## WEBVTT

00:00:00.160 --> 00:00:01.920 Funding for Yale Cancer Answers

NOTE Confidence: 0.9486805

 $00{:}00{:}01.920 \dashrightarrow 00{:}00{:}03.679$  is provided by Smilow Cancer

NOTE Confidence: 0.9486805

 $00:00:03.679 \longrightarrow 00:00:04.180$  Hospital.

NOTE Confidence: 0.9401133

00:00:06.240 --> 00:00:08.160 Welcome to Yale Cancer Answers

NOTE Confidence: 0.9401133

 $00:00:08.160 \longrightarrow 00:00:09.200$  with the director of the

NOTE Confidence: 0.9401133

 $00:00:09.200 \longrightarrow 00:00:10.880$  Yale Cancer Center, doctor Eric

NOTE Confidence: 0.9401133

 $00:00:10.880 \longrightarrow 00:00:11.380$  Winer.

NOTE Confidence: 0.9664466

00:00:11.920 --> 00:00:13.705 Yale Cancer Answers features

NOTE Confidence: 0.9664466

 $00:00:13.705 \longrightarrow 00:00:16.025$  conversations with oncologists and specialists

NOTE Confidence: 0.9664466

 $00:00:16.025 \longrightarrow 00:00:16.985$  who are on the forefront

NOTE Confidence: 0.9664466

 $00:00:16.985 \longrightarrow 00:00:18.025$  of the battle to fight

NOTE Confidence: 0.9664466

 $00:00:18.025 \longrightarrow 00:00:18.525$  cancer.

NOTE Confidence: 0.9509943

 $00{:}00{:}19.065 \dashrightarrow 00{:}00{:}20.364$  This week, it's a conversation

NOTE Confidence: 0.9509943

 $00:00:20.505 \longrightarrow 00:00:21.864$  about head and neck cancers

NOTE Confidence: 0.9509943

00:00:21.864 --> 00:00:23.864 with doctor Saral Mehra. Doctor

 $00:00:23.864 \longrightarrow 00:00:25.465$  Mehra is an associate professor

NOTE Confidence: 0.9509943

 $00:00:25.465 \longrightarrow 00:00:26.765$  of surgery and otolaryngology

NOTE Confidence: 0.9939377

 $00:00:27.305 \longrightarrow 00:00:28.345$  at the Yale School of

NOTE Confidence: 0.9939377

 $00:00:28.345 \longrightarrow 00:00:28.845$  Medicine.

NOTE Confidence: 0.9245674

 $00:00:29.340 \longrightarrow 00:00:30.400$  Here's doctor Winer.

 $00:00:32.540 \longrightarrow 00:00:34.060$  How is it that

NOTE Confidence: 0.9997911

 $00:00:34.460 \longrightarrow 00:00:36.000$  someone becomes interested

NOTE Confidence: 0.9876538

 $00:00:37.739 \longrightarrow 00:00:39.340$  in the field of ear,

NOTE Confidence: 0.9876538

 $00:00:39.340 \longrightarrow 00:00:40.479$  nose, and throat?

NOTE Confidence: 0.9633597

00:00:41.580 --> 00:00:43.200 And then more specifically,

NOTE Confidence: 0.9137215

 $00:00:44.635 \longrightarrow 00:00:45.675$  how is it that you

NOTE Confidence: 0.9137215

 $00{:}00{:}45.675 --> 00{:}00{:}46.414 \ \mathrm{got \ interested}$ 

NOTE Confidence: 0.9982383

 $00:00:47.354 \longrightarrow 00:00:49.754$  in cancers that arise in

NOTE Confidence: 0.9982383

 $00:00:49.754 \longrightarrow 00:00:51.594$  this region that is the

NOTE Confidence: 0.9982383

 $00:00:51.594 \longrightarrow 00:00:52.495$  head and neck?

NOTE Confidence: 0.99091524

 $00:00:53.434 \longrightarrow 00:00:54.315$  So when I was

00:00:54.315 --> 00:00:55.835 in medical school in New

NOTE Confidence: 0.99091524

00:00:55.835 --> 00:00:56.495 York City,

NOTE Confidence: 0.96900785

 $00:00:57.370 \longrightarrow 00:00:58.410 \text{ I didn't know what}$ 

NOTE Confidence: 0.96900785

00:00:58.410 --> 00:00:59.770 ENT was barely. I thought

NOTE Confidence: 0.96900785

 $00:00:59.770 \longrightarrow 00:01:01.370$  maybe they'd take some tonsils

NOTE Confidence: 0.96900785

00:01:01.370 --> 00:01:02.489 out, put some ear tubes

NOTE Confidence: 0.96900785

 $00:01:02.489 \longrightarrow 00:01:03.610$  in, but it had a

NOTE Confidence: 0.96900785

 $00:01:03.610 \longrightarrow 00:01:04.670$  mandatory rotation.

NOTE Confidence: 0.9979562

 $00:01:05.209 \longrightarrow 00:01:06.409$  And what I loved about

NOTE Confidence: 0.9979562

00:01:06.409 --> 00:01:06.909 ENT,

NOTE Confidence: 0.93418276

00:01:08.090 --> 00:01:09.150 right off the bat, was

 $00:01:10.490 \longrightarrow 00:01:11.610$  I realized that they did

NOTE Confidence: 0.919356

 $00:01:11.610 \longrightarrow 00:01:12.750$  surgeries that

NOTE Confidence: 0.9601511

00:01:13.225 --> 00:01:14.744 I did not imagine an

NOTE Confidence: 0.9601511

00:01:14.744 --> 00:01:17.145 ENT surgeon, in my idea

NOTE Confidence: 0.9601511

 $00:01:17.145 \longrightarrow 00:01:18.584$  of one, would do, but

 $00:01:18.584 \longrightarrow 00:01:20.284$  more importantly, the culture

NOTE Confidence: 0.8916619

 $00{:}01{:}20.825 \dashrightarrow 00{:}01{:}22.604$  of ENT surgeons and otolary ngologist

NOTE Confidence: 0.8916619

 $00:01:22.664 \longrightarrow 00:01:24.344$  just fit with me.

NOTE Confidence: 0.8916619

 $00:01:24.344 \longrightarrow 00:01:25.725$  They worked hard,

NOTE Confidence: 0.961935

00:01:26.584 --> 00:01:28.185 did some really delicate fine

NOTE Confidence: 0.961935

 $00:01:28.185 \longrightarrow 00:01:29.760$  work, and had a

NOTE Confidence: 0.961935

 $00:01:29.760 \longrightarrow 00:01:30.960$  good time doing it. And

NOTE Confidence: 0.961935

 $00:01:30.960 \longrightarrow 00:01:32.080$  I thought this is the

NOTE Confidence: 0.961935

 $00{:}01{:}32.080 \to 00{:}01{:}33.600$  type of culture and specialty

NOTE Confidence: 0.961935

 $00:01:33.600 \longrightarrow 00:01:34.580$  I wanna be in.

 $00:01:36.160 \longrightarrow 00:01:37.520$  That's great.

NOTE Confidence: 0.93285793

 $00:01:37.520 \longrightarrow 00:01:38.480$  And it's

NOTE Confidence: 0.93285793

 $00:01:38.480 \longrightarrow 00:01:39.620$  an area where

NOTE Confidence: 0.99524

 $00{:}01{:}40.080 \dashrightarrow 00{:}01{:}42.020$  the anatomy is really complicated.

NOTE Confidence: 0.99524

 $00:01:42.240 \longrightarrow 00:01:43.040$  I mean, there are all

NOTE Confidence: 0.99524

 $00:01:43.040 \longrightarrow 00:01:43.860$  these structures in

00:01:45.125 --> 00:01:47.704 our nose, mouth, throat,

 $00:01:48.884 \longrightarrow 00:01:50.664$  that just are all

NOTE Confidence: 0.96189

 $00:01:51.125 \longrightarrow 00:01:52.744$  very close to one another

NOTE Confidence: 0.96189

 $00:01:52.804 \longrightarrow 00:01:54.405$  and yet serve very different

NOTE Confidence: 0.96189

 $00:01:54.405 \longrightarrow 00:01:54.905$  functions.

NOTE Confidence: 0.98857456

 $00{:}01{:}55.685 \dashrightarrow 00{:}01{:}57.204$  Totally agree. And that's really

NOTE Confidence: 0.98857456

 $00:01:57.204 \longrightarrow 00:01:58.320$  what I enjoyed about it too.

NOTE Confidence: 0.98857456

00:01:58.320 --> 00:01:59.760 Working in the nose,

NOTE Confidence: 0.98857456

 $00:01:59.760 \longrightarrow 00:02:00.960$  you're right next to the

NOTE Confidence: 0.98857456

 $00:02:00.960 \longrightarrow 00:02:02.400$  eye and the brain.

NOTE Confidence: 0.98857456

 $00:02:02.400 \longrightarrow 00:02:03.440$  You're working in the neck,

NOTE Confidence: 0.98857456

 $00{:}02{:}03.440 \dashrightarrow 00{:}02{:}05.120$ you're near important cranial nerves

NOTE Confidence: 0.98857456

 $00:02:05.120 \longrightarrow 00:02:06.260$  that move the tongue

NOTE Confidence: 0.8081523

 $00{:}02{:}06.720 \dashrightarrow 00{:}02{:}07.200$  that

NOTE Confidence: 0.99526197

 $00:02:07.600 \longrightarrow 00:02:09.780$  help with speech and breathing.

NOTE Confidence: 0.9878623

 $00:02:10.480 \longrightarrow 00:02:12.614$  It's just really intricate fine

 $00:02:12.614 \longrightarrow 00:02:14.215$  anatomy and requires a lot

NOTE Confidence: 0.9878623

00:02:14.215 --> 00:02:15.974 of attention to detail, which,

NOTE Confidence: 0.9878623

00:02:15.974 --> 00:02:17.334 again, I thought really fit

NOTE Confidence: 0.9878623

 $00:02:17.334 \longrightarrow 00:02:18.555$  well with my personality.

NOTE Confidence: 0.9791594

 $00:02:19.415 \longrightarrow 00:02:21.174$  And when you made the

NOTE Confidence: 0.9791594

 $00:02:21.174 \longrightarrow 00:02:21.674$  decision to

 $00:02:23.014 \longrightarrow 00:02:25.254$  apply to residency programs in ENT

 $00:02:27.080 \longrightarrow 00:02:28.220$  ear, nose, and throat,

NOTE Confidence: 0.98038644

 $00:02:28.680 \longrightarrow 00:02:29.720$  did you know at that

NOTE Confidence: 0.98038644

 $00{:}02{:}29.720 \dashrightarrow 00{:}02{:}30.760$  time that you were interested

NOTE Confidence: 0.98038644

 $00:02:30.760 \longrightarrow 00:02:31.500$  in cancer?

NOTE Confidence: 0.99986696

 $00:02:32.840 \longrightarrow 00:02:33.340$  Definitely not.

 $00:02:34.440 \longrightarrow 00:02:36.380$  In fact, it was almost

NOTE Confidence: 0.9420255

 $00:02:36.440 \longrightarrow 00:02:37.639$  on my short list of

NOTE Confidence: 0.9420255

 $00:02:37.639 \longrightarrow 00:02:40.200$  subspecialties within ENT I would

NOTE Confidence: 0.9420255

 $00:02:40.200 \longrightarrow 00:02:41.175$  probably not do.

NOTE Confidence: 0.8833324

 $00:02:41.655 \longrightarrow 00:02:43.595$  There were long, complicated

 $00:02:43.895 \longrightarrow 00:02:44.395$  surgeries,

NOTE Confidence: 0.95580864

 $00{:}02{:}44.775 \dashrightarrow 00{:}02{:}46.475$  difficult patients, challenging,

NOTE Confidence: 0.99506974

 $00:02:48.455 \longrightarrow 00:02:49.355$  social issues,

NOTE Confidence: 0.9832573

 $00:02:50.375 \longrightarrow 00:02:52.395$  in addition to a disease

NOTE Confidence: 0.9832573

00:02:52.535 --> 00:02:53.355 that

NOTE Confidence: 0.95733213

 $00:02:54.730 \longrightarrow 00:02:56.090$  can be devastating to many

NOTE Confidence: 0.95733213

 $00:02:56.090 \longrightarrow 00:02:56.590$  patients.

00:02:58.250 --> 00:03:00.030 But during my journey in residency I

 $00:03:01.930 \longrightarrow 00:03:03.550$  saw head and neck cancer

NOTE Confidence: 0.971135

 $00:03:04.490 \longrightarrow 00:03:06.090$  done as a team and

NOTE Confidence: 0.971135

 $00:03:06.090 \longrightarrow 00:03:06.910$  done right.

NOTE Confidence: 0.957902

 $00:03:07.575 \longrightarrow 00:03:09.575$  And once I saw

NOTE Confidence: 0.957902

 $00:03:09.575 \longrightarrow 00:03:10.775$  the team approach to head

NOTE Confidence: 0.957902

 $00:03:10.775 \longrightarrow 00:03:11.995$  and neck cancer care,

NOTE Confidence: 0.9977046

 $00:03:12.455 \longrightarrow 00:03:13.815$  that's when I realized this

NOTE Confidence: 0.9977046

 $00:03:13.815 \longrightarrow 00:03:15.195$  was definitely the specialty

NOTE Confidence: 0.98031443

 $00:03:15.655 \longrightarrow 00:03:17.035$  for me.

00:03:19.980 --> 00:03:20.940 I played a

NOTE Confidence: 0.93927765

00:03:20.940 --> 00:03:22.400 lot of sports growing up,

NOTE Confidence: 0.93927765

 $00:03:22.460 \longrightarrow 00:03:23.760$  and I was

NOTE Confidence: 0.93927765

 $00:03:23.900 \longrightarrow 00:03:24.780$  a key member of

NOTE Confidence: 0.93927765

 $00:03:24.780 \longrightarrow 00:03:25.820$  a lot of different teams.

NOTE Confidence: 0.93927765

 $00:03:25.820 \longrightarrow 00:03:26.780$  I was a range guy,

NOTE Confidence: 0.93927765

 $00:03:26.780 \longrightarrow 00:03:27.740$  and that's what head neck

NOTE Confidence: 0.93927765

 $00:03:27.740 \longrightarrow 00:03:28.860$  cancer is. It's a

NOTE Confidence: 0.93927765

 $00:03:28.860 \longrightarrow 00:03:29.680$  team sport.

00:03:32.715 --> 00:03:34.655 People are very familiar with

NOTE Confidence: 0.98342407

 $00:03:34.875 \longrightarrow 00:03:36.955$  breast cancer and colon cancer

NOTE Confidence: 0.98342407

 $00:03:36.955 \longrightarrow 00:03:39.135$  and even pancreatic cancer and,

NOTE Confidence: 0.98438454

 $00:03:39.675 \longrightarrow 00:03:41.694$  you know, tumors like glioblastomas

NOTE Confidence: 0.959845

 $00{:}03{:}42.395 \to 00{:}03{:}43.915$  because some very famous people

NOTE Confidence: 0.959845

 $00:03:43.915 \longrightarrow 00:03:44.815$  have had them and

NOTE Confidence: 0.9988508

 $00:03:45.675 \longrightarrow 00:03:46.735$  are in the news.

 $00:03:47.460 \longrightarrow 00:03:48.740$  People know a little bit

NOTE Confidence: 0.99979764 00:03:48.740 --> 00:03:49.240 less NOTE Confidence: 0.9913555

 $00:03:49.860 \longrightarrow 00:03:51.240$  about head and neck cancers.

NOTE Confidence: 0.9913555

 $00:03:51.460 \longrightarrow 00:03:52.280$  I think that's

NOTE Confidence: 0.9606114

00:03:53.060 --> 00:03:53.560 partially

NOTE Confidence: 0.9929387

 $00:03:54.260 \longrightarrow 00:03:55.160$  in the past,

NOTE Confidence: 0.96779394

 $00:03:56.580 \longrightarrow 00:03:58.100$  because maybe there were fewer

NOTE Confidence: 0.96779394

 $00{:}03{:}58.100 \dashrightarrow 00{:}03{:}59.800$  famous people who had them.

NOTE Confidence: 0.9186099

 $00:04:00.740 \longrightarrow 00:04:02.040$  And, also, because

NOTE Confidence: 0.998008

 $00:04:02.525 \longrightarrow 00:04:03.425$  it's an area

NOTE Confidence: 0.9990509

 $00{:}04{:}03.725 --> 00{:}04{:}04.225 \text{ where}$ 

NOTE Confidence: 0.99757385

 $00:04:04.685 \longrightarrow 00:04:06.285$  there are many different types

NOTE Confidence: 0.99757385

 $00:04:06.285 \longrightarrow 00:04:07.025$  of cancers.

NOTE Confidence: 0.99523276

00:04:08.365 --> 00:04:09.485 Can you just talk a

NOTE Confidence: 0.99523276

00:04:09.485 --> 00:04:11.565 little bit about about, you

 $00:04:11.565 \longrightarrow 00:04:13.105$  know, all the different cancers

NOTE Confidence: 0.99523276

 $00:04:13.165 \longrightarrow 00:04:13.905$  that exist?

NOTE Confidence: 0.9887468

 $00:04:14.445 \longrightarrow 00:04:15.905$  Yeah. It's strange,

NOTE Confidence: 0.9473613

 $00:04:16.445 \longrightarrow 00:04:17.745$  in a number of ways,

NOTE Confidence: 0.96512693

 $00:04:19.550 \longrightarrow 00:04:20.910$  as related to other cancers.

NOTE Confidence: 0.96512693

00:04:20.910 --> 00:04:22.029 It's definitely not one of

NOTE Confidence: 0.96512693

 $00:04:22.029 \longrightarrow 00:04:23.389$  the big four,

NOTE Confidence: 0.96512693

 $00:04:23.389 \longrightarrow 00:04:24.750$  however you

NOTE Confidence: 0.96512693

 $00{:}04{:}24.750 \dashrightarrow 00{:}04{:}26.110$  wanna classify them. Head and

NOTE Confidence: 0.96512693

 $00:04:26.110 \longrightarrow 00:04:27.470$  neck cancers make up about

NOTE Confidence: 0.96512693

00:04:27.470 --> 00:04:29.089 four percent of all cancers,

 $00:04:30.990 \longrightarrow 00:04:31.875$  in the United States.

NOTE Confidence: 0.96664643

 $00{:}04{:}32.515 \dashrightarrow 00{:}04{:}34.675$  There's about sixty six thousand

NOTE Confidence: 0.96664643

 $00{:}04{:}34.675 \dashrightarrow 00{:}04{:}36.275$  new cases diagnosed each year.

NOTE Confidence: 0.96664643

 $00:04:36.275 \longrightarrow 00:04:36.995$  And you think about it,

NOTE Confidence: 0.96664643

 $00:04:36.995 \longrightarrow 00:04:38.435$  that's actually a pretty small

 $00:04:38.435 \longrightarrow 00:04:39.975$  number when you compare it

NOTE Confidence: 0.96664643

00:04:40.195 --> 00:04:41.395 to breast and prostate,

NOTE Confidence: 0.96664643

 $00:04:41.395 \longrightarrow 00:04:42.355$  the colon, the big ones

NOTE Confidence: 0.96664643

 $00:04:42.355 \longrightarrow 00:04:43.795$  that you mentioned. So it's

NOTE Confidence: 0.96664643

 $00:04:43.795 \longrightarrow 00:04:45.154$  relatively rare, and those are

NOTE Confidence: 0.96664643

 $00:04:45.154 \longrightarrow 00:04:46.710$  the numbers. And not only

NOTE Confidence: 0.96664643

00:04:46.710 --> 00:04:47.850 that, it's sort of,

NOTE Confidence: 0.98966986

00:04:48.310 --> 00:04:49.430 as you pointed out, it's

NOTE Confidence: 0.98966986

 $00{:}04{:}49.430 \dashrightarrow 00{:}04{:}50.630$  a weird term, head and

NOTE Confidence: 0.98966986

 $00:04:50.630 \longrightarrow 00:04:51.770$  neck cancers.

NOTE Confidence: 0.9671785

 $00{:}04{:}52.150 \dashrightarrow 00{:}04{:}54.470$  Really it comprises cancers

NOTE Confidence: 0.9671785

 $00:04:54.470 \longrightarrow 00:04:55.370$  in the mouth,

NOTE Confidence: 0.984751

 $00:04:56.390 \longrightarrow 00:04:57.210$  the throat,

NOTE Confidence: 0.92577124

 $00:04:59.795 \longrightarrow 00:05:00.455$  the nose,

NOTE Confidence: 0.9959766

 $00:05:00.995 \longrightarrow 00:05:02.375$  the salivary glands,

NOTE Confidence: 0.97219616

 $00:05:02.915 \longrightarrow 00:05:04.355$  and then in the neck,

 $00:05:04.355 \longrightarrow 00:05:05.495$  like thyroid

NOTE Confidence: 0.99190074

 $00:05:05.795 \longrightarrow 00:05:07.475$  or skin cancer. So it's

NOTE Confidence: 0.99190074

 $00:05:07.475 \longrightarrow 00:05:08.214$  this whole

NOTE Confidence: 0.995126

 $00:05:08.835 \longrightarrow 00:05:10.515$  milieu of different types of

NOTE Confidence: 0.995126

 $00{:}05{:}10.515 \dashrightarrow 00{:}05{:}12.195$  cancers. We'll have carcinomas. We'll

NOTE Confidence: 0.995126

 $00:05:12.195 \longrightarrow 00:05:14.270$  have sarcomas. We have even

NOTE Confidence: 0.995126

 $00:05:14.270 \longrightarrow 00:05:16.029$  diagnosed lymphomas in the head

NOTE Confidence: 0.995126

 $00:05:16.029 \longrightarrow 00:05:17.150$  and neck. So it is

NOTE Confidence: 0.995126

 $00:05:17.150 \longrightarrow 00:05:18.750$  a huge variety of cancers

NOTE Confidence: 0.995126

 $00:05:18.750 \longrightarrow 00:05:20.430$  that show up in this

NOTE Confidence: 0.995126

 $00:05:20.430 \longrightarrow 00:05:21.490$  part of the body.

 $00:05:25.789 \longrightarrow 00:05:26.529$  And of the

NOTE Confidence: 0.96767056

 $00:05:27.605 \longrightarrow 00:05:29.525$  sixty plus thousand people who

NOTE Confidence: 0.96767056

 $00{:}05{:}29.525 \dashrightarrow 00{:}05{:}31.065$  develop head and neck cancers,

NOTE Confidence: 0.96556383

 $00:05:32.485 \longrightarrow 00:05:34.165$  we've made progress, but how

NOTE Confidence: 0.96556383

 $00{:}05{:}34.165 \dashrightarrow 00{:}05{:}35.445$  many people are still dying

 $00:05:35.445 \longrightarrow 00:05:36.425$  from these cancers?

NOTE Confidence: 0.9705638

00:05:36.885 --> 00:05:37.785 Yeah. Unfortunately,

NOTE Confidence: 0.7859603

 $00:05:38.165 \longrightarrow 00:05:38.745$  it depends,

NOTE Confidence: 0.73557043

 $00:05:40.229 \longrightarrow 00:05:40.889$  or fortunately,

NOTE Confidence: 0.9721965

 $00:05:41.349 \longrightarrow 00:05:42.650$  when you catch the cancer.

NOTE Confidence: 0.9721965

 $00:05:42.870 \longrightarrow 00:05:44.069$  For advanced stage head and

NOTE Confidence: 0.9721965

00:05:44.069 --> 00:05:45.509 neck cancers, meaning cancers that

NOTE Confidence: 0.9721965

 $00:05:45.509 \longrightarrow 00:05:47.190$  have spread beyond just the

NOTE Confidence: 0.9721965

00:05:47.190 --> 00:05:48.250 primary site,

NOTE Confidence: 0.98350126

00:05:49.110 --> 00:05:50.970 survival rates are still, unfortunately,

NOTE Confidence: 0.98350126

 $00:05:51.110 \longrightarrow 00:05:52.949$  around fifty percent at five

NOTE Confidence: 0.98350126

 $00:05:52.949 \longrightarrow 00:05:53.449$  years.

NOTE Confidence: 0.99182194

00:05:55.294 --> 00:05:56.094 You can look at it

NOTE Confidence: 0.99182194

 $00:05:56.094 \longrightarrow 00:05:57.474$  two ways. We can cure

NOTE Confidence: 0.9625

 $00:05:57.775 \longrightarrow 00:05:58.974$  for long term half of

 $00:05:58.974 \longrightarrow 00:06:00.814$  the patients with stage three

NOTE Confidence: 0.9625

 $00:06:00.814 \longrightarrow 00:06:02.495$  and stage four cancer, which

NOTE Confidence: 0.9625

 $00:06:02.495 \longrightarrow 00:06:04.354$  is great, but it's also

NOTE Confidence: 0.9339876

 $00:06:05.534 \longrightarrow 00:06:06.974$  we can't cure about

NOTE Confidence: 0.9339876

 $00:06:06.974 \longrightarrow 00:06:08.110$  half of them. Now early

NOTE Confidence: 0.9339876

 $00:06:08.110 \longrightarrow 00:06:09.070$  stage cancer is one that

NOTE Confidence: 0.9339876

 $00:06:09.070 \longrightarrow 00:06:10.270$  when caught caught early, we

NOTE Confidence: 0.9339876

 $00:06:10.270 \longrightarrow 00:06:10.930$  can cure

NOTE Confidence: 0.9420682

 $00{:}06{:}12.029 \dashrightarrow 00{:}06{:}14.270$  eighty, ninety percent plus of

NOTE Confidence: 0.9420682

 $00:06:14.270 \longrightarrow 00:06:15.630$  those patients. So it really

NOTE Confidence: 0.9420682

 $00{:}06{:}15.630 \dashrightarrow 00{:}06{:}17.550$  counts. Cancers that haven't spread

NOTE Confidence: 0.9420682

 $00:06:17.550 \longrightarrow 00:06:19.810$  to lymph nodes, they're localized

NOTE Confidence: 0.96601087

 $00:06:20.190 \longrightarrow 00:06:21.550$  in a given organ,

NOTE Confidence: 0.9660108700:06:21.550 --> 00:06:22.050 like

NOTE Confidence: 0.9476683

 $00:06:22.350 \longrightarrow 00:06:24.464$  in the tonsil or on

NOTE Confidence: 0.9476683

 $00:06:24.464 \longrightarrow 00:06:26.324$  the tongue.

 $00:06:27.665 \longrightarrow 00:06:28.165$  Yeah.

NOTE Confidence: 0.9823805

 $00:06:28.785 \longrightarrow 00:06:29.285$  And,

NOTE Confidence: 0.9752845

 $00:06:30.384 \longrightarrow 00:06:31.425$  talk a little bit about

NOTE Confidence: 0.9752845

00:06:31.425 --> 00:06:32.785 the risk factors for head

NOTE Confidence: 0.9752845

 $00:06:32.785 \longrightarrow 00:06:34.164$  and neck cancers because

NOTE Confidence: 0.99377537

 $00:06:34.705 \longrightarrow 00:06:35.764$  there is

NOTE Confidence: 0.98274624

 $00:06:36.380 \longrightarrow 00:06:38.000$  quite a spectrum there,

NOTE Confidence: 0.966165

 $00:06:38.460 \longrightarrow 00:06:40.300$  and not everyone is at

NOTE Confidence: 0.966165

 $00{:}06{:}40.300 \dashrightarrow 00{:}06{:}41.419$  equal risk. There are some

NOTE Confidence: 0.966165

 $00:06:41.419 \longrightarrow 00:06:43.180$  people who are dramatically higher

NOTE Confidence: 0.966165

 $00:06:43.180 \longrightarrow 00:06:43.680$  risk.

NOTE Confidence: 0.99952364

 $00:06:44.540 \longrightarrow 00:06:45.839$  Absolutely. The

NOTE Confidence: 0.95953447

 $00{:}06{:}46.460 \dashrightarrow 00{:}06{:}47.820$  big three risk factors that

NOTE Confidence: 0.95953447

 $00:06:47.820 \longrightarrow 00:06:48.620$  we talk about in head

NOTE Confidence: 0.95953447

 $00:06:48.620 \longrightarrow 00:06:50.060$  and neck cancer are the

00:06:50.060 --> 00:06:51.805 ones that your listeners might

NOTE Confidence: 0.95953447

00:06:51.805 --> 00:06:53.004 be well aware of, to bacco

NOTE Confidence: 0.95953447

 $00:06:53.004 \longrightarrow 00:06:54.365$  and alcohol. That's all

NOTE Confidence: 0.95953447

 $00:06:54.365 \longrightarrow 00:06:55.964$  the cancers, you know, not

NOTE Confidence: 0.95953447

 $00:06:55.964 \longrightarrow 00:06:57.104$  all, but many cancers.

 $00{:}06{:}58.685 \dashrightarrow 00{:}07{:}00.845$  And they synergize, correct?

NOTE Confidence: 0.9615835

 $00:07:00.845 \longrightarrow 00:07:03.120$  Yeah. Totally. Tobacco is a

NOTE Confidence: 0.9615835

 $00:07:03.199 \longrightarrow 00:07:04.720$  biggest risk factor. Alcohol is

NOTE Confidence: 0.9615835

 $00:07:04.720 \longrightarrow 00:07:05.760$  a risk factor. But as

NOTE Confidence: 0.9615835

 $00{:}07{:}05.760 \dashrightarrow 00{:}07{:}06.880$  you point out, they synergize.

NOTE Confidence: 0.9615835

 $00:07:06.880 \longrightarrow 00:07:08.240$  When you combine the two,

NOTE Confidence: 0.9615835

 $00{:}07{:}08.240 --> 00{:}07{:}09.520$  the risk factor doesn't just

NOTE Confidence: 0.9615835

 $00:07:09.520 \longrightarrow 00:07:11.220$  double. It goes up

NOTE Confidence: 0.9808924

 $00{:}07{:}11.760 \dashrightarrow 00{:}07{:}13.280$  significantly more than just double,

NOTE Confidence: 0.9808924

00:07:13.280 --> 00:07:14.419 probably ten times.

NOTE Confidence: 0.9933108

 $00:07:15.120 \longrightarrow 00:07:15.919$  So those are the two

 $00:07:15.919 \longrightarrow 00:07:16.800$  big ones that we talk

NOTE Confidence: 0.9933108

 $00:07:16.800 \longrightarrow 00:07:18.075$  about. But the third big

NOTE Confidence: 0.9933108

 $00:07:18.235 \longrightarrow 00:07:19.355$  one that we don't talk

NOTE Confidence: 0.9933108

 $00:07:19.355 \longrightarrow 00:07:20.795$  about as much is the

NOTE Confidence: 0.9933108

 $00:07:20.795 \longrightarrow 00:07:21.935$  HPV virus.

NOTE Confidence: 0.98871756

 $00:07:23.355 \longrightarrow 00:07:24.635$  And how long have we

NOTE Confidence: 0.98871756

 $00:07:24.635 \longrightarrow 00:07:26.555$  appreciated that?

NOTE Confidence: 0.98871756

00:07:26.555 --> 00:07:27.595 When I was a

NOTE Confidence: 0.98871756

00:07:27.595 --> 00:07:28.495 medical student

NOTE Confidence: 0.97661775

 $00:07:28.955 \longrightarrow 00:07:30.075$  quite a number of years

NOTE Confidence: 0.97661775 00:07:30.075 --> 00:07:30.575 ago,

NOTE Confidence: 0.9982243

 $00:07:30.940 \longrightarrow 00:07:32.400$  we didn't really know about

NOTE Confidence: 0.9982243

 $00:07:32.460 \longrightarrow 00:07:32.960 \text{ HPV}$ 

NOTE Confidence: 0.98550516

 $00:07:33.820 \longrightarrow 00:07:34.780$  and head and neck

NOTE Confidence: 0.98550516

00:07:34.780 --> 00:07:35.280 cancers. 00:07:37.580 --> 00:07:38.160 I mean,

 $00:07:38.540 \longrightarrow 00:07:39.360$  in our field,

NOTE Confidence: 0.95359975

 $00:07:39.980 \longrightarrow 00:07:42.300$  the HPV associated neck cancers

NOTE Confidence: 0.95359975

 $00:07:42.300 \longrightarrow 00:07:43.580$  is almost a new disease.

NOTE Confidence: 0.95359975

 $00:07:43.580 \longrightarrow 00:07:44.320$  We're talking

NOTE Confidence: 0.99046904

 $00:07:44.965 \longrightarrow 00:07:46.725$  really identifying it and thinking

NOTE Confidence: 0.99046904

 $00:07:46.725 \longrightarrow 00:07:47.765$  about it maybe only in

NOTE Confidence: 0.99046904

 $00:07:47.765 \longrightarrow 00:07:48.425$  the last

NOTE Confidence: 0.9918569

 $00:07:48.805 \longrightarrow 00:07:50.485$  twenty to thirty years.

NOTE Confidence: 0.9918569

 $00:07:50.485 \longrightarrow 00:07:52.345$  And for a new disease,

NOTE Confidence: 0.9918569

 $00:07:52.485 \longrightarrow 00:07:53.765$  that is a very short

NOTE Confidence: 0.9918569

 $00:07:53.765 \longrightarrow 00:07:54.645$  amount of time in the

NOTE Confidence: 0.9918569

 $00:07:54.645 \longrightarrow 00:07:55.785$  grand scheme of things.

NOTE Confidence: 0.972709

 $00:07:56.165 \longrightarrow 00:07:57.205$  And this is the one

NOTE Confidence: 0.972709

 $00:07:57.205 \longrightarrow 00:07:58.645$  head neck cancer that is

NOTE Confidence: 0.972709

 $00:07:58.645 \longrightarrow 00:08:00.100$  on the rise. All of

NOTE Confidence: 0.972709

 $00{:}08{:}00.100 \dashrightarrow 00{:}08{:}02.020$  our smoking, drinking related cancers,

 $00:08:02.020 \longrightarrow 00:08:03.480$  the mouth cancers are

NOTE Confidence: 0.9993018

 $00:08:04.420 \longrightarrow 00:08:04.920$  decreasing

NOTE Confidence: 0.9833182

 $00:08:05.460 \longrightarrow 00:08:07.780$  but HPV associated head

NOTE Confidence: 0.9833182

 $00:08:07.780 \longrightarrow 00:08:08.980$  and neck cancers are really

NOTE Confidence: 0.9833182

 $00:08:08.980 \longrightarrow 00:08:09.940$  on the rise. We're talking

NOTE Confidence: 0.9833182

 $00:08:09.940 \longrightarrow 00:08:10.900$  probably more than a two

NOTE Confidence: 0.9833182

 $00:08:10.900 \longrightarrow 00:08:12.260$  hundred percent increase in the

NOTE Confidence: 0.9833182

 $00:08:12.260 \longrightarrow 00:08:13.395$  last twenty years.

NOTE Confidence: 0.99953663

 $00:08:13.935 \longrightarrow 00:08:15.615$  And is that because

NOTE Confidence: 0.99953663

 $00:08:15.615 \longrightarrow 00:08:16.435$  there's more

NOTE Confidence: 0.98544055

00:08:17.134 --> 00:08:17.634 HPV?

NOTE Confidence: 0.9880727

00:08:19.134 --> 00:08:20.895 That's a great question.

NOTE Confidence: 0.9880727

00:08:20.895 --> 00:08:21.775 I wish I had a great

NOTE Confidence: 0.9880727

00:08:21.775 --> 00:08:22.974 answer for you of exactly

NOTE Confidence: 0.9880727

 $00:08:22.974 \longrightarrow 00:08:24.094$  why it's on the rise.

 $00:08:24.094 \longrightarrow 00:08:24.895$  You know, it may be

NOTE Confidence: 0.9880727

 $00:08:24.895 \longrightarrow 00:08:25.395$  related

NOTE Confidence: 0.95169735

 $00:08:25.870 \longrightarrow 00:08:28.190$  to certain behaviors, or it

NOTE Confidence: 0.95169735

 $00:08:28.190 \longrightarrow 00:08:28.930$  may be,

NOTE Confidence: 0.9698656

 $00:08:29.550 \longrightarrow 00:08:30.930$  just related to

NOTE Confidence: 0.99472445

 $00{:}08{:}32.030 \dashrightarrow 00{:}08{:}33.710$  something in the environment that's

NOTE Confidence: 0.99472445

 $00:08:33.710 \longrightarrow 00:08:35.309$  impacting the ability to

NOTE Confidence: 0.99472445

 $00:08:35.309 \longrightarrow 00:08:36.590$  clear the HPV. The HPV

NOTE Confidence: 0.99472445

 $00:08:36.590 \longrightarrow 00:08:37.809$  virus has been here

NOTE Confidence: 0.99697995

 $00{:}08{:}38.355 \dashrightarrow 00{:}08{:}40.035$  for ever. Most people are exposed

NOTE Confidence: 0.99697995

 $00:08:40.035 \longrightarrow 00:08:41.075$  to it at some point

NOTE Confidence: 0.99697995

 $00:08:41.075 \longrightarrow 00:08:41.815$  in their life.

NOTE Confidence: 0.9816692

 $00:08:42.355 \longrightarrow 00:08:43.975$  The vast majority of people

NOTE Confidence: 0.9816692

 $00:08:44.115 \longrightarrow 00:08:45.075$  may be exposed to it,

NOTE Confidence: 0.9816692

 $00:08:45.075 \longrightarrow 00:08:46.675$  but clear it. It's this

NOTE Confidence: 0.9816692

 $00{:}08{:}46.675 \dashrightarrow 00{:}08{:}48.274$  small percentage of maybe two

 $00:08:48.274 \longrightarrow 00:08:49.575$  to five percent of people

NOTE Confidence: 0.99599105

 $00:08:50.035 \longrightarrow 00:08:51.829$  who don't clear the HPV

NOTE Confidence: 0.99599105

 $00:08:51.889 \longrightarrow 00:08:53.170$  virus. And within that, there's

NOTE Confidence: 0.99599105

 $00:08:53.170 \longrightarrow 00:08:54.290$  a very small percentage of

NOTE Confidence: 0.99599105

 $00:08:54.290 \longrightarrow 00:08:55.170$  people who go on and

NOTE Confidence: 0.99599105

 $00:08:55.170 \longrightarrow 00:08:56.850$  develop a cancer in the

NOTE Confidence: 0.99599105

 $00:08:56.850 \longrightarrow 00:08:58.790$  throat from the HPV virus.

NOTE Confidence: 0.99599105

 $00:08:58.850 \longrightarrow 00:09:00.850$  And this is, in

NOTE Confidence: 0.99599105

 $00:09:00.850 \longrightarrow 00:09:01.350$  theory,

NOTE Confidence: 0.9817215

 $00:09:02.449 \longrightarrow 00:09:03.809$  a set of cancers that

NOTE Confidence: 0.9817215

 $00:09:03.809 \longrightarrow 00:09:05.509$  could be prevented with vaccination.

NOTE Confidence: 0.9981164

00:09:06.325 --> 00:09:08.345 Absolutely. We have the HPV

NOTE Confidence: 0.8308927

00:09:08.804 --> 00:09:09.304 vaccine, it's been around

NOTE Confidence: 0.93604225

 $00:09:11.925 \longrightarrow 00:09:13.765$  and been used for girls

NOTE Confidence: 0.93604225

 $00:09:13.765 \longrightarrow 00:09:15.125$  and women for years, but

 $00:09:15.125 \longrightarrow 00:09:16.084$  now we think of

NOTE Confidence: 0.93604225

 $00{:}09{:}16.084 \dashrightarrow 00{:}09{:}17.765$  it as prevention for cervical

NOTE Confidence: 0.93604225

00:09:17.765 --> 00:09:19.809 cancer predominantly, but it

NOTE Confidence: 0.93604225

00:09:19.809 --> 00:09:21.090 also prevents these head and

NOTE Confidence: 0.93604225

 $00:09:21.090 \longrightarrow 00:09:21.750$  neck cancers.

NOTE Confidence: 0.96851

00:09:22.210 --> 00:09:23.490 Absolutely. And in fact, head

NOTE Confidence: 0.96851

 $00:09:23.490 \longrightarrow 00:09:24.690$  and neck cancers have now,

NOTE Confidence: 0.96851

 $00:09:24.690 \longrightarrow 00:09:25.570$  as of about two years

NOTE Confidence: 0.96851

 $00{:}09{:}25.570 \dashrightarrow 00{:}09{:}27.730$  ago, surpassed cervical cancer as

NOTE Confidence: 0.96851

 $00{:}09{:}27.730 \dashrightarrow 00{:}09{:}29.570$  the most common HPV associated

NOTE Confidence: 0.96851

 $00:09:29.570 \longrightarrow 00:09:31.135$  cancer in this country. And

NOTE Confidence: 0.96851

 $00:09:31.135 \longrightarrow 00:09:32.735$  we think that's probably due

NOTE Confidence: 0.96851

 $00:09:32.735 \longrightarrow 00:09:34.575$  to screening for cervical cancer

NOTE Confidence: 0.96851

 $00{:}09{:}34.575 \dashrightarrow 00{:}09{:}36.015$  and probably related in some

NOTE Confidence: 0.96851

 $00:09:36.015 \longrightarrow 00:09:37.135$  ways to the vaccine as

NOTE Confidence: 0.96851

 $00:09:37.135 \longrightarrow 00:09:37.635$  well.

 $00:09:38.175 \longrightarrow 00:09:38.675$  Wow.

NOTE Confidence: 0.9906616

00:09:39.375 --> 00:09:41.635 And these HPV cancers,

NOTE Confidence: 0.9938235

 $00:09:42.095 \longrightarrow 00:09:44.195$  or HPV associated cancers,

NOTE Confidence: 0.99949867

 $00:09:45.149 \longrightarrow 00:09:46.990$  do they typically arise in

NOTE Confidence: 0.99949867

 $00:09:46.990 \longrightarrow 00:09:48.210$  any particular

NOTE Confidence: 0.91341007

 $00:09:48.750 \longrightarrow 00:09:50.110$  part of the head and

NOTE Confidence: 0.91341007

 $00:09:50.110 \longrightarrow 00:09:50.850$  neck anatomy?

NOTE Confidence: 0.97020006

 $00:09:51.550 \longrightarrow 00:09:53.230$  Definitely. Almost all of them

NOTE Confidence: 0.97020006

00:09:53.230 --> 00:09:54.350 I say almost all, not

NOTE Confidence: 0.97020006

 $00:09:54.350 \longrightarrow 00:09:55.309$  all, but almost all of

NOTE Confidence: 0.97020006

 $00:09:55.309 \longrightarrow 00:09:57.089$  them are what we call

NOTE Confidence: 0.97020006

 $00:09:57.149 \longrightarrow 00:09:58.945$  back of throat cancer to the layman

 $00:10:00.385 \longrightarrow 00:10:02.225$  and laywoman. But it's basically

NOTE Confidence: 0.95466745

 $00:10:02.225 \longrightarrow 00:10:02.964$  the tonsils

NOTE Confidence: 0.9609789

 $00:10:03.425 \longrightarrow 00:10:04.225$  and the base of the

NOTE Confidence: 0.9609789

00:10:04.225 --> 00:10:04.725 tongue,

 $00{:}10{:}05.264 \dashrightarrow 00{:}10{:}06.545$  sometimes a soft palate and

NOTE Confidence: 0.95386386

 $00:10:06.545 \longrightarrow 00:10:07.345$  the back of the throat.

NOTE Confidence: 0.95386386

 $00:10:07.345 \longrightarrow 00:10:08.865$  But back of throat cancer, it's

 $00:10:10.225 \longrightarrow 00:10:11.505$  not mouth cancer per se.

NOTE Confidence: 0.95386386

00:10:11.505 --> 00:10:12.964 It's back of throat cancer.

NOTE Confidence: 0.9939299

 $00{:}10{:}13.850 --> 00{:}10{:}15.210$  And so if you see

NOTE Confidence: 0.9939299

 $00:10:15.210 \longrightarrow 00:10:16.350$  someone who,

NOTE Confidence: 0.99928844

 $00:10:16.970 \longrightarrow 00:10:17.710$  for example,

NOTE Confidence: 0.96597314

 $00{:}10{:}18.250 \dashrightarrow 00{:}10{:}20.350$  doesn't have a significant smoking

NOTE Confidence: 0.96597314

00:10:20.410 --> 00:10:22.890 and drinking history, they're fifty

NOTE Confidence: 0.96597314

 $00:10:22.890 \longrightarrow 00:10:24.750$  years old and they have

NOTE Confidence: 0.99964094

 $00:10:25.130 \longrightarrow 00:10:25.790$  a cancer

NOTE Confidence: 0.9829831

 $00:10:26.170 \longrightarrow 00:10:27.610$  that is in the back

NOTE Confidence: 0.9829831

 $00:10:27.610 \longrightarrow 00:10:28.510$  of the throat,

NOTE Confidence: 0.9915207

 $00:10:28.904 \longrightarrow 00:10:30.024$  how likely is it that

NOTE Confidence: 0.9915207

 $00{:}10{:}30.024 \dashrightarrow 00{:}10{:}32.045$  that's an HPV associated cancer?

00:10:32.985 --> 00:10:34.425 The short answer is very

NOTE Confidence: 0.9973261

 $00:10:34.425 \longrightarrow 00:10:34.925$  likely.

NOTE Confidence: 0.9945978

 $00:10:35.464 \longrightarrow 00:10:36.745$  Back of throat cancers now

NOTE Confidence: 0.9945978

00:10:36.745 --> 00:10:38.605 make up about seventy percent

NOTE Confidence: 0.9945978

 $00:10:38.904 \longrightarrow 00:10:41.144$  of all tonsil and base

NOTE Confidence: 0.9945978

 $00:10:41.144 \longrightarrow 00:10:42.985$  of tongue cancers, and that's

NOTE Confidence: 0.9945978

 $00:10:42.985 \longrightarrow 00:10:43.884$  on the rise.

00:10:47.210 --> 00:10:48.570 And my understanding is the

NOTE Confidence: 0.9952157

 $00{:}10{:}48.570 \dashrightarrow 00{:}10{:}50.010$  treatment differs a little bit

NOTE Confidence: 0.9952157

 $00:10:50.010 \longrightarrow 00:10:50.990$  too for these cancers.

NOTE Confidence: 0.96868825

 $00{:}10{:}51.450 \dashrightarrow 00{:}10{:}53.290$  We're still fleshing that out

NOTE Confidence: 0.96868825

 $00:10:53.290 \longrightarrow 00:10:55.210$  exactly, but, yes, the short

NOTE Confidence: 0.96868825

 $00:10:55.210 \longrightarrow 00:10:56.809$  answer is they do

NOTE Confidence: 0.96868825

 $00:10:56.809 \longrightarrow 00:10:57.929$  differ. And the reason is

NOTE Confidence: 0.96868825

 $00:10:57.929 \longrightarrow 00:10:59.684$  because the prognosis of these

NOTE Confidence: 0.96868825

00:10:59.684 --> 00:11:01.865 cancers is so much better

00:11:02.005 --> 00:11:03.705 than the non-HPV associated

NOTE Confidence: 0.96868825

00:11:03.765 --> 00:11:05.045 cancers in the exact same

NOTE Confidence: 0.96868825 00:11:05.045 --> 00:11:05.545 area. NOTE Confidence: 0.99428236

00:11:06.165 --> 00:11:07.365 And so what we're working

NOTE Confidence: 0.99428236

 $00:11:07.365 \longrightarrow 00:11:09.065$  on now throughout the country

NOTE Confidence: 0.9477776

 $00:11:09.525 \longrightarrow 00:11:11.465$  is on the de intensification of

 $00:11:13.020 \longrightarrow 00:11:14.300$  treatment. If we have a

NOTE Confidence: 0.9991315

 $00:11:14.300 \longrightarrow 00:11:15.200$  cancer with

NOTE Confidence: 0.9906473

 $00{:}11{:}15.660 --> 00{:}11{:}17.340 \ a \ eighty, \, ninety \, percent \, cure$ 

NOTE Confidence: 0.9906473 00:11:17.340 --> 00:11:17.840 rate,

NOTE Confidence: 0.99982464

 $00:11:18.220 \longrightarrow 00:11:19.360$  do we need to

NOTE Confidence: 0.9583337

 $00:11:20.300 \longrightarrow 00:11:21.580$  operate on them plus give

NOTE Confidence: 0.9583337

 $00:11:21.580 \longrightarrow 00:11:23.100$  them radiation, plus give them

NOTE Confidence: 0.9583337

 $00:11:23.100 \longrightarrow 00:11:24.780$  chemotherapy? And the answer to

NOTE Confidence: 0.9583337

 $00:11:24.780 \longrightarrow 00:11:26.195$  that is no.

NOTE Confidence: 0.9926723

 $00:11:26.495 \longrightarrow 00:11:27.455$  And that's what we're trying

 $00:11:27.455 \longrightarrow 00:11:28.495$  to figure out. How can

NOTE Confidence: 0.9926723

00:11:28.495 --> 00:11:29.795 we give less treatment

NOTE Confidence: 0.9995455

 $00:11:30.255 \longrightarrow 00:11:30.755$  without

NOTE Confidence: 0.99128366

00:11:32.095 --> 00:11:33.715 compromising cure rates?

NOTE Confidence: 0.98249745

00:11:34.335 --> 00:11:35.615 And, you know, we'll

NOTE Confidence: 0.98249745

 $00:11:35.615 \longrightarrow 00:11:36.815$  talk more about this in

NOTE Confidence: 0.98249745

 $00:11:36.815 \longrightarrow 00:11:38.575$  in the second half of

NOTE Confidence: 0.98249745

00:11:38.575 --> 00:11:40.195 our interview. But,

NOTE Confidence: 0.99911594

00:11:40.690 --> 00:11:41.430 of course,

NOTE Confidence: 0.975941

00:11:41.890 --> 00:11:43.970 often times, people are afraid of

NOTE Confidence: 0.975941

 $00:11:43.970 \longrightarrow 00:11:45.350$  backing off on treatment.

NOTE Confidence: 0.97673273

 $00:11:46.450 \longrightarrow 00:11:48.610$  But here, the consequences of

NOTE Confidence: 0.97673273

00:11:48.610 --> 00:11:49.990 treatment are often

NOTE Confidence: 0.9989964

 $00:11:50.930 \longrightarrow 00:11:53.110$  significant enough and severe enough

NOTE Confidence: 0.97606987 00:11:53.490 --> 00:11:53.990 that NOTE Confidence: 0.99204075  $00:11:54.434 \longrightarrow 00:11:55.715$  the whole reason to do

NOTE Confidence: 0.99204075

00:11:55.715 --> 00:11:57.475 this is, of course,

NOTE Confidence: 0.99204075

 $00:11:57.475 \longrightarrow 00:11:58.375$  to give people

NOTE Confidence: 0.997097

 $00:11:59.155 \longrightarrow 00:12:00.675$  an equally long life and

NOTE Confidence: 0.997097

 $00:12:00.675 \longrightarrow 00:12:02.215$  a better quality of life.

NOTE Confidence: 0.9761827

 $00{:}12{:}02.595 \dashrightarrow 00{:}12{:}04.035$  Absolutely. And this comes back

NOTE Confidence: 0.9761827

 $00:12:04.035 \longrightarrow 00:12:05.315$  to one of my reasons

NOTE Confidence: 0.9761827

 $00:12:05.315 \longrightarrow 00:12:06.755$  for going into ENT. It's

NOTE Confidence: 0.9761827

 $00:12:06.755 \longrightarrow 00:12:07.795$  a lot of this

NOTE Confidence: 0.9761827

00:12:07.795 --> 00:12:09.630 is about quality of life,

NOTE Confidence: 0.95251596

 $00:12:10.110 \longrightarrow 00:12:11.010$  and treatment

NOTE Confidence: 0.9736471

 $00:12:11.470 \longrightarrow 00:12:12.850$  for back of throat cancers

NOTE Confidence: 0.9736471

 $00:12:12.910 \longrightarrow 00:12:14.590$  can impact a lot of

NOTE Confidence: 0.9736471

00:12:14.590 --> 00:12:16.030 aspects of quality of life,

NOTE Confidence: 0.9736471

00:12:16.030 --> 00:12:17.570 most importantly, swallowing,

NOTE Confidence: 0.96813726

 $00:12:18.350 \longrightarrow 00:12:19.730$  but also speech,

00:12:21.309 --> 00:12:21.809 breathing,

NOTE Confidence: 0.926666

 $00:12:22.350 \longrightarrow 00:12:22.850$  appearance,

NOTE Confidence: 0.98965716

 $00:12:23.905 \longrightarrow 00:12:25.265$  a lot of consequences to

NOTE Confidence: 0.98965716

 $00{:}12{:}25.265 --> 00{:}12{:}25.765 \ {\rm treatment}.$ 

 $00:12:29.345 \longrightarrow 00:12:30.085$  Years ago,

NOTE Confidence: 0.96809703

 $00:12:31.345 \longrightarrow 00:12:32.545$  one would see people who

NOTE Confidence: 0.96809703

 $00:12:32.545 \longrightarrow 00:12:33.905$  had been treated for head

NOTE Confidence: 0.96809703

 $00:12:33.905 \longrightarrow 00:12:35.845$  and neck cancers, and oftentimes,

NOTE Confidence: 0.96243024

 $00:12:36.225 \longrightarrow 00:12:38.005$  they really couldn't speak.

NOTE Confidence: 0.9225609

00:12:39.059 --> 00:12:39.540 And,

NOTE Confidence: 0.9784772

 $00{:}12{:}40.020 \dashrightarrow 00{:}12{:}41.620$  of course, difficulty with swallowing

NOTE Confidence: 0.9784772

 $00:12:41.620 \longrightarrow 00:12:42.900$  is still something

NOTE Confidence: 0.9784772

 $00:12:42.900 \longrightarrow 00:12:43.960$  that people have.

NOTE Confidence: 0.97781605

 $00:12:44.420 \longrightarrow 00:12:45.960$  But the treatment

NOTE Confidence: 0.94327736

 $00:12:46.340 \longrightarrow 00:12:47.400$  for this particular

NOTE Confidence: 0.9506946

 $00:12:48.660 \longrightarrow 00:12:49.640$  type of cancer,

 $00:12:50.340 \longrightarrow 00:12:51.160$  at times,

 $00:12:54.045 \longrightarrow 00:12:55.165$  is maybe not worse than

NOTE Confidence: 0.94883937

00:12:55.165 --> 00:12:56.285 the cancer, but it's pretty bad.

NOTE Confidence: 0.94883937

00:12:56.285 --> 00:12:58.205 Yeah. At times, definitely,

NOTE Confidence: 0.94883937

 $00:12:58.205 \longrightarrow 00:12:59.565$  patients are probably saying that

NOTE Confidence: 0.94883937

 $00:12:59.565 \longrightarrow 00:13:00.765$  in the middle or towards

NOTE Confidence: 0.94883937

 $00:13:00.765 \longrightarrow 00:13:01.965$  the end of radiation, if

NOTE Confidence: 0.94883937

00:13:01.965 --> 00:13:02.925 they're getting chemo,

NOTE Confidence: 0.9671839

 $00:13:03.405 \longrightarrow 00:13:05.085$  you're absolutely right. They're definitely

NOTE Confidence: 0.9671839

 $00:13:05.085 \longrightarrow 00:13:06.360$  saying that.

NOTE Confidence: 0.9671839

 $00:13:06.440 \longrightarrow 00:13:07.559$  And we'll talk more

NOTE Confidence: 0.9671839

 $00:13:07.559 \longrightarrow 00:13:08.600$  about that when

NOTE Confidence: 0.9671839

 $00:13:08.600 \longrightarrow 00:13:09.480$  we talk about,

NOTE Confidence: 0.988716

 $00:13:09.880 \longrightarrow 00:13:11.579$  sort of the multidisciplinary

NOTE Confidence: 0.99820083

 $00:13:12.040 \longrightarrow 00:13:13.160$  nature of the work.

NOTE Confidence: 0.9772632

 $00:13:17.160 \longrightarrow 00:13:18.839$  So I think that at

00:13:18.839 --> 00:13:20.040 this point, maybe we should

NOTE Confidence: 0.9772632

 $00:13:20.040 \longrightarrow 00:13:21.615$  take a little break, and

NOTE Confidence: 0.9772632

 $00:13:21.615 \longrightarrow 00:13:22.635$  we'll be back.

NOTE Confidence: 0.96896785

00:13:23.095 --> 00:13:25.015 We'll pick up with our

NOTE Confidence: 0.96896785

 $00{:}13{:}25.015 \dashrightarrow 00{:}13{:}27.675$ guest, doctor Saral Mehra, associate

NOTE Confidence: 0.96896785

00:13:27.735 --> 00:13:29.755 professor of surgery at

NOTE Confidence: 0.9895835

00:13:30.455 --> 00:13:31.755 Yale School of Medicine,

NOTE Confidence: 0.9621561

 $00:13:33.015 \longrightarrow 00:13:34.375$  and chief of head and

NOTE Confidence: 0.9621561

 $00:13:34.375 \longrightarrow 00:13:35.035$  neck surgery.

NOTE Confidence: 0.99856395

00:13:35.470 --> 00:13:36.830 And we'll be talking more

NOTE Confidence: 0.99856395

 $00:13:36.830 \longrightarrow 00:13:37.309$  about this, I think, very

 $00:13:39.470 \longrightarrow 00:13:39.970$  interesting

NOTE Confidence: 0.96700096

 $00:13:40.750 \longrightarrow 00:13:41.790$  topic of head and neck

NOTE Confidence: 0.96700096

 $00:13:41.790 \longrightarrow 00:13:43.070$  cancers and all the progress

NOTE Confidence: 0.96700096

 $00:13:43.070 \longrightarrow 00:13:43.970$  that's been made.

NOTE Confidence: 0.95812416

 $00{:}13{:}44.510 \dashrightarrow 00{:}13{:}46.270$  Funding for Yale Cancer Answers

00:13:46.270 --> 00:13:48.210 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.99283344

 $00{:}13{:}48.625 {\:{\circ}{\circ}{\circ}}>00{:}13{:}50.885$  where their hematology program offers

NOTE Confidence: 0.99283344

 $00:13:50.945 \longrightarrow 00:13:51.445$  comprehensive

NOTE Confidence: 0.9684399

00:13:51.745 --> 00:13:53.425 diagnosis and treatment of blood

NOTE Confidence: 0.9684399

 $00{:}13{:}53.425 \rightarrow 00{:}13{:}55.985$  cancers, including lymphoma, leukemia, and

NOTE Confidence: 0.9684399

00:13:55.985 --> 00:13:56.485 myeloma.

NOTE Confidence: 0.7369361

00:13:57.184 --> 00:13:57.684 Smilowcancer

NOTE Confidence: 0.93036485

00:13:58.065 --> 00:13:59.445 hospital dot org.

NOTE Confidence: 0.9807237

 $00:14:01.360 \longrightarrow 00:14:03.600$  The American Cancer Society estimates

NOTE Confidence: 0.9807237

 $00{:}14{:}03.600 \dashrightarrow 00{:}14{:}05.040$  that over two hundred thousand

NOTE Confidence: 0.9807237

 $00:14:05.040 \longrightarrow 00:14:06.639$  cases of melanoma will be

NOTE Confidence: 0.9807237

 $00{:}14{:}06.639 \dashrightarrow 00{:}14{:}08.240$  diagnosed in the United States

NOTE Confidence: 0.9807237

 $00:14:08.240 \longrightarrow 00:14:09.679$  this year, with over a

NOTE Confidence: 0.9807237

 $00:14:09.679 \longrightarrow 00:14:11.779$  thousand patients in Connecticut alone.

NOTE Confidence: 0.9976018

00:14:12.160 --> 00:14:14.320 While melanoma accounts for only

 $00:14:14.320 \longrightarrow 00:14:15.985$  about one percent of skin

NOTE Confidence: 0.9976018

 $00:14:15.985 \longrightarrow 00:14:16.965$  cancer cases,

NOTE Confidence: 0.9854373

 $00:14:17.345 \longrightarrow 00:14:18.785$  it causes the most skin

NOTE Confidence: 0.9854373

 $00:14:18.785 \longrightarrow 00:14:20.885$  cancer deaths, but when detected

NOTE Confidence: 0.9854373

 $00:14:20.945 \longrightarrow 00:14:22.465$  early, it is easily treated

NOTE Confidence: 0.9854373

 $00:14:22.465 \longrightarrow 00:14:23.525$  and highly curable.

NOTE Confidence: 0.96959066

00:14:24.145 --> 00:14:25.985 Clinical trials are currently underway

NOTE Confidence: 0.96959066

 $00:14:25.985 \longrightarrow 00:14:28.545$  at federally designated comprehensive cancer

NOTE Confidence: 0.96959066

 $00:14:28.545 \longrightarrow 00:14:30.320$  centers such as Yale Cancer

NOTE Confidence: 0.96959066

 $00:14:30.320 \longrightarrow 00:14:32.000$  Center and at Smilow Cancer

NOTE Confidence: 0.96959066

 $00{:}14{:}32.000 --> 00{:}14{:}32.500 \ Hospital$ 

NOTE Confidence: 0.98362666

00:14:32.959 --> 00:14:34.639 to test innovative new treatments

NOTE Confidence: 0.98362666

 $00:14:34.639 \longrightarrow 00:14:35.380$  for melanoma.

NOTE Confidence: 0.97666425

00:14:36.000 --> 00:14:37.300 The goal of the Specialized

NOTE Confidence: 0.97666425

 $00{:}14{:}37.519 \dashrightarrow 00{:}14{:}39.519$  Programs of Research Excellence in

NOTE Confidence: 0.97666425

00:14:39.519 --> 00:14:41.199 Skin Cancer grant is to

00:14:41.199 --> 00:14:43.040 better understand the biology of

NOTE Confidence: 0.97666425

 $00:14:43.040 \longrightarrow 00:14:44.464$  skin cancer with a focus

NOTE Confidence: 0.97666425

 $00:14:44.464 \longrightarrow 00:14:46.464$  on discovering targets that will

NOTE Confidence: 0.97666425

00:14:46.464 --> 00:14:48.225 lead to improved diagnosis and

NOTE Confidence: 0.97666425

 $00:14:48.225 \longrightarrow 00:14:48.725$  treatment.

NOTE Confidence: 0.9839054

00:14:49.345 --> 00:14:51.024 More information is available at

NOTE Confidence: 0.9839054

 $00:14:51.024 \longrightarrow 00:14:52.805$  yale cancer center dot org.

NOTE Confidence: 0.9839054

 $00{:}14{:}53.024 \dashrightarrow 00{:}14{:}54.704$  You're listening to Connecticut Public

NOTE Confidence: 0.9839054

 $00:14:54.704 \longrightarrow 00:14:55.204$  Radio.

NOTE Confidence: 0.93218803

00:14:57.120 --> 00:14:58.720 This is Eric Winer again

NOTE Confidence: 0.93218803

00:14:58.720 --> 00:15:00.740 here with Yale Cancer Answers.

NOTE Confidence: 0.98266417

 $00:15:01.680 \longrightarrow 00:15:03.120$  And I'm speaking with my

NOTE Confidence: 0.98266417

 $00:15:03.120 \longrightarrow 00:15:05.280$  guest, doctor Saral Mehra, who

NOTE Confidence: 0.98266417

 $00:15:05.280 \longrightarrow 00:15:06.820$  is an expert in

NOTE Confidence: 0.9941446

 $00:15:07.200 \longrightarrow 00:15:08.960$  the treatment of head and

 $00:15:08.960 \longrightarrow 00:15:09.780$  neck cancers,

NOTE Confidence: 0.9684202

 $00{:}15{:}10.495 \dashrightarrow 00{:}15{:}12.254$  and specifically in the surgical

NOTE Confidence: 0.9684202

 $00{:}15{:}12.254 \dashrightarrow 00{:}15{:}14.035$  aspects of that treatment. But

NOTE Confidence: 0.9947214

 $00:15:14.574 \longrightarrow 00:15:16.095$  as a surgeon, you have

NOTE Confidence: 0.9947214

 $00:15:16.095 \longrightarrow 00:15:17.235$  to know a lot more

NOTE Confidence: 0.9947214

00:15:17.375 --> 00:15:18.995 than just the surgery

NOTE Confidence: 0.9394956

 $00:15:19.535 \longrightarrow 00:15:21.055$  because this is a type

NOTE Confidence: 0.9394956

 $00:15:21.055 \longrightarrow 00:15:21.714$  of cancer

NOTE Confidence: 0.97560424

 $00:15:22.430 \longrightarrow 00:15:24.670$  where you are dependent upon

NOTE Confidence: 0.97560424

 $00:15:24.670 \longrightarrow 00:15:26.529$  your colleagues in other disciplines.

NOTE Confidence: 0.9985286

 $00:15:27.470 \longrightarrow 00:15:29.070$  And maybe we can start

NOTE Confidence: 0.9985286

 $00:15:29.070 \longrightarrow 00:15:30.529$  off talking about that.

NOTE Confidence: 0.9812189

00:15:31.149 --> 00:15:32.510 Who else do you interact

NOTE Confidence: 0.9812189

 $00:15:32.510 \longrightarrow 00:15:33.870$  with? When a patient comes

NOTE Confidence: 0.9812189

 $00:15:33.870 \longrightarrow 00:15:34.690$  to see you

NOTE Confidence: 0.9948845

 $00:15:35.070 \longrightarrow 00:15:36.529$  and says, you know,

00:15:37.465 --> 00:15:38.905 doctor Mehra, can

NOTE Confidence: 0.9822229

 $00:15:38.905 \longrightarrow 00:15:40.125$  you take care of me?

NOTE Confidence: 0.9822229

 $00:15:40.265 \longrightarrow 00:15:42.105$  Your first answer is

NOTE Confidence: 0.9822229

 $00:15:42.105 \longrightarrow 00:15:43.065$  probably, well, I can take

NOTE Confidence: 0.9822229

 $00:15:43.065 \longrightarrow 00:15:43.865$  care of you, but I

NOTE Confidence: 0.9822229

 $00:15:43.865 \longrightarrow 00:15:44.665$  need the rest of my

NOTE Confidence: 0.9822229

00:15:44.665 --> 00:15:45.165 team.

NOTE Confidence: 0.99075055

00:15:46.345 --> 00:15:48.105 Absolutely. And this comes back

NOTE Confidence: 0.99075055

00:15:48.105 --> 00:15:48.985 to what we were talking

NOTE Confidence: 0.99075055

 $00{:}15{:}48.985 \dashrightarrow 00{:}15{:}50.025$  about earlier. The reason I

NOTE Confidence: 0.99075055

 $00:15:50.025 \longrightarrow 00:15:51.180$  got in to head and

NOTE Confidence: 0.99075055

 $00:15:51.180 \longrightarrow 00:15:52.700$  neck cancer is it really

NOTE Confidence: 0.99075055

 $00:15:52.700 \longrightarrow 00:15:54.080$  is a team sport.

NOTE Confidence: 0.99783987

 $00:15:55.020 \longrightarrow 00:15:56.140$  I think the team I

NOTE Confidence: 0.99783987

00:15:56.140 --> 00:15:56.940 like to break it down

 $00:15:56.940 \longrightarrow 00:15:58.080$  into a few different

NOTE Confidence: 0.75827813

 $00:15:58.940 \longrightarrow 00:15:59.440$  groups.

NOTE Confidence: 0.98948836

00:15:59.900 --> 00:16:01.820 Basically, you have your doctors,

NOTE Confidence: 0.98948836

 $00:16:01.820 \longrightarrow 00:16:03.020$  which are one part of

NOTE Confidence: 0.98948836

 $00:16:03.020 \longrightarrow 00:16:04.655$  your team, and that's a

NOTE Confidence: 0.98948836

 $00{:}16{:}04.655 \dashrightarrow 00{:}16{:}06.255$  surgical oncologist, which is what

NOTE Confidence: 0.98948836

 $00:16:06.255 \longrightarrow 00:16:07.875$  I do. But you absolutely

NOTE Confidence: 0.98948836

 $00:16:07.935 \longrightarrow 00:16:09.635$  need a medical oncologist

NOTE Confidence: 0.9994438

 $00:16:10.255 \longrightarrow 00:16:11.395$  and a radiation

NOTE Confidence: 0.99971884

 $00:16:11.855 \longrightarrow 00:16:12.355$  oncologist.

NOTE Confidence: 0.99496055

 $00{:}16{:}12.735 \to 00{:}16{:}14.595$  Now medical oncologists are responsible

NOTE Confidence: 0.99496055

 $00:16:14.735 \longrightarrow 00:16:16.575$  for talking with patients about

NOTE Confidence: 0.99496055

 $00:16:16.575 \longrightarrow 00:16:17.875$  the disease, the

NOTE Confidence: 0.6819842

 $00:16:18.255 \longrightarrow 00:16:18.995$  the process,

NOTE Confidence: 0.99843293

 $00:16:19.350 \longrightarrow 00:16:21.670$  and they administer chemotherapy and

NOTE Confidence: 0.99843293

 $00{:}16{:}21.670 --> 00{:}16{:}22.170 \ \mathrm{immunotherapy}$ 

 $00:16:22.550 \longrightarrow 00:16:23.910$  when it's given and help

NOTE Confidence: 0.9896716

 $00:16:23.910 \longrightarrow 00:16:24.630$  manage a lot of the

NOTE Confidence: 0.9896716

 $00:16:24.630 \longrightarrow 00:16:27.029$  medical aspects of care. They

NOTE Confidence: 0.9896716

 $00:16:27.029 \longrightarrow 00:16:27.930$  also get

NOTE Confidence: 0.999856

 $00:16:28.310 \longrightarrow 00:16:29.529$  extremely involved

NOTE Confidence: 0.9901624

 $00:16:29.910 \longrightarrow 00:16:32.470$  when the cancer may spread

NOTE Confidence: 0.9901624

 $00:16:32.470 \longrightarrow 00:16:33.845$  beyond the head and neck

NOTE Confidence: 0.9901624

 $00:16:33.845 \longrightarrow 00:16:34.885$  and into other parts of

NOTE Confidence: 0.9901624

 $00:16:34.885 \longrightarrow 00:16:36.964$  the body. That's when surgeons

NOTE Confidence: 0.9901624

 $00:16:36.964 \longrightarrow 00:16:38.964$  and radiation oncologists are not

NOTE Confidence: 0.9901624

 $00:16:38.964 \longrightarrow 00:16:40.565$  the answer. And our colleagues

NOTE Confidence: 0.9901624

 $00:16:40.565 \longrightarrow 00:16:42.325$  in medical oncology, that's when

NOTE Confidence: 0.9901624

 $00:16:42.325 \longrightarrow 00:16:43.704$  they really step up.

NOTE Confidence: 0.9925236

 $00:16:44.005 \longrightarrow 00:16:45.925$  And then radiation oncologists, we

NOTE Confidence: 0.9925236

00:16:45.925 --> 00:16:47.204 work hand in hand with

 $00:16:47.204 \longrightarrow 00:16:48.345$  radiation doctors

NOTE Confidence: 0.98630637

00:16:49.610 --> 00:16:51.690 to identify and personalize the

NOTE Confidence: 0.98630637

 $00{:}16{:}51.690 \dashrightarrow 00{:}16{:}53.370$  treatment for patients. Like I

NOTE Confidence: 0.98630637

 $00:16:53.370 \longrightarrow 00:16:54.570$  was saying before, we wanna

NOTE Confidence: 0.98630637

00:16:54.570 --> 00:16:56.090 minimize the amount of treatment

NOTE Confidence: 0.98630637

 $00:16:56.090 \longrightarrow 00:16:57.550$  we give these patients, specifically

NOTE Confidence: 0.98630637

 $00{:}16{:}57.690 \dashrightarrow 00{:}17{:}00.010~\mathrm{HPV}$  associated cancers, and that's

NOTE Confidence: 0.98630637

 $00:17:00.010 \longrightarrow 00:17:01.305$  where we'd all three of

NOTE Confidence: 0.98630637

 $00:17:01.305 \longrightarrow 00:17:02.425$  us have to talk about

NOTE Confidence: 0.98630637

 $00{:}17{:}02.425 \dashrightarrow 00{:}17{:}04.185$  the optimal treatment for the

NOTE Confidence: 0.98630637

 $00:17:04.185 \longrightarrow 00:17:05.484$  patient in front of us.

NOTE Confidence: 0.98630637

 $00:17:05.705 \longrightarrow 00:17:06.925$  And sometimes,

NOTE Confidence: 0.9874022

 $00:17:07.385 \longrightarrow 00:17:09.725$  particularly with surgery and radiation

NOTE Confidence: 0.9874022

 $00:17:09.785 \longrightarrow 00:17:11.565$  oncology, there's a trade off

NOTE Confidence: 0.9874022

 $00:17:11.785 \longrightarrow 00:17:13.859$  in terms of more surgery,

NOTE Confidence: 0.9874022

00:17:13.859 --> 00:17:16.100 less radiation, more radiation, less

00:17:16.100 --> 00:17:17.240 surgery.

NOTE Confidence: 0.9835519

 $00:17:17.940 \longrightarrow 00:17:19.940$  Absolutely.

NOTE Confidence: 0.9835519

 $00:17:19.940 \longrightarrow 00:17:21.380$  We have shifting

NOTE Confidence: 0.9835519

 $00:17:21.380 \longrightarrow 00:17:21.880$  paradigms

NOTE Confidence: 0.95292735

 $00:17:22.260 \longrightarrow 00:17:23.640$  in this, and new information's

NOTE Confidence: 0.95292735

 $00:17:23.700 \longrightarrow 00:17:24.900$  coming out all the time.

 $00:17:26.585 \longrightarrow 00:17:28.025$  But there's a recent trial that

NOTE Confidence: 0.93508977

 $00:17:28.025 \longrightarrow 00:17:29.225$  showed that if we can

NOTE Confidence: 0.93508977

 $00:17:29.225 \longrightarrow 00:17:31.005$  operate, remove all the cancer

NOTE Confidence: 0.93508977

 $00:17:31.145 \longrightarrow 00:17:33.385$  for a oropharynx or tonsillar

NOTE Confidence: 0.93508977

00:17:33.385 --> 00:17:34.525 based at tongue cancer,

NOTE Confidence: 0.99876994

 $00:17:34.825 \longrightarrow 00:17:36.345$  we can actually lower the

NOTE Confidence: 0.99876994

 $00:17:36.345 \longrightarrow 00:17:38.265$  dose of radiation by more

NOTE Confidence: 0.99876994

 $00:17:38.265 \longrightarrow 00:17:39.005$  than ten

NOTE Confidence: 0.9884996

00:17:39.570 --> 00:17:41.250 percent, almost twenty percent, and

NOTE Confidence: 0.9884996

 $00:17:41.250 \longrightarrow 00:17:43.350$  get the exact same cancer

 $00:17:43.409 \longrightarrow 00:17:43.909$  outcomes

NOTE Confidence: 0.9986456

 $00:17:44.210 \longrightarrow 00:17:45.730$  with a better quality of

NOTE Confidence: 0.9986456

 $00:17:45.730 \longrightarrow 00:17:46.690$  life. So these are the

NOTE Confidence: 0.9986456

 $00:17:46.690 \longrightarrow 00:17:47.190$  boundaries

NOTE Confidence: 0.99952394

 $00:17:47.490 \longrightarrow 00:17:48.789$  we're pushing in the field.

NOTE Confidence: 0.99003303

 $00:17:49.169 \longrightarrow 00:17:50.130$  And, you know, ten or

NOTE Confidence: 0.99003303

 $00:17:50.130 \longrightarrow 00:17:51.650$  twenty percent may not sound

NOTE Confidence: 0.99003303

 $00:17:51.650 \longrightarrow 00:17:53.250$  like that much to people

NOTE Confidence: 0.99003303

 $00:17:53.250 \longrightarrow 00:17:53.750$  listening,

NOTE Confidence: 0.9991968

 $00:17:54.405 \longrightarrow 00:17:54.905$  but

NOTE Confidence: 0.99961334

 $00:17:55.205 \longrightarrow 00:17:56.345$  the side effects

NOTE Confidence: 0.9746749

 $00:17:56.885 \longrightarrow 00:17:57.385$  increase,

NOTE Confidence: 0.9812731

 $00:17:58.805 \longrightarrow 00:18:00.645$  not in a linear

NOTE Confidence: 0.9812731

00:18:00.645 --> 00:18:01.925 fashion as you increase the

NOTE Confidence: 0.9812731

 $00:18:01.925 \longrightarrow 00:18:02.905$  dose of radiation.

00:18:03.605 --> 00:18:04.105 So

NOTE Confidence: 0.97302294

 $00:18:04.405 \longrightarrow 00:18:06.105$  that by eliminating

NOTE Confidence: 0.9992681

 $00:18:06.405 \longrightarrow 00:18:07.685$  twenty percent of the dose,

NOTE Confidence: 0.9992681

 $00:18:07.685 \longrightarrow 00:18:08.585$  you may eliminate

NOTE Confidence: 0.9962124

 $00:18:09.190 \longrightarrow 00:18:10.869$  fifty percent or eighty percent

NOTE Confidence: 0.9962124

 $00:18:10.869 \longrightarrow 00:18:11.850$  of the side effects.

NOTE Confidence: 0.98013264

00:18:12.710 --> 00:18:13.830 That's what we're

NOTE Confidence: 0.98013264

00:18:13.830 --> 00:18:15.190 trying trying to do. Any

NOTE Confidence: 0.98013264

 $00:18:15.190 \longrightarrow 00:18:16.390$  major cancer center in the

NOTE Confidence: 0.98013264

 $00:18:16.390 \longrightarrow 00:18:17.350$  country who sees a lot

NOTE Confidence: 0.98013264

 $00:18:17.350 \longrightarrow 00:18:17.930$  of this

NOTE Confidence: 0.98519063

 $00:18:18.390 \longrightarrow 00:18:19.050$  is exactly

NOTE Confidence: 0.94303167

 $00:18:19.910 \longrightarrow 00:18:20.869$  doing that. So you have

NOTE Confidence: 0.94303167

 $00:18:20.869 \longrightarrow 00:18:22.634$  the doctors and probably

NOTE Confidence: 0.94303167

00:18:22.634 --> 00:18:24.075 worth mentioning that in addition

NOTE Confidence: 0.94303167

 $00{:}18{:}24.075 \dashrightarrow 00{:}18{:}25.434$  to the surgical oncologist and

00:18:25.434 --> 00:18:27.215 radiation oncologist and medical oncologist,

NOTE Confidence: 0.9935735

00:18:27.674 --> 00:18:29.434 you know, supporting all of

NOTE Confidence: 0.9935735

 $00:18:29.434 \longrightarrow 00:18:30.815$  us are the pathologists

NOTE Confidence: 0.97342426

 $00:18:31.195 \longrightarrow 00:18:31.934$  and the

NOTE Confidence: 0.99473876

 $00:18:32.234 \longrightarrow 00:18:32.734$  radiologists

NOTE Confidence: 0.98098177

 $00:18:33.115 \longrightarrow 00:18:34.715$  who we can't really live

NOTE Confidence: 0.98098177

 $00:18:34.715 \longrightarrow 00:18:35.215$  without.

NOTE Confidence: 0.98799324

 $00:18:35.570 \longrightarrow 00:18:37.510$  But then you have

NOTE Confidence: 0.98799324

 $00:18:37.650 \longrightarrow 00:18:38.790$  all the other people.

NOTE Confidence: 0.9790254

 $00:18:39.730 \longrightarrow 00:18:41.250$  And who else do you

NOTE Confidence: 0.9790254

00:18:41.250 --> 00:18:42.470 rely on? Because,

NOTE Confidence: 0.9703642

 $00:18:42.770 \longrightarrow 00:18:43.429$  you know,

NOTE Confidence: 0.99945736

 $00:18:44.050 \longrightarrow 00:18:45.109$  patients may

NOTE Confidence: 0.9783403

 $00:18:45.410 \longrightarrow 00:18:47.010$  come to a center because

NOTE Confidence: 0.9783403

 $00:18:47.010 \longrightarrow 00:18:48.630$  they have a doctor's name.

 $00:18:49.015 \longrightarrow 00:18:49.835$  But in the

NOTE Confidence: 0.9986534

 $00:18:50.215 \longrightarrow 00:18:51.515$  end, a lot of the

NOTE Confidence: 0.9951479

 $00:18:52.215 \longrightarrow 00:18:53.355$  care they receive is

 $00:18:56.375 \longrightarrow 00:18:57.815$  as a result of all

NOTE Confidence: 0.97524947

 $00:18:57.815 \longrightarrow 00:18:59.895$  the efforts that non

NOTE Confidence: 0.97524947

 $00:18:59.895 \longrightarrow 00:19:01.415$  doctors put into the care

NOTE Confidence: 0.97524947

 $00:19:01.415 \longrightarrow 00:19:02.075$  of patients.

NOTE Confidence: 0.95772386

 $00:19:03.310 \longrightarrow 00:19:05.090$  Definitely. I think this cancer

NOTE Confidence: 0.95772386

 $00:19:05.230 \longrightarrow 00:19:06.450$  may be more than others.

NOTE Confidence: 0.95772386

 $00:19:06.590 \longrightarrow 00:19:07.710$  I'm a little biased. It

NOTE Confidence: 0.95772386

 $00:19:07.710 \longrightarrow 00:19:09.490$  requires a lot of therapists.

NOTE Confidence: 0.95772386

 $00:19:09.710 \longrightarrow 00:19:11.869$  We're talking

NOTE Confidence: 0.95772386

 $00:19:11.869 \longrightarrow 00:19:12.369$  speech,

NOTE Confidence: 0.98832047

 $00:19:12.670 \longrightarrow 00:19:14.590$  language, and swallow therapists. We're

NOTE Confidence: 0.98832047

00:19:14.590 --> 00:19:15.810 talking lymphedema

NOTE Confidence: 0.8822577

 $00:19:16.350 \longrightarrow 00:19:17.330$  physical therapists.

00:19:18.345 --> 00:19:19.085 We're talking

NOTE Confidence: 0.75712395

 $00:19:19.385 \longrightarrow 00:19:19.885$  about

NOTE Confidence: 0.97628385

 $00{:}19{:}21.065 \dashrightarrow 00{:}19{:}23.244$  social workers and mental therapists.

NOTE Confidence: 0.98360276

 $00:19:23.785 \longrightarrow 00:19:24.285$  Some

NOTE Confidence: 0.90302

 $00:19:24.665 \longrightarrow 00:19:26.425$  not talked about often, but

NOTE Confidence: 0.90302

 $00:19:26.425 \longrightarrow 00:19:27.484$  head and neck cancer

NOTE Confidence: 0.98800266

 $00:19:28.105 \longrightarrow 00:19:29.545$  patients who've recovered from that

NOTE Confidence: 0.98800266

 $00:19:29.545 \longrightarrow 00:19:30.665$  actually have some of the

NOTE Confidence: 0.98800266

 $00{:}19{:}30.665 \dashrightarrow 00{:}19{:}32.125$  highest rates of depression

NOTE Confidence: 0.90052617

 $00:19:32.840 \longrightarrow 00:19:33.900$  following treatment.

NOTE Confidence: 0.9972984

 $00{:}19{:}34.680 \to 00{:}19{:}35.180$  And

NOTE Confidence: 0.9933402

 $00:19:35.720 \longrightarrow 00:19:37.660$  we need psychiatrists, psychologists

NOTE Confidence: 0.9076976

 $00:19:38.040 \longrightarrow 00:19:39.720$  in the survivorship aspect of

NOTE Confidence: 0.9076976

 $00:19:39.720 \longrightarrow 00:19:41.400$  this. So really a lot

NOTE Confidence: 0.9076976

 $00:19:41.400 \longrightarrow 00:19:42.220$  of key

NOTE Confidence: 0.93482345

 $00:19:42.600 \longrightarrow 00:19:44.440$  we call them ancillary, but

 $00:19:44.440 \longrightarrow 00:19:46.280$  really they're absolutely critical to

NOTE Confidence: 0.93482345

 $00:19:46.280 \longrightarrow 00:19:47.395$  the quality of life and

NOTE Confidence: 0.93482345

 $00:19:47.395 \longrightarrow 00:19:47.895$  rehabilitation

NOTE Confidence: 0.9984206

 $00:19:48.355 \longrightarrow 00:19:49.015$  of patients.

NOTE Confidence: 0.97880363

 $00:19:49.635 \longrightarrow 00:19:50.775$  And then there are the

NOTE Confidence: 0.97880363

 $00:19:50.835 \longrightarrow 00:19:52.434$  nurses, of course, who are,

NOTE Confidence: 0.97880363

00:19:52.434 --> 00:19:53.715 you know, front and center

NOTE Confidence: 0.97880363

 $00:19:53.715 \longrightarrow 00:19:54.615$  in that group.

NOTE Confidence: 0.9995316

 $00:19:54.994 \longrightarrow 00:19:56.775$  Absolutely. We're dealing with tracheotomy

NOTE Confidence: 0.97587264

 $00:19:57.155 \longrightarrow 00:19:59.554$  tubes sometimes, feeding tubes. And

NOTE Confidence: 0.97587264

 $00:19:59.554 \longrightarrow 00:20:00.835$  when there's a problem, who

NOTE Confidence: 0.97587264

 $00:20:00.835 \longrightarrow 00:20:01.734$  do I call?

NOTE Confidence: 0.99366474

 $00{:}20{:}02.109 \dashrightarrow 00{:}20{:}04.029$  The nurses to help manage

NOTE Confidence: 0.99366474

 $00:20:04.029 \longrightarrow 00:20:04.529$  them,

NOTE Confidence: 0.97282946

 $00:20:04.830 \longrightarrow 00:20:06.609$  counsel patients, teach patients.

 $00:20:08.830 \longrightarrow 00:20:10.029$  And

 $00:20:10.590 \longrightarrow 00:20:12.109$  it's oftentimes a hard course

NOTE Confidence: 0.9824079

00:20:12.109 --> 00:20:13.389 of treatment to go through

NOTE Confidence: 0.9824079

 $00:20:13.389 \longrightarrow 00:20:13.889$  getting

NOTE Confidence: 0.9982765

 $00:20:14.804 \longrightarrow 00:20:15.304$  chemotherapy

NOTE Confidence: 0.96687335

 $00:20:16.404 \longrightarrow 00:20:17.784$  and maybe radiation

NOTE Confidence: 0.9929906

 $00:20:18.325 \longrightarrow 00:20:19.144$  and surgery in

 $00:20:20.565 \longrightarrow 00:20:21.705$  varying orders.

00:20:25.365 --> 00:20:26.910 And oftentimes, you have to take

NOTE Confidence: 0.988325

 $00:20:26.990 \longrightarrow 00:20:28.109$  special steps to make sure

NOTE Confidence: 0.988325

 $00:20:28.109 \longrightarrow 00:20:28.990$  that people are gonna get

NOTE Confidence: 0.988325

 $00:20:28.990 \longrightarrow 00:20:29.950$  through this. So you have

NOTE Confidence: 0.988325

 $00:20:29.950 \longrightarrow 00:20:31.310$  to worry about how people

NOTE Confidence: 0.988325

 $00:20:31.310 \longrightarrow 00:20:32.609$  are gonna nourish themselves,

NOTE Confidence: 0.9982345 00:20:34.030 --> 00:20:34.530 and

NOTE Confidence: 0.9928957

 $00:20:34.830 \longrightarrow 00:20:36.750$  how they're gonna remain hydrated

NOTE Confidence: 0.9928957

00:20:36.750 --> 00:20:38.530 if they're having trouble swallowing.

 $00:20:38.750 \longrightarrow 00:20:40.109$  So these are the things

NOTE Confidence: 0.9928957

 $00{:}20{:}40.109 \dashrightarrow 00{:}20{:}41.630$  you consider as well, I'd assume.

 $00:20:43.445 \longrightarrow 00:20:44.885$  Absolutely. And I think not

NOTE Confidence: 0.99294174

00:20:44.885 --> 00:20:46.085 only are they getting through

NOTE Confidence: 0.99294174

 $00:20:46.085 \longrightarrow 00:20:47.125$  a lot of different types

NOTE Confidence: 0.99294174

 $00:20:47.125 \longrightarrow 00:20:48.565$  of treatment, it's in a

NOTE Confidence: 0.99294174

00:20:48.565 --> 00:20:50.825 relatively short amount of time.

NOTE Confidence: 0.9970013

 $00:20:51.445 \longrightarrow 00:20:53.285$  Ideally, in an ideal world,

NOTE Confidence: 0.9970013

 $00:20:53.285 \longrightarrow 00:20:54.805$  if we're gonna operate and

NOTE Confidence: 0.9970013

 $00:20:54.805 \longrightarrow 00:20:56.505$  give radiation or chemo,

NOTE Confidence: 0.9913909

 $00:20:57.400 \longrightarrow 00:20:58.520$  we like to get that

NOTE Confidence: 0.9913909

 $00:20:58.520 \longrightarrow 00:21:00.600$  radiation chemo started within about

NOTE Confidence: 0.9913909

 $00:21:00.600 \longrightarrow 00:21:01.420$  six weeks

NOTE Confidence: 0.9995995

 $00{:}21{:}01.800 \dashrightarrow 00{:}21{:}03.480$  of recovering from what's often

NOTE Confidence: 0.9995995

 $00:21:03.480 \longrightarrow 00:21:04.140$  a major

NOTE Confidence: 0.9795819

 $00:21:04.600 \longrightarrow 00:21:06.440$  surgery. And that's different than

 $00:21:06.440 \longrightarrow 00:21:07.800$  other cancers where you can

NOTE Confidence: 0.9795819

 $00:21:07.880 \longrightarrow 00:21:08.680$  you have a little bit

NOTE Confidence: 0.9795819

 $00:21:08.680 \longrightarrow 00:21:09.960$  more time to start the

NOTE Confidence: 0.9795819

 $00:21:09.960 \longrightarrow 00:21:11.744$  chemo or the immunotherapy or

NOTE Confidence: 0.9795819

 $00:21:11.744 \longrightarrow 00:21:13.185$  the systemic therapy or the

NOTE Confidence: 0.9795819

 $00:21:13.185 \longrightarrow 00:21:13.685$  radiation.

NOTE Confidence: 0.99363106

 $00:21:15.105 \longrightarrow 00:21:16.145$  And so a big part

NOTE Confidence: 0.99363106

 $00:21:16.145 \longrightarrow 00:21:17.345$  of that is getting them

NOTE Confidence: 0.99363106

00:21:17.345 --> 00:21:17.925 through it,

NOTE Confidence: 0.9974287

 $00:21:18.465 \longrightarrow 00:21:19.925$  having them not give up,

NOTE Confidence: 0.9991353

 $00:21:20.625 \longrightarrow 00:21:21.685$  making sure they're

NOTE Confidence: 0.93627435

00:21:23.920 --> 00:21:25.060 taking enough nutrition,

NOTE Confidence: 0.9908637

 $00:21:26.000 \longrightarrow 00:21:28.080$  and optimizing their swallowing function

NOTE Confidence: 0.9908637

 $00:21:28.080 \longrightarrow 00:21:29.359$  in the end.

NOTE Confidence: 0.9908637

 $00:21:29.359 \longrightarrow 00:21:30.240$  A lot of things to think about

NOTE Confidence: 0.9908637

 $00:21:30.240 \longrightarrow 00:21:31.060$  during treatment.

 $00:21:31.680 \longrightarrow 00:21:32.880$  So how do you talk

NOTE Confidence: 0.98996305

00:21:32.880 --> 00:21:35.220 to patients about doing less?

NOTE Confidence: 0.967685

 $00:21:36.585 \longrightarrow 00:21:37.625$  You know, there are a

NOTE Confidence: 0.967685

 $00:21:37.625 \longrightarrow 00:21:39.065$  lot of people who will

NOTE Confidence: 0.967685

 $00:21:39.065 \longrightarrow 00:21:40.605$  come in and will say,

NOTE Confidence: 0.99318284

 $00:21:42.025 \longrightarrow 00:21:44.425$  doctor, I want everything that

NOTE Confidence: 0.99318284

 $00:21:44.425 \longrightarrow 00:21:45.465$  I can get to make

NOTE Confidence: 0.99318284

 $00:21:45.465 \longrightarrow 00:21:46.744$  sure that this cancer is

NOTE Confidence: 0.99318284

 $00:21:46.744 \longrightarrow 00:21:48.285$  never gonna show up again.

NOTE Confidence: 0.9668064

 $00:21:49.020 \longrightarrow 00:21:50.540$  And you may have a

NOTE Confidence: 0.9668064

 $00:21:50.540 \longrightarrow 00:21:52.800$  clinical trial or you may

NOTE Confidence: 0.9668064

00:21:52.859 --> 00:21:53.359 actually,

NOTE Confidence: 0.99000967

 $00{:}21{:}54.780 --> 00{:}21{:}55.680 \; \mathrm{just \; know},$ 

NOTE Confidence: 0.97484803

 $00:21:56.540 \longrightarrow 00:21:57.740$  based on trials that have

NOTE Confidence: 0.97484803

 $00:21:57.740 \longrightarrow 00:21:59.500$  been done, that sometimes a

 $00:21:59.500 \longrightarrow 00:22:00.720$  little less is

NOTE Confidence: 0.91084945

 $00:22:01.045 \longrightarrow 00:22:02.905$  every bit as good, or

NOTE Confidence: 0.95575696

 $00:22:03.525 \longrightarrow 00:22:04.645$  if not every bit as

NOTE Confidence: 0.95575696

 $00:22:04.645 \longrightarrow 00:22:05.145 \text{ good}$ 

NOTE Confidence: 0.9770994

 $00:22:05.525 \longrightarrow 00:22:07.445$  very close and maybe worth

NOTE Confidence: 0.9770994

 $00:22:07.445 \longrightarrow 00:22:09.045$  the trade off. So what

NOTE Confidence: 0.9770994

 $00:22:09.045 \longrightarrow 00:22:10.645$  what are those conversations like?

NOTE Confidence: 0.9770994

00:22:10.645 --> 00:22:11.365 And do people

NOTE Confidence: 0.9975983

 $00:22:12.165 \longrightarrow 00:22:13.205$  can you tell when you

NOTE Confidence: 0.9975983

00:22:13.205 --> 00:22:14.244 see somebody if they're gonna

NOTE Confidence: 0.9975983

 $00:22:14.244 \longrightarrow 00:22:15.445$  be comfortable doing a little

NOTE Confidence: 0.9975983

 $00:22:15.445 \longrightarrow 00:22:16.185$  bit less?

NOTE Confidence: 0.98350173

 $00:22:16.930 \longrightarrow 00:22:17.970$  Totally. When I see a

NOTE Confidence: 0.98350173

 $00:22:17.970 \longrightarrow 00:22:18.850$  new patient with head and

NOTE Confidence: 0.98350173

00:22:18.850 --> 00:22:19.890 neck cancer, I kinda talk

NOTE Confidence: 0.98350173

 $00:22:19.890 \longrightarrow 00:22:21.650$  to them about the journey

 $00{:}22{:}21.650 --> 00{:}22{:}22.930$  of cancer. And during that

NOTE Confidence: 0.98350173

 $00:22:22.930 \longrightarrow 00:22:23.890$  time, you kinda get to

NOTE Confidence: 0.98350173

 $00:22:23.890 \longrightarrow 00:22:25.190$  know them and their personality.

NOTE Confidence: 0.98350173

 $00{:}22{:}25.490 --> 00{:}22{:}26.210$  And I tell them the

NOTE Confidence: 0.98350173

00:22:26.210 --> 00:22:27.090 journey for head and neck

NOTE Confidence: 0.98350173

 $00:22:27.090 \longrightarrow 00:22:28.869$  cancer is threefold. One,

NOTE Confidence: 0.99618816

 $00:22:29.515 \longrightarrow 00:22:30.575$  get all the information.

NOTE Confidence: 0.96249366

 $00{:}22{:}30.955 \rightarrow 00{:}22{:}32.554$  That's getting the scans, getting

NOTE Confidence: 0.96249366

 $00:22:32.554 \longrightarrow 00:22:34.155$  the consultations done with the

NOTE Confidence: 0.96249366

00:22:34.155 --> 00:22:36.315 multidisciplinary team, getting everything ready

NOTE Confidence: 0.96249366

 $00:22:36.315 \longrightarrow 00:22:37.355$  to go. I tell them

NOTE Confidence: 0.96249366

 $00:22:37.355 \longrightarrow 00:22:38.475$  this is probably the most

NOTE Confidence: 0.96249366

 $00:22:38.475 \longrightarrow 00:22:39.755$  frustrating part of your journey

NOTE Confidence: 0.96249366

00:22:39.755 --> 00:22:40.715 because you have

NOTE Confidence: 0.96249366

 $00:22:40.715 \longrightarrow 00:22:41.215$  cancer.

00:22:41.595 --> 00:22:43.340 You think we're not doing

NOTE Confidence: 0.9978786

 $00:22:43.340 \longrightarrow 00:22:44.860$  anything, but you're actually in

NOTE Confidence: 0.9978786

 $00:22:44.860 \longrightarrow 00:22:45.920$  the most important

NOTE Confidence: 0.9888848

00:22:46.220 --> 00:22:47.600 part of your journey.

NOTE Confidence: 0.98142236

 $00:22:47.980 \longrightarrow 00:22:49.660$  And this, I tell them,

NOTE Confidence: 0.98142236

00:22:49.660 --> 00:22:51.180 is really important. I could

NOTE Confidence: 0.98142236

 $00:22:51.180 \longrightarrow 00:22:52.320$  operate on you tomorrow,

NOTE Confidence: 0.998719

 $00:22:52.700 \longrightarrow 00:22:53.200$  but

NOTE Confidence: 0.9686571

 $00:22:54.415 \longrightarrow 00:22:55.295$  what if I do an

NOTE Confidence: 0.9686571

00:22:55.295 --> 00:22:57.695 unnecessary operation, impacts your swallowing,

NOTE Confidence: 0.9686571

 $00:22:57.695 \longrightarrow 00:22:58.734$  and you could just gone

NOTE Confidence: 0.9686571

 $00{:}22{:}58.734 \dashrightarrow 00{:}22{:}59.935$  straight to radiation in a

NOTE Confidence: 0.9686571

 $00:22:59.935 \longrightarrow 00:23:01.135$  few weeks and had the

NOTE Confidence: 0.9686571

 $00:23:01.135 \longrightarrow 00:23:02.494$  exact same outcome with less

NOTE Confidence: 0.9686571

00:23:02.494 --> 00:23:04.015 side effects? Once I start

NOTE Confidence: 0.9686571

00:23:04.015 --> 00:23:05.455 telling talking to them about

 $00:23:05.455 \longrightarrow 00:23:06.734$  that, I think they realize

NOTE Confidence: 0.9686571

00:23:06.734 --> 00:23:07.475 it's worth

NOTE Confidence: 0.9734453

 $00:23:07.789 \longrightarrow 00:23:09.070$  the trade off to do

NOTE Confidence: 0.9734453

 $00:23:09.070 \longrightarrow 00:23:10.429$  the right work up, to

NOTE Confidence: 0.9734453

 $00:23:10.429 \longrightarrow 00:23:11.649$  see all the multidisciplinary

NOTE Confidence: 0.85879564

00:23:12.109 --> 00:23:12.609 team,

NOTE Confidence: 0.98739946

 $00:23:13.230 \longrightarrow 00:23:15.649$  and get less treatment if

NOTE Confidence: 0.98739946

 $00:23:15.869 \longrightarrow 00:23:17.070$  it's the right thing for

NOTE Confidence: 0.98739946

00:23:17.070 --> 00:23:18.750 you. Interestingly, I think I

NOTE Confidence: 0.98739946

 $00:23:18.750 \longrightarrow 00:23:19.950$  have less of that problem

NOTE Confidence: 0.98739946

 $00:23:19.950 \longrightarrow 00:23:21.649$  than maybe other cancers because

NOTE Confidence: 0.99960655

 $00:23:21.950 \longrightarrow 00:23:22.450$  people

NOTE Confidence: 0.9723092

 $00{:}23{:}23.804 \dashrightarrow 00{:}23{:}25.804$  read, I guess, on Google,

NOTE Confidence: 0.9723092

 $00:23:25.804 \longrightarrow 00:23:27.404$  the Internet, whatever, about the

NOTE Confidence: 0.9723092

 $00:23:27.404 \longrightarrow 00:23:28.284$  side effects of head and

 $00:23:28.284 \longrightarrow 00:23:29.804$  neck cancer treatment, and most

NOTE Confidence: 0.9723092

 $00:23:29.804 \longrightarrow 00:23:31.024$  of them are happy

NOTE Confidence: 0.999843

 $00:23:31.325 \longrightarrow 00:23:32.544$  to take less treatment

NOTE Confidence: 0.99261445

 $00:23:32.845 \longrightarrow 00:23:33.644$  as long as they have

NOTE Confidence: 0.99261445

 $00:23:33.644 \longrightarrow 00:23:35.164$  the confidence it's not gonna

NOTE Confidence: 0.99261445

 $00:23:35.164 \longrightarrow 00:23:37.264$  impact their cure rates.

NOTE Confidence: 0.9997678

 $00:23:37.950 \longrightarrow 00:23:38.450$  Sure.

 $00:23:40.669 \longrightarrow 00:23:42.190$  These are often

NOTE Confidence: 0.9302582

 $00:23:42.190 \longrightarrow 00:23:43.090$  hard discussions.

NOTE Confidence: 0.99583113

00:23:43.470 --> 00:23:43.970 And,

NOTE Confidence: 0.88800764

 $00:23:44.350 \longrightarrow 00:23:45.730$  you know, it's interesting.

NOTE Confidence: 0.9961088

 $00{:}23{:}47.230 \dashrightarrow 00{:}23{:}49.090$  When someone's first diagnosed,

NOTE Confidence: 0.9955124

 $00:23:50.669 \longrightarrow 00:23:51.890$  they're often willing to

 $00:23:53.595 \longrightarrow 00:23:54.795$  or say they will go

NOTE Confidence: 0.99532324

 $00{:}23{:}54.795 \dashrightarrow 00{:}23{:}55.615 \ through \ anything$ 

NOTE Confidence: 0.9910839

 $00:23:56.395 \longrightarrow 00:23:58.715$  to absolutely minimize the chance

NOTE Confidence: 0.9910839

 $00:23:58.715 \longrightarrow 00:23:59.994$  of a recurrence of the

 $00:23:59.994 \longrightarrow 00:24:00.494$  cancer.

 $00:24:02.395 \longrightarrow 00:24:03.135$  But what sometimes

NOTE Confidence: 0.9994225

 $00:24:04.075 \longrightarrow 00:24:05.934$  is less apparent

NOTE Confidence: 0.9829023

 $00:24:06.400 \longrightarrow 00:24:08.000$  is that dealing with side

NOTE Confidence: 0.9829023

 $00:24:08.000 \longrightarrow 00:24:09.859$  effects that extend for

NOTE Confidence: 0.9813135

 $00:24:10.320 \longrightarrow 00:24:11.920$  a year, two years, five

NOTE Confidence: 0.9813135

 $00:24:11.920 \longrightarrow 00:24:13.440$  years, or in some cases,

NOTE Confidence: 0.9813135

 $00:24:13.440 \longrightarrow 00:24:14.100$  a lifetime

NOTE Confidence: 0.9581662

 $00{:}24{:}14.880 \dashrightarrow 00{:}24{:}16.480$  can be pretty devastating. And

NOTE Confidence: 0.9581662

 $00:24:16.480 \longrightarrow 00:24:17.619$  I suspect that's

NOTE Confidence: 0.9919966

 $00:24:18.494 \longrightarrow 00:24:20.015$  partially related to the high

NOTE Confidence: 0.9919966

00:24:20.015 --> 00:24:21.615 rate of depression in many

NOTE Confidence: 0.9919966

 $00:24:21.615 \longrightarrow 00:24:23.375$  patients after treatment for head

NOTE Confidence: 0.9919966

 $00:24:23.375 \longrightarrow 00:24:24.575$  and neck cancers. It's just

NOTE Confidence: 0.9919966

 $00:24:24.575 \longrightarrow 00:24:26.415$  dealing with the chronic problems

NOTE Confidence: 0.9919966

00:24:26.415 --> 00:24:28.095 that just never seem to

 $00:24:28.095 \longrightarrow 00:24:29.215$  go away, which is what

NOTE Confidence: 0.9919966

00:24:29.215 --> 00:24:30.300 you're trying to avoid.

NOTE Confidence: 0.9863848

00:24:30.700 --> 00:24:31.740 I think you're right. If

NOTE Confidence: 0.9863848

 $00:24:31.740 \longrightarrow 00:24:32.700$  you have a patient with

NOTE Confidence: 0.9863848

 $00:24:32.700 \longrightarrow 00:24:33.900$  a cancer of the voice

NOTE Confidence: 0.9863848

 $00:24:33.900 \longrightarrow 00:24:34.940$  box sitting in front of

NOTE Confidence: 0.9863848

 $00:24:34.940 \longrightarrow 00:24:36.220$  you and you tell them,

NOTE Confidence: 0.9863848

00:24:36.220 --> 00:24:37.420 I could remove your voice

NOTE Confidence: 0.9863848

 $00:24:37.420 \longrightarrow 00:24:37.920$  box, but

00:24:40.380 --> 00:24:41.420 I could try and save

NOTE Confidence: 0.96593434

00:24:41.420 --> 00:24:43.555 your voice box, not operate,

NOTE Confidence: 0.96593434

00:24:43.695 --> 00:24:44.835 give you other treatments

NOTE Confidence: 0.9610121

00:24:45.295 --> 00:24:46.655 with the exact same cure

NOTE Confidence: 0.9610121

 $00:24:46.655 \longrightarrow 00:24:47.155$  rate.

NOTE Confidence: 0.99980605

 $00:24:47.775 \longrightarrow 00:24:49.955$  It's not a tough decision

NOTE Confidence: 0.99980605

 $00:24:50.175 \longrightarrow 00:24:51.635$  for a lot of them.

 $00:24:52.335 \longrightarrow 00:24:52.835$  Yeah.

NOTE Confidence: 0.99872595

 $00:24:53.934 \longrightarrow 00:24:55.215$  So tell us a little

NOTE Confidence: 0.99872595

00:24:55.215 --> 00:24:56.115 bit about

NOTE Confidence: 0.9973375

 $00:24:56.539 \longrightarrow 00:24:58.140$  the research that you've been

NOTE Confidence: 0.9973375

 $00:24:58.140 \longrightarrow 00:25:00.559$  involved in over these past

NOTE Confidence: 0.996802

 $00:25:00.940 \longrightarrow 00:25:02.240$  five to ten years.

NOTE Confidence: 0.9963946

 $00:25:03.740 \longrightarrow 00:25:06.299$  My research is really

NOTE Confidence: 0.9963946

 $00:25:06.299 \longrightarrow 00:25:07.760$  focused on the process

NOTE Confidence: 0.9994488

 $00:25:08.140 \longrightarrow 00:25:09.919$  of cancer care delivery.

NOTE Confidence: 0.9981657

 $00:25:10.780 \longrightarrow 00:25:12.044$  It's a field of

NOTE Confidence: 0.9981657

 $00:25:12.044 \longrightarrow 00:25:13.904$  research called health services research.

NOTE Confidence: 0.9848539

 $00:25:14.524 \longrightarrow 00:25:16.044$  It doesn't get all the

NOTE Confidence: 0.9848539

00:25:16.044 --> 00:25:17.725 fame and glory of fancy

NOTE Confidence: 0.9848539

00:25:17.725 --> 00:25:19.024 new drugs and medications,

NOTE Confidence: 0.9638689

 $00:25:19.325 \longrightarrow 00:25:21.325$  but in my hypothesis and

 $00:25:21.325 \longrightarrow 00:25:22.365$  theory and why I'm so

NOTE Confidence: 0.9638689

 $00:25:22.365 \longrightarrow 00:25:23.725$  interested in it is I

NOTE Confidence: 0.9638689

 $00:25:23.725 \longrightarrow 00:25:25.500$  think, as a health services

NOTE Confidence: 0.9638689

00:25:25.559 --> 00:25:27.420 researcher, we can make just

NOTE Confidence: 0.9638689

 $00:25:27.559 \longrightarrow 00:25:29.480$  a big an impact on

NOTE Confidence: 0.9638689

 $00:25:29.480 \longrightarrow 00:25:29.980$  outcomes

NOTE Confidence: 0.9989835

 $00:25:30.280 \longrightarrow 00:25:31.500$  and care of patients

NOTE Confidence: 0.9922748

 $00:25:32.280 \longrightarrow 00:25:34.119$  throughout the world as the

NOTE Confidence: 0.9922748

 $00:25:34.119 \longrightarrow 00:25:35.820$  next fancy blue pill.

NOTE Confidence: 0.94487214

 $00:25:36.600 \longrightarrow 00:25:37.960$  And that's where if you

NOTE Confidence: 0.94487214

 $00:25:37.960 \longrightarrow 00:25:39.895$  can't deliver that blue pill

NOTE Confidence: 0.94487214

 $00:25:39.895 \longrightarrow 00:25:40.555$  to everybody,

NOTE Confidence: 0.99404836

 $00:25:42.055 \longrightarrow 00:25:43.835$  and if people have trouble

NOTE Confidence: 0.99404836

00:25:43.895 --> 00:25:45.175 taking it or people have

NOTE Confidence: 0.99404836

 $00:25:45.175 \longrightarrow 00:25:46.715$  trouble accessing it,

NOTE Confidence: 0.9515458

 $00:25:47.255 \longrightarrow 00:25:48.535$  it's not gonna do anyone

 $00:25:48.535 \longrightarrow 00:25:49.734$  much good. So we

NOTE Confidence: 0.9515458

 $00:25:49.734 \longrightarrow 00:25:50.775$  have to figure these things out.

NOTE Confidence: 0.9515458

 $00:25:50.775 \longrightarrow 00:25:51.655$  Exactly. So I think

NOTE Confidence: 0.9515458

 $00:25:51.655 \longrightarrow 00:25:52.830$  it tell us more about

NOTE Confidence: 0.9557588

 $00:25:53.230 \longrightarrow 00:25:54.429$  what you do. Exactly. So

NOTE Confidence: 0.9557588

 $00:25:54.429 \longrightarrow 00:25:55.630$  I think we need to

NOTE Confidence: 0.9557588

 $00:25:55.630 \longrightarrow 00:25:56.789$  work hand in hand with

NOTE Confidence: 0.9557588

 $00:25:56.789 \longrightarrow 00:25:58.190$  the researchers who

NOTE Confidence: 0.9557588

 $00:25:58.190 \longrightarrow 00:25:59.390$  are making the fancy blue

NOTE Confidence: 0.9557588

 $00:25:59.390 \longrightarrow 00:26:00.510$  pills because as you pointed

NOTE Confidence: 0.9557588

 $00{:}26{:}00.510 \dashrightarrow 00{:}26{:}01.390$ out, how do you get

NOTE Confidence: 0.9557588

 $00:26:01.390 \longrightarrow 00:26:02.750$  it to people? How do

NOTE Confidence: 0.9557588 00:26:02.750 --> 00:26:03.250 you

NOTE Confidence: 0.9537112

 $00:26:03.630 \longrightarrow 00:26:05.789$  decrease variation in cancer care

NOTE Confidence: 0.9537112

 $00:26:05.789 \longrightarrow 00:26:07.665$  delivery across the country?

 $00:26:07.744 \longrightarrow 00:26:08.785$  Somebody in one part

NOTE Confidence: 0.9537112

 $00:26:08.785 \longrightarrow 00:26:10.165$  of the country should have

NOTE Confidence: 0.99759656

 $00:26:10.865 \longrightarrow 00:26:12.065$  the ability to get the

NOTE Confidence: 0.99759656

 $00:26:12.065 \longrightarrow 00:26:13.984$  same quality of care with

NOTE Confidence: 0.99759656

 $00:26:13.984 \longrightarrow 00:26:15.765$  the latest and greatest information

NOTE Confidence: 0.99759656

 $00{:}26{:}15.825 \dashrightarrow 00{:}26{:}17.025$  that somebody in another part

NOTE Confidence: 0.99759656

 $00:26:17.025 \longrightarrow 00:26:17.765$  of the country

NOTE Confidence: 0.9825008

 $00:26:18.225 \longrightarrow 00:26:19.980$  has access to. And that's

NOTE Confidence: 0.9825008

 $00{:}26{:}20.220 \dashrightarrow 00{:}26{:}21.740$  basically my research. We look

NOTE Confidence: 0.9825008

 $00:26:21.740 \longrightarrow 00:26:23.260$  at national trends. We look

NOTE Confidence: 0.9825008

 $00:26:23.260 \longrightarrow 00:26:24.700$  at regional trends, and we

NOTE Confidence: 0.9825008

00:26:24.700 --> 00:26:26.480 look at barriers to accessing

NOTE Confidence: 0.9799092

 $00:26:27.100 \longrightarrow 00:26:28.619$  that care and delivering that

NOTE Confidence: 0.9799092

 $00:26:28.619 \longrightarrow 00:26:29.820$  care. And we've found some

NOTE Confidence: 0.9799092

 $00:26:29.820 \longrightarrow 00:26:30.320$  really

NOTE Confidence: 0.9232217

 $00:26:30.700 \longrightarrow 00:26:32.380$  interesting and drawn some interesting

 $00:26:32.380 \longrightarrow 00:26:33.740$  conclusions about this. And most

NOTE Confidence: 0.9232217

 $00{:}26{:}33.740 \dashrightarrow 00{:}26{:}34.940$  importantly, I think, it's just

NOTE Confidence: 0.9232217

 $00:26:34.940 \longrightarrow 00:26:35.679$  raised awareness

NOTE Confidence: 0.9997657

 $00:26:36.605 \longrightarrow 00:26:37.585$  of the variability

NOTE Confidence: 0.9841175

 $00:26:38.205 \longrightarrow 00:26:39.805$  and differences in care.

NOTE Confidence: 0.9841175

00:26:39.805 --> 00:26:41.585 Finally, in our last minute,

NOTE Confidence: 0.96650666

 $00:26:41.965 \longrightarrow 00:26:43.165$  and maybe this is sort

NOTE Confidence: 0.96650666

00:26:43.165 --> 00:26:44.365 of backwards, and I should

NOTE Confidence: 0.96650666

00:26:44.365 --> 00:26:45.325 have asked you this to

NOTE Confidence: 0.96650666

 $00:26:45.325 \longrightarrow 00:26:46.785$  begin with. But

NOTE Confidence: 0.9991106

 $00{:}26{:}47.085 --> 00{:}26{:}48.445$  can you just leave our

NOTE Confidence: 0.9991106

 $00:26:48.445 \longrightarrow 00:26:49.665$  listeners with

NOTE Confidence: 0.9918745

00:26:50.850 --> 00:26:52.550 a few comments about

NOTE Confidence: 0.9967063

 $00:26:52.930 \longrightarrow 00:26:54.609$  the kinds of symptoms that

NOTE Confidence: 0.9967063

 $00:26:54.609 \longrightarrow 00:26:56.630$  they may have that

 $00:26:57.410 \longrightarrow 00:26:58.930$  should lead them to seek

NOTE Confidence: 0.9920685

 $00{:}26{:}58.930 \dashrightarrow 00{:}27{:}00.450$  attention for a possible head

NOTE Confidence: 0.9920685

 $00:27:00.450 \longrightarrow 00:27:01.270$  and neck cancer?

NOTE Confidence: 0.9856186

 $00:27:01.730 \longrightarrow 00:27:02.850$  Absolutely. And I think it's

NOTE Confidence: 0.9856186

 $00:27:02.850 \longrightarrow 00:27:04.244$  a great way to end

NOTE Confidence: 0.9856186

 $00:27:04.244 \longrightarrow 00:27:06.005$  because we are all about

NOTE Confidence: 0.9856186

 $00:27:06.005 \longrightarrow 00:27:07.365$  awareness in head and neck

NOTE Confidence: 0.9856186

 $00:27:07.365 \longrightarrow 00:27:09.145$  cancers. We don't have fancy

NOTE Confidence: 0.9856186

00:27:09.205 --> 00:27:11.285 screening guidelines like lung cancer

NOTE Confidence: 0.9856186

00:27:11.285 --> 00:27:12.805 and breast cancer and colon

NOTE Confidence: 0.9856186

 $00:27:12.805 \longrightarrow 00:27:14.265$  cancer and prostate cancer.

NOTE Confidence: 0.99810946

 $00:27:14.645 \longrightarrow 00:27:16.345$  We are all about awareness.

NOTE Confidence: 0.99321103

 $00:27:16.960 \longrightarrow 00:27:19.200$  So symptoms that patients need

NOTE Confidence: 0.99321103

 $00:27:19.200 \longrightarrow 00:27:20.260$  to be aware of,

NOTE Confidence: 0.96492344

 $00:27:20.800 \longrightarrow 00:27:22.080$  when thinking about head and

NOTE Confidence: 0.96492344

 $00:27:22.080 \longrightarrow 00:27:23.680$  neck cancers would be a

 $00:27:23.680 \longrightarrow 00:27:24.960$  sore in the mouth that

NOTE Confidence: 0.96492344

 $00:27:24.960 \longrightarrow 00:27:26.720$  doesn't heal after a few

NOTE Confidence: 0.96492344

 $00:27:26.720 \longrightarrow 00:27:28.240$  weeks, maybe four to six

NOTE Confidence: 0.96492344

 $00:27:28.240 \longrightarrow 00:27:29.440$  weeks. Everyone gets a sore

NOTE Confidence: 0.96492344

 $00:27:29.440 \longrightarrow 00:27:30.160$  once in a while, a

NOTE Confidence: 0.96492344

 $00:27:30.160 \longrightarrow 00:27:31.725$  canker sore, but they heal.

NOTE Confidence: 0.96492344

00:27:31.804 --> 00:27:33.905 Something that doesn't heal, seek attention.

NOTE Confidence: 0.91164166

 $00:27:34.684 \longrightarrow 00:27:36.525$  If you have a throat

NOTE Confidence: 0.91164166 00:27:36.525 --> 00:27:37.025 pain,

NOTE Confidence: 0.99281174

 $00:27:37.484 \longrightarrow 00:27:37.984$  one-sided,

NOTE Confidence: 0.9912346

00:27:38.365 --> 00:27:39.905 not getting better after

NOTE Confidence: 0.99929476

00:27:40.525 --> 00:27:42.605 four weeks, six weeks, seek

NOTE Confidence: 0.99929476

00:27:42.605 --> 00:27:43.744 attention immediately.

NOTE Confidence: 0.99219936

00:27:44.539 --> 00:27:45.900 Referred pain to the ear

NOTE Confidence: 0.99219936

 $00:27:45.900 \longrightarrow 00:27:47.820$  can sometimes be associated with

 $00:27:47.820 \longrightarrow 00:27:49.020$  deeper cancers in the throat

NOTE Confidence: 0.99219936

 $00{:}27{:}49.020 --> 00{:}27{:}50.700$  that you can't see, voice

NOTE Confidence: 0.99219936

 $00:27:50.700 \longrightarrow 00:27:53.280$  changes, raspiness of voice, difficulty

NOTE Confidence: 0.99219936

00:27:53.419 --> 00:27:53.919 swallowing.

NOTE Confidence: 0.99765325

 $00:27:54.220 \longrightarrow 00:27:55.900$  And then for HPV cancers,

NOTE Confidence: 0.99765325

 $00:27:55.900 \longrightarrow 00:27:57.020$  one of the most common

NOTE Confidence: 0.99765325

 $00:27:57.020 \longrightarrow 00:27:57.520$  presentations

NOTE Confidence: 0.99385804

 $00:27:57.900 \longrightarrow 00:27:59.895$  is actually a neck mass.

NOTE Confidence: 0.99385804

 $00{:}28{:}00.135 \dashrightarrow 00{:}28{:}01.895$  Before you even find anything

NOTE Confidence: 0.99385804

00:28:01.895 --> 00:28:02.855 in your throat or have

NOTE Confidence: 0.99385804

 $00{:}28{:}02.855 \dashrightarrow 00{:}28{:}03.994$  a symptom in your throat,

NOTE Confidence: 0.99385804

 $00:28:04.215 \longrightarrow 00:28:05.515$  a lump in the neck.

NOTE Confidence: 0.99385804

 $00:28:05.734 \longrightarrow 00:28:07.575$  If you're above thirty five

NOTE Confidence: 0.99385804

 $00:28:07.575 \longrightarrow 00:28:08.535$  and have a lump in

NOTE Confidence: 0.99385804

 $00:28:08.535 \longrightarrow 00:28:09.595$  your neck develop,

NOTE Confidence: 0.9725637

00:28:10.135 --> 00:28:11.255 go get that checked out

 $00:28:11.255 \longrightarrow 00:28:13.840$  immediately and ask about the

NOTE Confidence: 0.9725637

 $00:28:13.840 \longrightarrow 00:28:16.080$  possibility of an HPV associated

NOTE Confidence: 0.9725637

 $00:28:16.080 \longrightarrow 00:28:16.580$  cancer.

NOTE Confidence: 0.8946608

 $00:28:17.200 \longrightarrow 00:28:18.720$  Doctor Saral Mehra is an

NOTE Confidence: 0.8946608

 $00:28:18.720 \longrightarrow 00:28:20.559$  associate professor of surgery and

NOTE Confidence: 0.8946608

 $00:28:20.559 \longrightarrow 00:28:21.059$  otolaryngology

NOTE Confidence: 0.99549073

 $00:28:21.679 \longrightarrow 00:28:22.720$  at the Yale School of

NOTE Confidence: 0.99549073

 $00:28:22.720 \longrightarrow 00:28:23.220$  Medicine.

NOTE Confidence: 0.9865537

 $00:28:23.759 \longrightarrow 00:28:24.960$  If you have questions, the

NOTE Confidence: 0.9865537

 $00{:}28{:}24.960 \dashrightarrow 00{:}28{:}26.559$  address is cancer answers at

NOTE Confidence: 0.9865537

00:28:26.559 --> 00:28:27.915 yale dot e d u,

NOTE Confidence: 0.9865537

 $00:28:27.994 \longrightarrow 00:28:29.275$  and past editions of the

NOTE Confidence: 0.9865537

 $00{:}28{:}29.275 \dashrightarrow 00{:}28{:}30.955$  program are available in audio

NOTE Confidence: 0.9865537

 $00{:}28{:}30.955 \dashrightarrow 00{:}28{:}32.315$  and written form at yale

NOTE Confidence: 0.9865537

 $00:28:32.315 \longrightarrow 00:28:34.155$  cancer center dot org. We

 $00{:}28{:}34.155 --> 00{:}28{:}35.195$ hope you'll join us next

NOTE Confidence: 0.9865537

00:28:35.195 --> 00:28:36.155 time to learn more about

NOTE Confidence: 0.9865537

 $00{:}28{:}36.155 \dashrightarrow 00{:}28{:}38.075$  the fight against cancer. Funding

NOTE Confidence: 0.9865537

00:28:38.075 --> 00:28:39.595 for Yale Cancer Answers is

NOTE Confidence: 0.9865537

 $00{:}28{:}39.595 \dashrightarrow 00{:}28{:}41.615$  provided by Smilow Cancer Hospital.