$ what factors go into deciding what kind

NOTE Confidence: 0.9864802725

 $00:23:43.990 \rightarrow 00:23:46.510$ of an operation a patient should have?

00:23:47.080 --> 00:23:49.075 One would think that it's a big

NOTE Confidence: 0.9864802725

 $00{:}23{:}49.075 \dashrightarrow 00{:}23{:}51.308$ 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

 $00{:}23{:}57{.}528 \dashrightarrow 00{:}24{:}00{.}837$ that I get to have multiple times a week,

NOTE Confidence: 0.986218198235294

 $00{:}24{:}00{.}840 \dashrightarrow 00{:}24{:}04{.}592$ so I usually talk about the benefits first

NOTE Confidence: 0.986218198235294

 $00:24:04.592 \rightarrow 00:24:08.639$ of only removing half of the thyroid and

NOTE Confidence: 0.986218198235294

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

NOTE Confidence: 0.986218198235294

 $00{:}24{:}12.805 \dashrightarrow 00{:}24{:}14.590$ Thyroid Association instituted

NOTE Confidence: 0.986218198235294

 $00{:}24{:}14.687 \dashrightarrow 00{:}24{:}18.050$ 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 --> 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

 $00{:}24{:}26{.}990 \dashrightarrow 00{:}24{:}29{.}814$ as I think what the experts were thinking,

NOTE Confidence: 0.986218198235294

 $00:24:29.820 \longrightarrow 00:24:32.508$ so the benefit of only removing half

NOTE Confidence: 0.986218198235294

 $00{:}24{:}32{.}508 \dashrightarrow 00{:}24{:}34{.}890$ 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

 $00{:}24{:}38.055 \dashrightarrow 00{:}24{:}40.449$ that the remaining thy roid may be

NOTE Confidence: 0.986218198235294

 $00{:}24{:}40{.}449 \dashrightarrow 00{:}24{:}44{.}615$ able to pick up the missing half and

 $00:24:44.615 \rightarrow 00:24:48.590$ still give you enough thyroid hormone.

00:24:50.030 --> 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

 $00{:}24{:}56{.}974$ --> $00{:}24{:}59{.}350$ hormone supplementation pill everyday.

NOTE Confidence: 0.986218198235294

 $00:24:59.350 \rightarrow 00:25:03.220$ But if you have at least half of a thyroid,

NOTE Confidence: 0.986218198235294

 $00{:}25{:}03{.}220 \dashrightarrow 00{:}25{:}04{.}273$ 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

 $00:25:07.906 \rightarrow 00:25:11.209$ 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

 $00:25:18.160 \rightarrow 00:25:22.240$ very safe when done in expert hands and

NOTE Confidence: 0.986218198235294

 $00{:}25{:}22{.}240 \dashrightarrow 00{:}25{:}26{.}780$ known to have very low complication rate it

NOTE Confidence: 0.986218198235294

 $00{:}25{:}26.780 \dashrightarrow 00{:}25{:}29.953$ 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

 $00{:}25{:}32{.}868 \dashrightarrow 00{:}25{:}36{.}740$ 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 --> 00:25:45.115 Obviously if one thyroid nodule

NOTE Confidence: 0.986218198235294

 $00:25:45.115 \longrightarrow 00:25:47.620$ was biopsied

NOTE Confidence: 0.986218198235294

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

NOTE Confidence: 0.986218198235294

 $00{:}25{:}51{.}130 \dashrightarrow 00{:}25{:}55{.}848$ 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 --> 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

 $00:26:05.805 \rightarrow 00:26:08.145$ 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

 $00{:}26{:}16.750 \dashrightarrow 00{:}26{:}19.732$ we can catch perhaps multiple

NOTE Confidence: 0.986218198235294

00:26:19.732 --> 00:26:22.308 spots of thyroid cancer,

- NOTE Confidence: 0.986218198235294
- $00:26:22.310 \longrightarrow 00:26:25.448$ which is a pretty well known
- NOTE Confidence: 0.986218198235294
- $00:26:25.448 \rightarrow 00:26:28.460$ 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
- $00:26:33.883 \rightarrow 00:26:36.668$ 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
- $00:26:41.510 \longrightarrow 00:26:43.422$ the lymph node spread
- NOTE Confidence: 0.986218198235294
- 00:26:43.422 --> 00:26:45.334 already outside the thyroid
- NOTE Confidence: 0.986218198235294
- $00:26:45.334 \rightarrow 00:26:48.077$ and then the discussion is OK,
- NOTE Confidence: 0.986218198235294
- $00:26:48.080 \rightarrow 00:26:51.352$ we should just go ahead and remove the
- NOTE Confidence: 0.986218198235294
- $00:26:51.352 \rightarrow 00:26:53.641$ entire thyroid and the compartments
- NOTE Confidence: 0.986218198235294
- $00:26:53.641 \rightarrow 00:26:56.860$ 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
- $00:26:59.845 \rightarrow 00:27:01.860$ is otherwise pretty healthy,
- NOTE Confidence: 0.984341302727273

 $00:27:01.860 \longrightarrow 00:27:05.230$ 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

 $00{:}27{:}13.110 \dashrightarrow 00{:}27{:}15.497$ 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

 $00{:}27{:}17{.}290 \dashrightarrow 00{:}27{:}19{.}080$ 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 --> 00:27:21.850 That's right.

00:27:24.780 --> 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

 $00{:}27{:}31.880 \dashrightarrow 00{:}27{:}32.880$ 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

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

 $00{:}27{:}38{.}900 \dashrightarrow 00{:}27{:}42{.}508$ Yes, so in the case of medullary thy roid

NOTE Confidence: 0.96064595

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

NOTE Confidence: 0.96064595

 $00{:}27{:}44.820$ --> $00{:}27{:}50.156$ but there is a genetic disposition and the NOTE Confidence: 0.96064595

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

NOTE Confidence: 0.96064595

 $00{:}27{:}53.520 \dashrightarrow 00{:}27{:}57.280$ We would be doing at minimum total thyroid

NOTE Confidence: 0.96064595

 $00{:}27{:}57{.}280 \dashrightarrow 00{:}28{:}00{.}541$ surgery and what's called central neck

NOTE Confidence: 0.96064595

 $00{:}28{:}00{.}541 \dashrightarrow 00{:}28{:}03{.}883$ lymph node dissection from the get go.

NOTE Confidence: 0.96064595

 $00{:}28{:}03{.}890 \dashrightarrow 00{:}28{:}06{.}620$ So the extent that we talk

NOTE Confidence: 0.96064595

 $00{:}28{:}06{.}620 \dashrightarrow 00{:}28{:}09{.}147$ about for different types of

NOTE Confidence: 0.96064595

 $00:28:09.147 \rightarrow 00:28:11.599$ thyroid cancer very drastically.

NOTE Confidence: 0.96064595

 $00{:}28{:}11.600 \dashrightarrow 00{:}28{:}14.197$ 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

 $00{:}28{:}15{.}310 \dashrightarrow 00{:}28{:}19{.}076$ if the patient is a surgical candidate,

NOTE Confidence: 0.96064595

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

NOTE Confidence: 0.96064595

 $00{:}28{:}22{.}713 \dashrightarrow 00{:}28{:}26{.}369$ 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

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

NOTE Confidence: 0.946921079333333

00:28:32.530 --> 00:28:34.833 Doctor Grace Lee is an assistant professor

NOTE Confidence: 0.946921079333333

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

NOTE Confidence: 0.946921079333333

00:28:37.530 - 00:28:39.190 If you have questions,

NOTE Confidence: 0.946921079333333

 $00{:}28{:}39{.}190 \dashrightarrow 00{:}28{:}41{.}265$ the addresses cancer answers at

NOTE Confidence: 0.946921079333333

 $00{:}28{:}41{.}270 \dashrightarrow 00{:}28{:}43{.}826$ yale.edu and past editions of the

NOTE Confidence: 0.946921079333333

 $00:28:43.826 \rightarrow 00:28:46.345$ program are available in audio and

NOTE Confidence: 0.946921079333333

 $00:28:46.345 \rightarrow 00:28:47.774$ written form at yalecancercenter.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 --> 00:28:52.338 learn more about the fight against

NOTE Confidence: 0.946921079333333

 $00{:}28{:}52{.}338 \dashrightarrow 00{:}28{:}53{.}933$ cancer here on Connecticut Public

NOTE Confidence: 0.946921079333333

 $00{:}28{:}53{.}984 \dashrightarrow 00{:}28{:}55{.}499$ radio funding for Yale Cancer

NOTE Confidence: 0.946921079333333

 $00{:}28{:}55{.}499 \dashrightarrow 00{:}28{:}57{.}014$ Answers is provided by Smilow

NOTE Confidence: 0.946921079333333

 $00{:}28{:}57{.}020 \dashrightarrow 00{:}29{:}00{.}000$ Cancer Hospital and Astra Zeneca.