WEBVTT

00:00:00.000 --> 00:00:02.415 Support for Yale Cancer Answers

NOTE Confidence: 0.925680875778198

 $00:00:02.415 \longrightarrow 00:00:04.830$ comes from AstraZeneca providing

NOTE Confidence: 0.925680875778198

00:00:04.913 --> 00:00:06.905 important treatment options for

NOTE Confidence: 0.925680875778198

 $00:00:06.905 \longrightarrow 00:00:09.893$ various types and stages of cancer.

NOTE Confidence: 0.925680875778198

 $00:00:09.900 \dashrightarrow 00:00:13.728$ More information at a strazeneca-us.com.

NOTE Confidence: 0.925680875778198

 $00:00:13.730 \longrightarrow 00:00:15.608$ Welcome to Yale Cancer Answers with

NOTE Confidence: 0.925680875778198

00:00:15.608 --> 00:00:17.668 your host doctor Anees Chappar.

NOTE Confidence: 0.925680875778198

 $00{:}00{:}17.668 \dashrightarrow 00{:}00{:}19.543$ Yale Cancer Answers features the

NOTE Confidence: 0.925680875778198

00:00:19.543 --> 00:00:21.807 latest information on cancer care by

NOTE Confidence: 0.925680875778198

 $00:00:21.807 \longrightarrow 00:00:23.239$ welcoming oncologists and specialists

NOTE Confidence: 0.925680875778198

 $00:00:23.239 \longrightarrow 00:00:25.732$ who are on the forefront of the

NOTE Confidence: 0.925680875778198

 $00:00:25.732 \longrightarrow 00:00:27.850$ battle to fight cancer. This week

NOTE Confidence: 0.925680875778198

00:00:27.850 --> 00:00:29.386 it's a conversation about

NOTE Confidence: 0.925680875778198

00:00:29.386 --> 00:00:30.922 cognitive decline after prostate

NOTE Confidence: 0.925680875778198

00:00:30.922 --> 00:00:32.787 cancer with doctor Herta Chao.

 $00:00:32.790 \longrightarrow 00:00:34.812$ Doctor Chao is the deputy director

NOTE Confidence: 0.925680875778198

 $00{:}00{:}34.812 \dashrightarrow 00{:}00{:}36.589$ at the VA Comprehensive Cancer

NOTE Confidence: 0.925680875778198

 $00:00:36.589 \longrightarrow 00:00:38.444$ Center and an associate professor

NOTE Confidence: 0.925680875778198

 $00:00:38.444 \longrightarrow 00:00:40.328$ of Medicine and medical oncology

NOTE Confidence: 0.925680875778198

 $00:00:40.328 \longrightarrow 00:00:42.320$ at the Yale School of Medicine,

NOTE Confidence: 0.925680875778198

 $00:00:42.320 \longrightarrow 00:00:44.840$ where doctor Chappar is a

NOTE Confidence: 0.925680875778198

 $00:00:44.840 \longrightarrow 00:00:47.170$ professor of surgical on oncology.

 $00:00:47.580 \longrightarrow 00:00:50.408$ I hear you work at the VA.

NOTE Confidence: 0.924813807010651

 $00:00:50.410 \longrightarrow 00:00:53.021$ Tell us a little bit about the

NOTE Confidence: 0.924813807010651

00:00:53.021 --> 00:00:55.134 VA and about cancer services

NOTE Confidence: 0.924813807010651 00:00:55.134 --> 00:00:58.110 at the VA?

NOTE Confidence: 0.924813807010651

 $00:00:58.110 \longrightarrow 00:01:01.054$ I feel very fortunate to work at the West Haven

VA

NOTE Confidence: 0.924813807010651

00:01:01.054 --> 00:01:03.599 Cancer Center because it's so closely

NOTE Confidence: 0.924813807010651

00:01:03.599 --> 00:01:06.209 affiliated with Yale Cancer Center,

NOTE Confidence: 0.924813807010651

 $00:01:06.210 \longrightarrow 00:01:08.576$ we basically can take advantage of a

NOTE Confidence: 0.924813807010651

 $00:01:08.576 \longrightarrow 00:01:11.506$ lot of the knowledge and expertise and

 $00:01:11.506 \longrightarrow 00:01:14.266$ resources that are available at your

NOTE Confidence: 0.924813807010651

 $00:01:14.346 \longrightarrow 00:01:17.307$ Cancer Center as well.

NOTE Confidence: 0.924813807010651

 $00:01:17.307 \longrightarrow 00:01:20.061$ A particularly important thing for the

NOTE Confidence: 0.924813807010651

 $00:01:20.061 \longrightarrow 00:01:23.438$ VA is that we're a tertiary center,

NOTE Confidence: 0.924813807010651

 $00:01:23.438 \longrightarrow 00:01:26.072$ and many resources are available

NOTE Confidence: 0.924813807010651

 $00:01:26.072 \longrightarrow 00:01:28.624$ that are not necessarily

NOTE Confidence: 0.924813807010651

 $00:01:28.624 \longrightarrow 00:01:31.810$ available in the private sector.

NOTE Confidence: 0.924813807010651

 $00:01:31.810 \longrightarrow 00:01:32.782$ For instance,

NOTE Confidence: 0.924813807010651

00:01:32.782 --> 00:01:34.726 if veterans need transportation,

NOTE Confidence: 0.924813807010651

 $00:01:34.730 \longrightarrow 00:01:38.139$ we can actually ask our social worker

NOTE Confidence: 0.924813807010651

00:01:38.139 --> 00:01:42.150 to help. If a veteran needs additional

NOTE Confidence: 0.924813807010651

 $00:01:42.150 \longrightarrow 00:01:43.479$ support and therapy,

NOTE Confidence: 0.924813807010651

 $00{:}01{:}43.479 \dashrightarrow 00{:}01{:}46.137$ we can actually ask the physical

NOTE Confidence: 0.924813807010651

00:01:46.137 --> 00:01:49.050 therapist to meet them in the Cancer Center,

NOTE Confidence: 0.924813807010651 00:01:49.050 --> 00:01:50.674 so it's NOTE Confidence: 0.924813807010651 $00:01:50.674 \longrightarrow 00:01:52.298$ very tailored to veterans.

NOTE Confidence: 0.930449306964874

 $00{:}01{:}52.710 --> 00{:}01{:}55.140$ Tell us a little bit about,

NOTE Confidence: 0.930449306964874

00:01:55.140 --> 00:01:57.975 you know when we think about cancer

NOTE Confidence: 0.930449306964874

 $00:01:57.980 \longrightarrow 00:02:00.346$ we kind of think of it ubiquitously

NOTE Confidence: 0.930449306964874

 $00:02:00.346 \longrightarrow 00:02:03.167$ but tell us about the prevalence of

NOTE Confidence: 0.930449306964874

 $00{:}02{:}03.167 \dashrightarrow 00{:}02{:}05.759$ cancer in the veteran population and

NOTE Confidence: 0.930449306964874

 $00:02:05.836 \longrightarrow 00:02:08.428$ whether the incidence of cancers

NOTE Confidence: 0.930449306964874

 $00{:}02{:}08.428 \dashrightarrow 00{:}02{:}10.926$ and particular kinds of cancers are

NOTE Confidence: 0.930449306964874

 $00{:}02{:}10.926 \to 00{:}02{:}13.224$ different in the veteran population as

NOTE Confidence: 0.930449306964874

 $00:02:13.224 \longrightarrow 00:02:16.000$ opposed to the general population?

NOTE Confidence: 0.913173913955688

 $00{:}02{:}16.000 \dashrightarrow 00{:}02{:}18.940$ That's a very very important point.

 $00:02:21.390 \longrightarrow 00:02:24.330$ I think we continue to

NOTE Confidence: 0.913173913955688

 $00:02:24.330 \longrightarrow 00:02:26.290$ learn. For many decades

NOTE Confidence: 0.913173913955688

 $00:02:26.290 \longrightarrow 00:02:29.404$ it was actually debated whether certain

NOTE Confidence: 0.913173913955688

 $00:02:29.404 \longrightarrow 00:02:32.660$ cancers are really related to an herbaside,

NOTE Confidence: 0.913173913955688

 $00:02:32.660 \longrightarrow 00:02:34.070$ like Agent Orange.

 $00:02:34.070 \longrightarrow 00:02:37.360$ We know it was widely used

NOTE Confidence: 0.913173913955688

00:02:37.457 --> 00:02:41.097 during the Vietnam War and many veterans

NOTE Confidence: 0.913173913955688

 $00:02:41.100 \longrightarrow 00:02:44.094$ develop cancers

NOTE Confidence: 0.913173913955688

00:02:44.094 --> 00:02:46.090 that are unusually aggressive,

NOTE Confidence: 0.913173913955688

 $00:02:46.090 \longrightarrow 00:02:48.590$ unusually early in their lifetime,

NOTE Confidence: 0.913173913955688

 $00:02:48.590 \longrightarrow 00:02:52.526$ and it took many decades before it was

NOTE Confidence: 0.913173913955688

 $00:02:52.526 \longrightarrow 00:02:56.067$ recognized that Agent Orange is a carcinogen.

NOTE Confidence: 0.913173913955688 00:02:56.070 --> 00:02:58.062 For instance,

NOTE Confidence: 0.913173913955688

 $00:02:58.062 \longrightarrow 00:03:00.552$ I think soft tissue sarcoma,

NOTE Confidence: 0.913173913955688

 $00:03:00.560 \longrightarrow 00:03:03.560$ which is a connective tissue cancer,

NOTE Confidence: 0.913173913955688

 $00{:}03{:}03.560 \dashrightarrow 00{:}03{:}06.050$ occurs early in our lifetime.

NOTE Confidence: 0.913173913955688

 $00:03:06.050 \longrightarrow 00:03:09.452$ It was recognized earlier that this is

NOTE Confidence: 0.913173913955688

 $00:03:09.452 \longrightarrow 00:03:12.050$ probably related to Agent Orange.

NOTE Confidence: 0.913173913955688

 $00:03:12.050 \longrightarrow 00:03:14.816$ Exposure has increased the risks of

NOTE Confidence: 0.913173913955688

 $00:03:14.816 \longrightarrow 00:03:17.799$ these veterans to develop these cancers.

NOTE Confidence: 0.913173913955688

 $00:03:17.800 \longrightarrow 00:03:19.712$ Prostate cancer, for instance,

 $00:03:19.712 \longrightarrow 00:03:22.102$ is so common among men and is

NOTE Confidence: 0.913173913955688

 $00:03:22.110 \longrightarrow 00:03:25.456$ the most frequent cancer among veterans.

NOTE Confidence: 0.913173913955688

 $00:03:25.460 \longrightarrow 00:03:29.798$ But for the many decades it was actually not

NOTE Confidence: 0.913173913955688

 $00:03:29.798 \longrightarrow 00:03:32.646$ acknowledged to be Agent Orange related.

NOTE Confidence: 0.913173913955688

 $00:03:32.650 \longrightarrow 00:03:36.122$ Not until 2008 there was a very

NOTE Confidence: 0.913173913955688

 $00:03:36.122 \longrightarrow 00:03:38.985$ important study done by Doctor Karen

NOTE Confidence: 0.913173913955688

00:03:38.985 --> 00:03:41.847 Shami at UCLA that actually proved

NOTE Confidence: 0.913173913955688 00:03:41.939 --> 00:03:44.629 that the NOTE Confidence: 0.913173913955688

 $00:03:44.630 \longrightarrow 00:03:47.726$ rate of prostate cancer and

NOTE Confidence: 0.913173913955688

 $00:03:47.726 \longrightarrow 00:03:50.589$ aggressiveness of prostate cancer was much,

NOTE Confidence: 0.913173913955688

 $00:03:50.590 \longrightarrow 00:03:53.901$ much higher in the veterans that were

NOTE Confidence: 0.913173913955688

 $00{:}03{:}53.901 \dashrightarrow 00{:}03{:}56.888$ exposed to Agent Orange compared to

NOTE Confidence: 0.913173913955688

 $00{:}03{:}56.888 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}04{:}00.325$ veter ans during the same era but not

NOTE Confidence: 0.913173913955688

00:04:00.415 --> 00:04:03.903 exposed to Agent Orange, so we know

NOTE Confidence: 0.913173913955688

 $00:04:03.903 \longrightarrow 00:04:06.669$ more and more that veterans may be

 $00:04:06.669 \longrightarrow 00:04:09.316$ at risk due to service related

NOTE Confidence: 0.913173913955688

 $00{:}04{:}09.316 \to 00{:}04{:}12.454$ exposures to certain type of cancer,

NOTE Confidence: 0.913173913955688

00:04:12.460 --> 00:04:13.954 including lung cancer,

NOTE Confidence: 0.913173913955688

00:04:13.954 --> 00:04:15.478 prostate cancer, leukemia

NOTE Confidence: 0.913173913955688

 $00:04:15.478 \longrightarrow 00:04:17.062$ and lymphomas.

 $00:04:17.590 \longrightarrow 00:04:20.712$ These days for men and women

NOTE Confidence: 0.912173449993134

 $00:04:20.712 \longrightarrow 00:04:24.386$ who are in combat al ot of times

NOTE Confidence: 0.912173449993134

 $00:04:24.386 \longrightarrow 00:04:27.104$ we don't think about

NOTE Confidence: 0.912173449993134

 $00{:}04{:}27.104 \dashrightarrow 00{:}04{:}29.524$ people using a particular agent

NOTE Confidence: 0.912173449993134

00:04:29.524 --> 00:04:32.150 like Agent Orange in combat,

NOTE Confidence: 0.912173449993134

00:04:32.150 --> 00:04:35.657 but more it's artillery,

NOTE Confidence: 0.912173449993134 00:04:35.660 --> 00:04:38.170 there's more

NOTE Confidence: 0.912173449993134

 $00:04:38.170 \longrightarrow 00:04:40.680$ roadside bombs and so on.

NOTE Confidence: 0.912173449993134

00:04:40.680 --> 00:04:43.620 Are those also associated

NOTE Confidence: 0.912173449993134

 $00:04:43.620 \longrightarrow 00:04:46.699$ with a higher risk of cancers?

NOTE Confidence: 0.881127893924713

 $00:04:46.710 \longrightarrow 00:04:52.870$ I think we will find out very soon.

 $00:04:52.870 \longrightarrow 00:04:56.062$ Unfortunately my colleagues

NOTE Confidence: 0.881127893924713

 $00:04:56.062 \longrightarrow 00:05:00.052$ and myself have been

NOTE Confidence: 0.881127893924713

 $00:05:00.060 \longrightarrow 00:05:03.185$ unpleasantly surprised about how many

NOTE Confidence: 0.881127893924713

 $00:05:03.185 \longrightarrow 00:05:07.696$ aggressive cases of cancer we see in very

NOTE Confidence: 0.881127893924713

 $00:05:07.696 \longrightarrow 00:05:11.170$ young veterans like in the 40s and 50s,

NOTE Confidence: 0.881127893924713

00:05:11.170 --> 00:05:13.810 and a whole variety of

NOTE Confidence: 0.881127893924713

 $00:05:13.810 \longrightarrow 00:05:15.922$ different type of cancer,

NOTE Confidence: 0.881127893924713

 $00:05:15.930 \longrightarrow 00:05:20.378$ not just one specific cancer and the

NOTE Confidence: 0.881127893924713

 $00{:}05{:}20.378 \dashrightarrow 00{:}05{:}24.015$ common thread of the story is really

NOTE Confidence: 0.881127893924713

00:05:24.015 --> 00:05:27.570 they were exposed to the burn pits,

NOTE Confidence: 0.881127893924713

 $00{:}05{:}27.570 \dashrightarrow 00{:}05{:}30.738$ where apparently many things were burned,

NOTE Confidence: 0.881127893924713 00:05:30.740 --> 00:05:31.790 including NOTE Confidence: 0.881127893924713

 $00:05:31.790 \longrightarrow 00:05:39.140$ what I was told was equipment that

NOTE Confidence: 0.881127893924713

 $00:05:39.140 \longrightarrow 00:05:41.678$ they wanted to be destroyed,

NOTE Confidence: 0.881127893924713

 $00:05:41.680 \longrightarrow 00:05:43.800$ and so there were many

NOTE Confidence: 0.881127893924713

 $00{:}05{:}43.800 \dashrightarrow 00{:}05{:}45.920$ toxic exposures and I fear,

 $00:05:45.920 \longrightarrow 00:05:48.496$ and I believe it will be true

NOTE Confidence: 0.881127893924713

 $00:05:48.496 \longrightarrow 00:05:51.595$ that we will see many other risk

NOTE Confidence: 0.881127893924713

00:05:51.595 --> 00:05:53.980 factors for different types of

NOTE Confidence: 0.916848301887512 00:05:53.980 --> 00:05:56.200 malignancies.

NOTE Confidence: 0.916848301887512

 $00:05:56.200 \longrightarrow 00:05:59.257$ I mean I don't know whether we still

NOTE Confidence: 0.916848301887512

 $00:05:59.257 \longrightarrow 00:06:01.910$ see veterans who were exposed to Hiroshima

NOTE Confidence: 0.916848301887512

 $00:06:01.910 \longrightarrow 00:06:04.156$ and Nagasaki, but radiation

NOTE Confidence: 0.916848301887512

 $00:06:04.156 \longrightarrow 00:06:07.117$ also can expose you to a variety

NOTE Confidence: 0.916848301887512

00:06:07.120 --> 00:06:08.840 of malignancies too, right?

NOTE Confidence: 0.916848301887512

 $00:06:08.840 \longrightarrow 00:06:10.130$ Absolutely, in fact

NOTE Confidence: 0.916848301887512

 $00:06:10.130 \longrightarrow 00:06:13.818$ I can talk about this because

NOTE Confidence: 0.916848301887512

 $00:06:13.818 \longrightarrow 00:06:17.199$ one of my veterans really wanted

NOTE Confidence: 0.916848301887512

 $00{:}06{:}17.199 \dashrightarrow 00{:}06{:}21.365$ to raise more awareness and he and

NOTE Confidence: 0.916848301887512

 $00{:}06{:}21.365 \dashrightarrow 00{:}06{:}24.575$ his wife really wanted want to

NOTE Confidence: 0.916848301887512

 $00:06:24.575 \longrightarrow 00:06:28.320$ publicly speak more about it.

 $00:06:28.320 \longrightarrow 00:06:31.530$ He was actually exposed,

NOTE Confidence: 0.916848301887512

 $00{:}06{:}34.210 \dashrightarrow 00{:}06{:}36.880$ in regular service to radiation in

NOTE Confidence: 0.916848301887512

 $00:06:36.880 \longrightarrow 00:06:39.016$ the nuclear powered submarines,

NOTE Confidence: 0.916848301887512

00:06:39.020 --> 00:06:39.844 and unfortunately,

NOTE Confidence: 0.916848301887512

 $00:06:39.844 \longrightarrow 00:06:41.904$ he was in very close proximity

NOTE Confidence: 0.916848301887512

 $00:06:41.904 \longrightarrow 00:06:44.772$ to it and unfortunately now deals

NOTE Confidence: 0.916848301887512

 $00:06:44.772 \longrightarrow 00:06:46.848$ with a very aggressive cancer.

NOTE Confidence: 0.916848301887512

 $00:06:46.850 \longrightarrow 00:06:48.634$ They were fortunately able

NOTE Confidence: 0.916848301887512

 $00:06:48.634 \longrightarrow 00:06:50.418$ to control it with chemotherapy,

NOTE Confidence: 0.916848301887512

 $00:06:50.420 \longrightarrow 00:06:53.549$ but it does look like he will

NOTE Confidence: 0.916848301887512

 $00:06:53.549 \longrightarrow 00:06:54.890$ be on chemotherapy

NOTE Confidence: 0.916848301887512

 $00:06:54.890 \longrightarrow 00:06:57.566$ probably for rest of his life.

NOTE Confidence: 0.916848301887512

 $00:06:57.570 \longrightarrow 00:06:59.362$ What about other agents?

NOTE Confidence: 0.916848301887512

 $00:06:59.362 \longrightarrow 00:06:59.810$ Do we have any idea

NOTE Confidence: 0.922635674476624

 $00:06:59.810 \longrightarrow 00:07:03.051$ about the carcinogenic

NOTE Confidence: 0.922635674476624

 $00{:}07{:}03.051 \dashrightarrow 00{:}07{:}05.619$ potential of things like tear gas,

 $00{:}07{:}05.620 {\:{\circ}{\circ}{\circ}}>00{:}07{:}08.296$ which is commonly used both

NOTE Confidence: 0.922635674476624

 $00:07:08.300 \longrightarrow 00:07:11.478$ I guess in combat and in

NOTE Confidence: 0.922635674476624

00:07:11.478 --> 00:07:13.250 civilian crowd control?

NOTE Confidence: 0.921124577522278 00:07:13.250 --> 00:07:15.632 I'm not NOTE Confidence: 0.921124577522278

 $00:07:15.632 \longrightarrow 00:07:17.980$ an expert in this regard,

NOTE Confidence: 0.921124577522278

 $00:07:17.980 \longrightarrow 00:07:20.876$ so I have to apologize that I can't

NOTE Confidence: 0.921124577522278

 $00:07:20.876 \longrightarrow 00:07:23.139$ answer this question correctly.

NOTE Confidence: 0.921124577522278

00:07:23.140 --> 00:07:26.515 But I do think that we have

NOTE Confidence: 0.921124577522278

00:07:26.515 --> 00:07:30.444 to be aware about all the herbicides

NOTE Confidence: 0.921124577522278

 $00:07:30.450 \longrightarrow 00:07:32.565$ we are using still commercially and

NOTE Confidence: 0.921124577522278

 $00:07:32.565 \longrightarrow 00:07:35.547$ also in the private sector that I

NOTE Confidence: 0.921124577522278

 $00{:}07{:}35.547 \dashrightarrow 00{:}07{:}37.522$ believe is under recognized

NOTE Confidence: 0.921124577522278

 $00:07:39.910 \longrightarrow 00:07:42.675$ so certainly there are

NOTE Confidence: 0.921124577522278

 $00:07:42.675 \longrightarrow 00:07:45.500$ a whole host of exposures that

NOTE Confidence: 0.921124577522278

 $00:07:45.500 \longrightarrow 00:07:47.960$ are unique to veterans and our

00:07:47.960 --> 00:07:50.428 military families and we have to

NOTE Confidence: 0.921124577522278

 $00:07:50.428 \longrightarrow 00:07:52.672$ remember that. And

NOTE Confidence: 0.921124577522278

 $00:07:52.672 \longrightarrow 00:07:55.433$ cancer is not uncommon

NOTE Confidence: 0.921124577522278

 $00:07:55.433 \longrightarrow 00:07:57.373$ even in the general public.

NOTE Confidence: 0.921124577522278

 $00:07:57.380 \longrightarrow 00:08:00.152$ And so when you are seeing patients

NOTE Confidence: 0.921124577522278

 $00{:}08{:}00.152 \dashrightarrow 00{:}08{:}02.465$ at the VA, you're seeing people

NOTE Confidence: 0.921124577522278

 $00:08:02.465 \longrightarrow 00:08:04.715$ who may be at increased risk

NOTE Confidence: 0.921124577522278

 $00:08:04.715 \longrightarrow 00:08:06.877$ because of their military service.

NOTE Confidence: 0.921124577522278

 $00{:}08{:}06.880 \dashrightarrow 00{:}08{:}09.310$ But you're also seeing people who

NOTE Confidence: 0.921124577522278

 $00:08:09.310 \longrightarrow 00:08:11.363$ are just diagnosed with cancers

NOTE Confidence: 0.921124577522278

 $00{:}08{:}11.363 \dashrightarrow 00{:}08{:}13.848$ that they would get as part of

NOTE Confidence: 0.921124577522278

 $00:08:13.848 \longrightarrow 00:08:15.988$ the general population as well.

 $00:08:17.076 \longrightarrow 00:08:20.124$ We serve all veterans,

NOTE Confidence: 0.886958599090576

 $00{:}08{:}20.130 \dashrightarrow 00{:}08{:}23.700$ whether they've been in combat or not

NOTE Confidence: 0.886958599090576

 $00{:}08{:}23.700 \dashrightarrow 00{:}08{:}26.862$ and if they fulfill the criteria

NOTE Confidence: 0.886958599090576

 $00:08:26.862 \longrightarrow 00:08:29.800$ to receive care at the VA,

 $00{:}08{:}29.800 \dashrightarrow 00{:}08{:}32.770$ we will absolutely see all veterans

NOTE Confidence: 0.886958599090576

 $00{:}08{:}32.770 \dashrightarrow 00{:}08{:}35.909$ that are eligible for VA health care.

 $00:08:37.293 \longrightarrow 00:08:40.059$ We will also see the cancers

NOTE Confidence: 0.886958599090576

 $00{:}08{:}40.059 \dashrightarrow 00{:}08{:}43.272$ that are not related to service

NOTE Confidence: 0.886958599090576

 $00:08:43.272 \longrightarrow 00:08:46.610$ connection and we will treat

NOTE Confidence: 0.886958599090576

 $00:08:46.610 \longrightarrow 00:08:50.418$ these veterans, as much as we can do,

NOTE Confidence: 0.886958599090576

 $00:08:50.420 \longrightarrow 00:08:54.695$ and one of the benefits for me to

NOTE Confidence: 0.886958599090576

 $00:08:54.700 \longrightarrow 00:08:57.556$ be an oncologist at the VA,

NOTE Confidence: 0.886958599090576

 $00{:}08{:}57.560 \dashrightarrow 00{:}09{:}00.368$ is that we have many other people

NOTE Confidence: 0.886958599090576

 $00:09:00.368 \longrightarrow 00:09:02.790$ helping me with their care.

NOTE Confidence: 0.886958599090576

 $00{:}09{:}02.790 \dashrightarrow 00{:}09{:}06.500$ One of the things that I do not miss is

NOTE Confidence: 0.886958599090576

 $00:09:06.600 \longrightarrow 00:09:10.410$ the billing issues and medication issues.

NOTE Confidence: 0.886958599090576

 $00:09:10.410 \longrightarrow 00:09:12.790$ I mean, as you know,

NOTE Confidence: 0.886958599090576

 $00:09:12.790 \longrightarrow 00:09:15.676$ there so many

NOTE Confidence: 0.886958599090576

00:09:15.676 --> 00:09:17.119 very very expensive

NOTE Confidence: 0.886958599090576

00:09:17.120 --> 00:09:18.824 cancer medications, in fact,

 $00:09:18.824 \longrightarrow 00:09:21.825$ we see a stream of

NOTE Confidence: 0.886958599090576

 $00:09:21.825 \longrightarrow 00:09:24.009$ new patients into the VA because

NOTE Confidence: 0.886958599090576

 $00:09:24.009 \longrightarrow 00:09:26.505$ of the very very expensive drug

NOTE Confidence: 0.886958599090576

 $00:09:26.505 \longrightarrow 00:09:29.151$ prices and any veteran that finds

NOTE Confidence: 0.886958599090576

 $00:09:29.151 \longrightarrow 00:09:32.130$ out that they can probably get

NOTE Confidence: 0.886958599090576

 $00:09:32.130 \longrightarrow 00:09:34.660$ these medications for \$9 copay

NOTE Confidence: 0.886958599090576

 $00:09:34.756 \longrightarrow 00:09:37.380$ at the VA a month will come to

NOTE Confidence: 0.886958599090576 00:09:37.380 --> 00:09:39.998 the VA. NOTE Confidence: 0.915887892246246

00:09:40.000 --> 00:09:43.294 For those who may or may not know, if you are

NOTE Confidence: 0.915887892246246

 $00:09:43.294 \longrightarrow 00:09:46.244$ a veteran, you can get coverage

NOTE Confidence: 0.915887892246246

 $00:09:46.244 \longrightarrow 00:09:48.740$ through the VA for your family,

NOTE Confidence: 0.915887892246246

00:09:48.740 --> 00:09:51.380 your spouse, and your children?

NOTE Confidence: 0.919187068939209

 $00:09:51.380 \longrightarrow 00:09:55.209$ That's a very interesting question.

NOTE Confidence: 0.919187068939209

 $00:09:55.210 \longrightarrow 00:09:58.843$ I ask the social worker all the

NOTE Confidence: 0.919187068939209

 $00:09:58.843 \longrightarrow 00:10:02.826$ time and it turns out that spouses

NOTE Confidence: 0.919187068939209

 $00{:}10{:}02.826 \dashrightarrow 00{:}10{:}05.591$ of 100% service connected veterans

00:10:05.591 --> 00:10:10.019 are eligible to get care at the VA

NOTE Confidence: 0.919187068939209

 $00:10:10.019 \dashrightarrow 00:10:12.849$ until the immediate Medicare age.

NOTE Confidence: 0.919187068939209

 $00:10:12.850 \longrightarrow 00:10:15.060$ I believe that the children

NOTE Confidence: 0.919187068939209

 $00:10:15.060 \longrightarrow 00:10:16.386$ are not necessarily,

NOTE Confidence: 0.919187068939209

 $00:10:16.390 \longrightarrow 00:10:19.274$ but I think there might

NOTE Confidence: 0.919187068939209

 $00:10:19.274 \longrightarrow 00:10:22.026$ be mechanisms to take care of

NOTE Confidence: 0.919187068939209

 $00:10:22.026 \longrightarrow 00:10:23.930$ the children of veterans,

NOTE Confidence: 0.919187068939209

 $00:10:23.930 \longrightarrow 00:10:27.026$ but the spouses of 100% service connected

NOTE Confidence: 0.919187068939209

 $00:10:27.026 \dashrightarrow 00:10:30.570$ veter an are eligible for care here at the VA.

NOTE Confidence: 0.919187068939209

 $00:10:30.570 \dashrightarrow 00:10:33.228$ What does 100% service connection mean?

NOTE Confidence: 0.919187068939209

 $00:10:33.230 \longrightarrow 00:10:36.038$ It means that these veterans have

NOTE Confidence: 0.919187068939209

 $00{:}10{:}36.038 \dashrightarrow 00{:}10{:}38.808$ a condition that disables them and

NOTE Confidence: 0.919187068939209

 $00{:}10{:}38.808 \dashrightarrow 00{:}10{:}41.650$ it originated during the time of

NOTE Confidence: 0.929405510425568

 $00:10:41.650 \longrightarrow 00:10:42.994$ the military service.

NOTE Confidence: 0.929405510425568 00:10:42.994 --> 00:10:45.225 And you see

00:10:45.225 --> 00:10:47.895 patients with all kinds of cancers,

NOTE Confidence: 0.929405510425568

 $00{:}10{:}47.900 \dashrightarrow 00{:}10{:}51.008$ and you treat them at the VA.

NOTE Confidence: 0.929405510425568

 $00:10:51.010 \longrightarrow 00:10:53.485$ Are there particular things that

NOTE Confidence: 0.929405510425568

00:10:53.485 --> 00:10:56.441 you're thinking about in terms of

NOTE Confidence: 0.929405510425568

 $00:10:56.441 \longrightarrow 00:10:58.799$ their treatment in terms of side

NOTE Confidence: 0.929405510425568

00:10:58.799 --> 00:11:02.203 effects and so on that may be of

NOTE Confidence: 0.929405510425568

00:11:02.203 --> 00:11:03.915 particular concern to veterans?

NOTE Confidence: 0.924570500850677

 $00:11:04.540 \longrightarrow 00:11:08.138$ I think there's several

NOTE Confidence: 0.924570500850677

 $00{:}11{:}08.138 \dashrightarrow 00{:}11{:}11.647$ things that we do have to consider,

NOTE Confidence: 0.924570500850677

00:11:11.650 --> 00:11:14.698 and that is, for instance, service

NOTE Confidence: 0.924570500850677

 $00:11:14.698 \longrightarrow 00:11:17.238$ connected post traumatic stress disorder.

NOTE Confidence: 0.924570500850677

 $00:11:17.240 \longrightarrow 00:11:20.432$ We unfortunately take care of a fair

NOTE Confidence: 0.924570500850677

 $00:11:20.432 \longrightarrow 00:11:23.599$ number of veterans that suffer from

NOTE Confidence: 0.924570500850677

00:11:23.599 --> 00:11:25.875 post traumatic stress disorder,

NOTE Confidence: 0.924570500850677

 $00:11:25.880 \longrightarrow 00:11:29.144$ and one of the things that

NOTE Confidence: 0.924570500850677

 $00:11:29.144 \longrightarrow 00:11:33.100$ we have to be aware of is

 $00:11:33.100 \longrightarrow 00:11:37.108$ sometimes when the cancer treatment itself

NOTE Confidence: 0.924570500850677

 $00{:}11{:}37.110 --> 00{:}11{:}37.850 \ {\rm causes \ stress},$

NOTE Confidence: 0.924570500850677

 $00:11:37.850 \longrightarrow 00:11:40.810$ some of the PTSD

NOTE Confidence: 0.924570500850677

00:11:40.889 --> 00:11:43.209 symptoms can

NOTE Confidence: 0.924570500850677

 $00:11:43.209 \longrightarrow 00:11:46.924$ flare up and that is the reason why

NOTE Confidence: 0.924570500850677

 $00:11:46.924 \longrightarrow 00:11:49.546$ we really right from the beginning

NOTE Confidence: 0.924570500850677

 $00:11:49.550 \longrightarrow 00:11:52.130$ even before we start treatment,

NOTE Confidence: 0.924570500850677

 $00:11:52.130 \longrightarrow 00:11:54.500$ we actually frequently have palliative

NOTE Confidence: 0.924570500850677

 $00:11:54.500 \longrightarrow 00:11:57.269$ care and the health psychology team,

NOTE Confidence: 0.924570500850677

00:11:57.270 --> 00:11:59.850 in addition to psychiatry, if necessary,

NOTE Confidence: 0.924570500850677

 $00:11:59.850 \longrightarrow 00:12:01.995$ be involved in the

NOTE Confidence: 0.924570500850677

 $00:12:01.995 \longrightarrow 00:12:04.140$ management of the patient.

NOTE Confidence: 0.924570500850677

 $00:12:04.140 \longrightarrow 00:12:05.888$ For instance, when

NOTE Confidence: 0.924570500850677

 $00{:}12{:}05.888 \to 00{:}12{:}07.199$ our veterans

NOTE Confidence: 0.924570500850677

 $00:12:07.200 \longrightarrow 00:12:10.110$ have to undergo complicated cancer surgery

 $00:12:10.110 \longrightarrow 00:12:12.660$ there is actually a service for

NOTE Confidence: 0.924570500850677

00:12:12.660 --> 00:12:15.461 elderly veterans called

NOTE Confidence: 0.924570500850677

 $00{:}12{:}15.461 \dashrightarrow 00{:}12{:}17.513$ Champions where the geriatrician

NOTE Confidence: 0.924570500850677

00:12:17.513 --> 00:12:20.300 and the psychologists are involved

NOTE Confidence: 0.924570500850677

 $00:12:20.300 \longrightarrow 00:12:23.054$ before even the surgery and really

NOTE Confidence: 0.924570500850677

00:12:23.054 --> 00:12:26.210 prepare the patients for the surgery

NOTE Confidence: 0.924570500850677

 $00{:}12{:}26.210 \dashrightarrow 00{:}12{:}28.688$ and follows them all along through

NOTE Confidence: 0.924570500850677

 $00:12:28.688 \longrightarrow 00:12:31.939$ the hospitalization and after discharge.

NOTE Confidence: 0.908037960529327

00:12:31.940 --> 00:12:34.435 Yeah, because I can imagine

NOTE Confidence: 0.908037960529327

 $00:12:34.435 \longrightarrow 00:12:37.280$ that for any patient cancer is

NOTE Confidence: 0.908037960529327

 $00{:}12{:}37.280 \dashrightarrow 00{:}12{:}40.058$ a big diagnosis, it's a scary diagnosis,

NOTE Confidence: 0.908037960529327

 $00:12:40.060 \longrightarrow 00:12:42.646$ but for veterans it may be even

NOTE Confidence: 0.908037960529327

 $00:12:42.646 \longrightarrow 00:12:46.901$ more so that it kind of adds to the

NOTE Confidence: 0.908037960529327

 $00:12:46.901 \longrightarrow 00:12:49.336$ stress that they've already gone

NOTE Confidence: 0.915897488594055 00:12:49.340 --> 00:12:50.230 through. NOTE Confidence: 0.915897488594055

 $00:12:50.230 \longrightarrow 00:12:53.790$ And that is one of the things where

00:12:53.872 --> 00:12:56.297 we are incredibly grateful for at

NOTE Confidence: 0.915897488594055

 $00:12:56.300 \longrightarrow 00:12:58.345$ the VA in Connecticut, we actually

NOTE Confidence: 0.915897488594055

 $00:12:58.345 \longrightarrow 00:13:00.924$ over the years we have developed

NOTE Confidence: 0.915897488594055

 $00:13:00.924 \longrightarrow 00:13:03.224$ a cancer care coordination

NOTE Confidence: 0.915897488594055

 $00:13:03.224 \longrightarrow 00:13:05.741$ system where the cancer

NOTE Confidence: 0.915897488594055

00:13:05.741 --> 00:13:07.547 care coordinator actually

NOTE Confidence: 0.915897488594055

 $00:13:07.550 \longrightarrow 00:13:09.735$ tracks patients that may

NOTE Confidence: 0.915897488594055

00:13:09.735 --> 00:13:11.483 develop cancer,

NOTE Confidence: 0.915897488594055

 $00:13:11.490 \longrightarrow 00:13:14.206$ but it's still in the work up

NOTE Confidence: 0.915897488594055

 $00:13:14.206 \longrightarrow 00:13:16.894$ and the primary care physician or

NOTE Confidence: 0.915897488594055

00:13:16.894 --> 00:13:19.768 any provider can council the cancer

NOTE Confidence: 0.915897488594055

00:13:19.768 --> 00:13:22.478 care coordination team to try to

NOTE Confidence: 0.915897488594055

 $00{:}13{:}22.478 \dashrightarrow 00{:}13{:}25.068$ expedite the work up and navigate

NOTE Confidence: 0.915897488594055

 $00:13:25.068 \longrightarrow 00:13:27.258$ for the patients

NOTE Confidence: 0.915897488594055

 $00:13:27.258 \longrightarrow 00:13:29.010$ going through the treatment.

 $00:13:29.010 \longrightarrow 00:13:30.758$ Yeah, that's so important.

NOTE Confidence: 0.910564303398132

 $00{:}13{:}30.760 \dashrightarrow 00{:}13{:}33.798$ We're going to talk a lot more

NOTE Confidence: 0.910564303398132

00:13:33.798 --> 00:13:36.053 about cancer treatment and the

NOTE Confidence: 0.910564303398132

 $00:13:36.053 \longrightarrow 00:13:38.218$ side effects in our veterans

NOTE Confidence: 0.910564303398132

 $00:13:38.220 \longrightarrow 00:13:39.528$ right after we take a short

NOTE Confidence: 0.910564303398132

 $00:13:39.528 \longrightarrow 00:13:40.780$ break for a medical minute.

NOTE Confidence: 0.934238910675049

 $00:13:41.340 \longrightarrow 00:13:44.065$ Support for Yale Cancer Answers

NOTE Confidence: 0.934238910675049

 $00{:}13{:}44.065 \dashrightarrow 00{:}13{:}46.790$ comes from AstraZeneca, dedicated

NOTE Confidence: 0.934238910675049

 $00{:}13{:}46.882 \dashrightarrow 00{:}13{:}50.238$ to providing innovative treatment

NOTE Confidence: 0.934238910675049

 $00:13:50.238 \longrightarrow 00:13:54.433$ options for people living with

NOTE Confidence: 0.934238910675049

 $00{:}13{:}54.433 \dashrightarrow 00{:}13{:}55.272$ cancer. Learn more@astrazeneca-us.com.

NOTE Confidence: 0.934238910675049

 $00:13:55.280 \longrightarrow 00:13:57.380$ This is a medical minute

NOTE Confidence: 0.934238910675049

 $00{:}13{:}57.380 \dashrightarrow 00{:}13{:}58.640$ about smoking cessation.

NOTE Confidence: 0.934238910675049

 $00:13:58.640 \longrightarrow 00:14:00.740$ There are many obstacles to

NOTE Confidence: 0.934238910675049

 $00:14:00.740 \longrightarrow 00:14:02.420$ face when quitting smoking.

NOTE Confidence: 0.934238910675049

 $00:14:02.420 \longrightarrow 00:14:05.360$ As smoking involves the potent drug nicotine.

00:14:05.360 --> 00:14:08.300 But it's a very important lifestyle change,

NOTE Confidence: 0.934238910675049

 $00:14:08.300 \longrightarrow 00:14:09.560$ especially for patients

NOTE Confidence: 0.934238910675049

 $00:14:09.560 \longrightarrow 00:14:10.820$ undergoing cancer treatment.

NOTE Confidence: 0.934238910675049

00:14:10.820 --> 00:14:13.082 Quitting smoking has been shown to

NOTE Confidence: 0.934238910675049

 $00:14:13.082 \longrightarrow 00:14:15.131$ positively impact response to treatments,

NOTE Confidence: 0.934238910675049

 $00:14:15.131 \longrightarrow 00:14:17.516$ decrease the likelihood that patients

NOTE Confidence: 0.934238910675049

00:14:17.516 --> 00:14:19.424 will develop second malignancies

NOTE Confidence: 0.934238910675049

 $00{:}14{:}19.491 \dashrightarrow 00{:}14{:}21.316$ and increase rates of survival.

NOTE Confidence: 0.934238910675049

 $00{:}14{:}21.320 \dashrightarrow 00{:}14{:}22.956$ To bacco treatment programs are

NOTE Confidence: 0.934238910675049

 $00:14:22.956 \longrightarrow 00:14:25.001$ currently being offered at federally

NOTE Confidence: 0.934238910675049

 $00:14:25.001 \longrightarrow 00:14:26.988$ designated comprehensive cancer centers

NOTE Confidence: 0.934238910675049

 $00:14:26.990 \longrightarrow 00:14:28.690$ and operate on the principles

NOTE Confidence: 0.934238910675049

 $00{:}14{:}28.690 \dashrightarrow 00{:}14{:}31.048$ of the US Public Health Service

NOTE Confidence: 0.934238910675049

 $00:14:31.048 \longrightarrow 00:14:32.827$ clinical practice guidelines.

NOTE Confidence: 0.934238910675049

 $00:14:32.830 \longrightarrow 00:14:34.930$ All treatment components are evidence

 $00:14:34.930 \longrightarrow 00:14:37.480$ based and therefore all patients are

NOTE Confidence: 0.934238910675049

 $00{:}14{:}37.480 \dashrightarrow 00{:}14{:}39.814$ treated with FDA approved first line

NOTE Confidence: 0.934238910675049

 $00:14:39.814 \longrightarrow 00:14:41.915$ medications for smoking cessation as

NOTE Confidence: 0.934238910675049

 $00:14:41.915 \longrightarrow 00:14:44.085$ well as smoking cessation counseling

NOTE Confidence: 0.934238910675049

 $00:14:44.090 \longrightarrow 00:14:46.586$ that stresses appropriate coping skills.

NOTE Confidence: 0.934238910675049

 $00{:}14{:}46.590 \dashrightarrow 00{:}14{:}48.735$ More information is available at

NOTE Confidence: 0.934238910675049

00:14:48.735 --> 00:14:50.022 yalecancercenter.org. You're listening

NOTE Confidence: 0.934238910675049

 $00{:}14{:}50.022 \dashrightarrow 00{:}14{:}51.589$ to Connecticut public radio.

NOTE Confidence: 0.916288673877716

 $00:14:52.730 \longrightarrow 00:14:55.118$ Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.916288673877716

00:14:55.120 --> 00:14:57.436 This is doctor Anees Chappar

NOTE Confidence: 0.916288673877716

 $00{:}14{:}57.436 \dashrightarrow 00{:}14{:}59.872$ and I'm joined to night by

NOTE Confidence: 0.916288673877716

 $00:14:59.872 \longrightarrow 00:15:02.278$ my guest doctor Herta Chao.

NOTE Confidence: 0.916288673877716

 $00:15:02.280 \longrightarrow 00:15:04.024$ We're talking about cancer,

NOTE Confidence: 0.916288673877716

 $00:15:04.024 \longrightarrow 00:15:05.768$ particularly in veterans and

NOTE Confidence: 0.916288673877716

00:15:05.768 --> 00:15:07.847 right before the break you

NOTE Confidence: 0.916288673877716

 $00:15:07.850 \longrightarrow 00:15:09.840$ were telling me about

 $00:15:09.840 \longrightarrow 00:15:11.830$ the really fabulous

NOTE Confidence: 0.916288673877716

 $00:15:11.830 \longrightarrow 00:15:13.820$ services that the VA offers

NOTE Confidence: 0.916288673877716

 $00:15:13.820 \longrightarrow 00:15:16.268$ veterans who are diagnosed with cancer.

NOTE Confidence: 0.916288673877716

00:15:16.270 --> 00:15:18.202 It is really a comprehensive approach

NOTE Confidence: 0.916288673877716

 $00:15:18.202 \longrightarrow 00:15:20.134$ a multidisciplinary approach with

NOTE Confidence: 0.916288673877716

00:15:20.134 --> 00:15:22.621 social work, with geriatricians, with

NOTE Confidence: 0.916288673877716

 $00:15:22.621 \longrightarrow 00:15:24.553$ psychologists and psychiatrists to

NOTE Confidence: 0.916288673877716

 $00{:}15{:}24.553 \dashrightarrow 00{:}15{:}26.931$ really provide the best treatment

NOTE Confidence: 0.916288673877716

 $00:15:26.931 \longrightarrow 00:15:28.647$ to veterans facing cancer.

NOTE Confidence: 0.916288673877716

 $00:15:28.650 \longrightarrow 00:15:31.440$ Because many of these veterans may

NOTE Confidence: 0.916288673877716

 $00:15:31.440 \longrightarrow 00:15:34.346$ face an increased risk of cancer

NOTE Confidence: 0.916288673877716

 $00{:}15{:}34.346 \dashrightarrow 00{:}15{:}36.736$ due to military based exposure.

NOTE Confidence: 0.916288673877716

 $00{:}15{:}36.740 \dashrightarrow 00{:}15{:}40.284$ The other thing that I think a lot

NOTE Confidence: 0.916288673877716

 $00{:}15{:}40.284 \dashrightarrow 00{:}15{:}43.697$ of people may not know about the VA

NOTE Confidence: 0.916288673877716

 $00:15:43.697 \longrightarrow 00:15:47.230$ is that the VA actually supports

00:15:47.230 --> 00:15:51.433 a lot of research in the area of cancer.

NOTE Confidence: 0.916288673877716

00:15:51.440 --> 00:15:55.643 Can you talk a little bit about the DoD,

NOTE Confidence: 0.916288673877716

00:15:55.650 --> 00:15:57.578 the Department of Defense,

NOTE Confidence: 0.916288673877716

 $00:15:57.578 \longrightarrow 00:16:00.800$ and the support that it provides for

NOTE Confidence: 0.929175555706024

 $00:16:00.800 \longrightarrow 00:16:03.140$ research into cancer?

NOTE Confidence: 0.929175555706024

00:16:03.140 --> 00:16:06.129 Yes, they had several mechanisms at the

NOTE Confidence: 0.929175555706024

 $00:16:06.129 \longrightarrow 00:16:09.687$ VA to apply for funding for research

NOTE Confidence: 0.92917555570602400:16:09.690 --> 00:16:10.626 in veterans,

NOTE Confidence: 0.929175555706024

 $00{:}16{:}10.626 \dashrightarrow 00{:}16{:}12.498$ including veterans with cancer.

NOTE Confidence: 0.929175555706024

00:16:12.500 --> 00:16:15.461 One is the DoD Department of Defense

NOTE Confidence: 0.929175555706024

 $00{:}16{:}15.461 \dashrightarrow 00{:}16{:}17.680$ has several grant mechanisms

NOTE Confidence: 0.929175555706024

00:16:17.680 --> 00:16:19.888 in many different cancers,

NOTE Confidence: 0.929175555706024

00:16:19.888 --> 00:16:21.544 including prostate cancer,

NOTE Confidence: 0.929175555706024

 $00{:}16{:}21.550 --> 00{:}16{:}23.706 \ \mathrm{lung \ cancer}, \ \mathrm{breast \ cancer},$

NOTE Confidence: 0.929175555706024

 $00:16:23.706 \longrightarrow 00:16:25.323$ there's another mechanism

NOTE Confidence: 0.929175555706024

 $00:16:25.323 \longrightarrow 00:16:27.630$ that's called VA Merit

 $00:16:27.630 \longrightarrow 00:16:30.720$ which is internally

NOTE Confidence: 0.929175555706024

 $00:16:30.720 \longrightarrow 00:16:34.068$ within the VA you can apply

NOTE Confidence: 0.929175555706024

 $00:16:34.068 \longrightarrow 00:16:37.038$ for funding to conduct research,

NOTE Confidence: 0.929175555706024

 $00:16:37.040 \longrightarrow 00:16:39.248$ an obviously there are others

NOTE Confidence: 0.929175555706024

00:16:39.248 --> 00:16:40.904 like the National Institutes of Health

NOTE Confidence: 0.929175555706024

 $00:16:43.190 \longrightarrow 00:16:44.900$ sponsored grants that

NOTE Confidence: 0.929175555706024

 $00:16:44.900 \longrightarrow 00:16:47.215$ physicians and researchers at the

NOTE Confidence: 0.929175555706024

00:16:47.215 --> 00:16:50.827 VA can apply to so I certainly

NOTE Confidence: 0.929175555706024

 $00{:}16{:}50.827 \dashrightarrow 00{:}16{:}53.837$ benefited from these grant mechanisms.

NOTE Confidence: 0.929175555706024

 $00:16:53.840 \longrightarrow 00:16:56.996$ One of my research interests,

NOTE Confidence: 0.929175555706024

 $00:16:57.000 \longrightarrow 00:16:59.220$ in addition to conducting clinical

NOTE Confidence: 0.929175555706024

 $00{:}16{:}59.220 \dashrightarrow 00{:}17{:}02.822$ trials at the VA and making clinical

NOTE Confidence: 0.929175555706024

 $00{:}17{:}02.822 \dashrightarrow 00{:}17{:}05.410$ trials accessible for veterans,

NOTE Confidence: 0.929175555706024

 $00:17:05.410 \longrightarrow 00:17:08.546$ is to look at the potential cognitive

NOTE Confidence: 0.929175555706024

 $00{:}17{:}08.546 \dashrightarrow 00{:}17{:}11.851$ side effects and toxicity of prostate

 $00:17:11.851 \longrightarrow 00:17:14.966$ cancer treatment with hormonal therapy.

NOTE Confidence: 0.929175555706024

00:17:14.970 --> 00:17:17.715 And this actually was not

NOTE Confidence: 0.929175555706024

00:17:17.715 --> 00:17:20.460 something that I thought about,

NOTE Confidence: 0.929175555706024

00:17:20.460 --> 00:17:24.292 this was prompted by one of my patients

NOTE Confidence: 0.929175555706024

00:17:24.292 --> 00:17:28.697 who is a decorated Vietnam War veteran,

NOTE Confidence: 0.929175555706024

 $00:17:28.700 \longrightarrow 00:17:31.485$ and he developed aggressive prostate

NOTE Confidence: 0.929175555706024

 $00:17:31.485 \longrightarrow 00:17:34.730$ cancer at a fairly young age.

NOTE Confidence: 0.929175555706024

 $00:17:34.730 \longrightarrow 00:17:38.090$ He was just in his early 60s when

NOTE Confidence: 0.929175555706024

 $00{:}17{:}38.090 \dashrightarrow 00{:}17{:}41.767$ he was diagnosed with metastatic

NOTE Confidence: 0.929175555706024

 $00:17:41.767 \longrightarrow 00:17:45.177$ gleason 8 prostate cancer and

NOTE Confidence: 0.929175555706024

 $00{:}17{:}45.180 \dashrightarrow 00{:}17{:}47.478$ he was diagnosed in the private

NOTE Confidence: 0.929175555706024

 $00:17:47.478 \longrightarrow 00:17:50.168$ sector and then found out that it

NOTE Confidence: 0.929175555706024

 $00:17:50.168 \longrightarrow 00:17:52.334$ was eligible for the VA benefits.

NOTE Confidence: 0.929175555706024

 $00:17:52.340 \longrightarrow 00:17:55.343$ He came to the VA and participated

NOTE Confidence: 0.929175555706024

 $00:17:55.343 \longrightarrow 00:17:56.630$ in several studies.

NOTE Confidence: 0.929175555706024 00:17:56.630 --> 00:17:57.085 Finally,

 $00:17:57.085 \longrightarrow 00:17:59.360$ after three years taking care

NOTE Confidence: 0.929175555706024

 $00:17:59.360 \longrightarrow 00:18:02.040$ of him and his prostate

NOTE Confidence: 0.929175555706024

 $00:18:02.040 \longrightarrow 00:18:04.032$ cancer it was beautiful controlled.

NOTE Confidence: 0.929175555706024

 $00:18:04.032 \longrightarrow 00:18:07.509$ He finally told me,

NOTE Confidence: 0.929175555706024

00:18:07.509 --> 00:18:09.927 I don't want to be ungrateful,

NOTE Confidence: 0.929175555706024

 $00:18:09.930 \longrightarrow 00:18:12.906$ but I think these hormone shots

NOTE Confidence: 0.929175555706024

 $00:18:12.906 \longrightarrow 00:18:14.890$ are frying my brain.

NOTE Confidence: 0.929175555706024

 $00:18:14.890 \longrightarrow 00:18:18.022$ And I asked him, what do you mean?

NOTE Confidence: 0.929175555706024

 $00:18:18.030 \longrightarrow 00:18:19.780$ And he said well,

NOTE Confidence: 0.929175555706024

00:18:19.780 --> 00:18:21.592 you know I've been busy all

NOTE Confidence: 0.929175555706024

 $00:18:21.592 \longrightarrow 00:18:23.620$ my life I can multitask,

NOTE Confidence: 0.929175555706024

 $00:18:23.620 \longrightarrow 00:18:25.708$ I can do so many things.

NOTE Confidence: 0.929175555706024

00:18:25.710 --> 00:18:28.146 But since I started the hormone shot,

NOTE Confidence: 0.929175555706024

 $00:18:28.150 \longrightarrow 00:18:31.129$ I have to write down the

NOTE Confidence: 0.929175555706024

00:18:31.129 --> 00:18:34.775 10 things I want to do within the next hour.

 $00:18:34.780 \longrightarrow 00:18:35.980$ And that's not me.

NOTE Confidence: 0.929175555706024

 $00{:}18{:}35.980 \dashrightarrow 00{:}18{:}38.256$ I usually can think of multiple

NOTE Confidence: 0.929175555706024

00:18:38.256 --> 00:18:41.063 things and I can get everything done,

NOTE Confidence: 0.929175555706024

 $00:18:41.070 \longrightarrow 00:18:43.558$ but now I feel like I have to

NOTE Confidence: 0.929175555706024

 $00:18:43.558 \longrightarrow 00:18:45.658$ write down and remind myself

NOTE Confidence: 0.929175555706024

 $00:18:45.660 \longrightarrow 00:18:48.170$ what I want to do.

NOTE Confidence: 0.929175555706024

00:18:48.170 --> 00:18:50.178 So then I thought,

NOTE Confidence: 0.929175555706024

 $00:18:50.178 \longrightarrow 00:18:51.658$ oh, that's easy.

NOTE Confidence: 0.929175555706024

 $00:18:51.658 \longrightarrow 00:18:55.081$ I'll refer you for

NOTE Confidence: 0.929175555706024

 $00:18:55.081 \longrightarrow 00:18:57.689$ neurocognitive testing and it turns

NOTE Confidence: 0.929175555706024

 $00{:}18{:}57.689 \dashrightarrow 00{:}19{:}00.219$ out that he scored beautifully.

NOTE Confidence: 0.929175555706024

 $00:19:00.220 \longrightarrow 00:19:03.342$ There was no deficit that we could

NOTE Confidence: 0.929175555706024

 $00:19:03.342 \longrightarrow 00:19:06.740$ find on regular neurocognitive testing.

NOTE Confidence: 0.929175555706024

 $00:19:06.740 \longrightarrow 00:19:09.752$ And then I started looking into

NOTE Confidence: 0.929175555706024 00:19:09.752 --> 00:19:13.320 it and it's NOTE Confidence: 0.929175555706024

 $00:19:13.320 \longrightarrow 00:19:15.920$ still not well understood

 $00:19:15.920 \longrightarrow 00:19:18.740$ what hormone therapy for prostate

NOTE Confidence: 0.929175555706024

 $00:19:18.740 \longrightarrow 00:19:22.720$ cancer can do the to the brain.

NOTE Confidence: 0.929175555706024

 $00:19:22.720 \longrightarrow 00:19:26.122$ I think that the breast cancer

NOTE Confidence: 0.929175555706024

 $00:19:26.122 \longrightarrow 00:19:28.390$ experts are way ahead.

NOTE Confidence: 0.929175555706024

 $00:19:28.390 \longrightarrow 00:19:31.984$ I mean the recognition that

NOTE Confidence: 0.929175555706024

00:19:31.984 --> 00:19:34.380 chemotherapy or hormonal therapy

NOTE Confidence: 0.929175555706024

 $00:19:34.483 \longrightarrow 00:19:37.603$ for breast cancer has been for

NOTE Confidence: 0.929175555706024

00:19:37.603 --> 00:19:39.163 many years already

NOTE Confidence: 0.929175555706024

 $00:19:39.170 \longrightarrow 00:19:41.454$ suspected and many

NOTE Confidence: 0.929175555706024

 $00:19:41.454 \longrightarrow 00:19:43.738$ studies actually support

NOTE Confidence: 0.929175555706024

 $00{:}19{:}43.740 \dashrightarrow 00{:}19{:}47.125$ the suspicion that chemotherapy and

NOTE Confidence: 0.929175555706024

 $00:19:47.125 \longrightarrow 00:19:50.510$ hormonal therapy for breast cancer

NOTE Confidence: 0.929175555706024

 $00{:}19{:}50.611 \dashrightarrow 00{:}19{:}54.888$ can cause chemo fog, or chemo brain.

NOTE Confidence: 0.929175555706024

 $00{:}19{:}54.888 \dashrightarrow 00{:}19{:}58.980$ It's not as well understood in prostate

NOTE Confidence: 0.929175555706024

 $00:19:59.107 \longrightarrow 00:20:03.174$ cancer so around 2009

 $00:20:03.180 \longrightarrow 00:20:07.140$ I started looking into that.

NOTE Confidence: 0.929175555706024

 $00:20:07.140 \longrightarrow 00:20:09.085$ And the interesting part is

NOTE Confidence: 0.929175555706024

 $00:20:09.085 \longrightarrow 00:20:11.030$ that it's not very easy

NOTE Confidence: 0.934914469718933

 $00:20:11.109 \longrightarrow 00:20:14.581$ to characterize these impact of hormone shots

NOTE Confidence: 0.934914469718933

 $00:20:14.581 \longrightarrow 00:20:17.747$ for prostate cancer, effects on the brain.

NOTE Confidence: 0.934914469718933

00:20:17.750 --> 00:20:19.960 If you do regular testing,

NOTE Confidence: 0.934914469718933

00:20:19.960 --> 00:20:21.358 neurocognitive testing,

NOTE Confidence: 0.934914469718933

 $00{:}20{:}21.358 \dashrightarrow 00{:}20{:}24.154$ whether it's a paper and pencil or

NOTE Confidence: 0.934914469718933

 $00:20:24.154 \longrightarrow 00:20:26.150$ whether it's on a computer,

NOTE Confidence: 0.934914469718933

 $00:20:26.150 \longrightarrow 00:20:29.406$ we have to be aware that there's a

NOTE Confidence: 0.934914469718933

 $00:20:29.406 \longrightarrow 00:20:31.890$ certain amount of practice effect.

NOTE Confidence: 0.934914469718933

00:20:31.890 --> 00:20:35.426 So if you do it every three months,

NOTE Confidence: 0.934914469718933

00:20:35.430 --> 00:20:38.559 if you do it every six months,

NOTE Confidence: 0.934914469718933

00:20:38.560 --> 00:20:41.780 you know what to expect to do in the test,

NOTE Confidence: 0.934914469718933

 $00:20:41.780 \longrightarrow 00:20:45.038$ so your test score may actually hold hold up

NOTE Confidence: 0.934914469718933

 $00:20:45.038 \longrightarrow 00:20:47.895$ despite the fact there might be a deficit.

 $00:20:47.900 \longrightarrow 00:20:53.465$ And that is probably true for many,

NOTE Confidence: 0.934914469718933

 $00:20:53.470 \longrightarrow 00:20:54.734$ many patients.

NOTE Confidence: 0.934914469718933

 $00:20:54.734 \longrightarrow 00:20:59.158$ That is what prompted me to think

NOTE Confidence: 0.934914469718933

 $00:20:59.158 \longrightarrow 00:21:03.761$ about what do other people do to study

NOTE Confidence: 0.934914469718933

00:21:03.761 --> 00:21:08.457 effects of anything in the brain,

NOTE Confidence: 0.934914469718933

 $00:21:08.460 \longrightarrow 00:21:10.203$ whether it's depression,

NOTE Confidence: 0.934914469718933

 $00:21:10.203 \longrightarrow 00:21:11.946$ whether it's dementia,

NOTE Confidence: 0.934914469718933

 $00{:}21{:}11.950 \dashrightarrow 00{:}21{:}14.282$ whether it's psychiatric illnesses.

NOTE Confidence: 0.934914469718933

 $00{:}21{:}14.282 \dashrightarrow 00{:}21{:}17.780$ So that's the reason why I approached

NOTE Confidence: 0.934914469718933

 $00{:}21{:}17.780 \dashrightarrow 00{:}21{:}20.264$ my colleagues at the Yale Medical School

NOTE Confidence: 0.934914469718933

00:21:20.264 --> 00:21:22.784 in psychiatry that are involved in

NOTE Confidence: 0.934914469718933

 $00:21:22.784 \longrightarrow 00:21:25.148$ functional brain imaging to see whether

NOTE Confidence: 0.934914469718933

 $00{:}21{:}25.148 \operatorname{--}{>} 00{:}21{:}27.788$ or not hormone the rapy can affect

NOTE Confidence: 0.934914469718933

00:21:27.788 --> 00:21:30.013 functional brain imaging.

NOTE Confidence: 0.934914469718933

00:21:30.020 --> 00:21:31.286 Just to clarify,

 $00:21:31.286 \longrightarrow 00:21:32.130$ what are

NOTE Confidence: 0.931411921977997

 $00{:}21{:}32.130 \dashrightarrow 00{:}21{:}34.240$ these hormone shots that you're

NOTE Confidence: 0.931411921977997

00:21:34.240 --> 00:21:35.928 giving for prostate cancer?

NOTE Confidence: 0.931411921977997

 $00:21:35.930 \longrightarrow 00:21:37.502$ What exactly is that?

NOTE Confidence: 0.931411921977997

00:21:37.502 --> 00:21:39.467 Because when we talk about

NOTE Confidence: 0.931411921977997

00:21:39.467 --> 00:21:41.288 hormonal therapy or endocrine

NOTE Confidence: 0.931411921977997

00:21:41.288 --> 00:21:43.100 therapy in breast cancer,

NOTE Confidence: 0.931411921977997

 $00:21:43.100 \longrightarrow 00:21:44.696$ that's often a pill.

NOTE Confidence: 0.931411921977997

 $00:21:44.696 \longrightarrow 00:21:47.740$ Is it the same kind of thing?

NOTE Confidence: 0.907076001167297

00:21:47.880 --> 00:21:52.712 It's not exactly the same because we know

NOTE Confidence: 0.907076001167297

 $00:21:52.712 \longrightarrow 00:21:58.181$ that if we just use a pill form like

NOTE Confidence: 0.907076001167297

 $00:21:58.181 \longrightarrow 00:22:02.954$ something called by Bicalutamide which is a

NOTE Confidence: 0.907076001167297

00:22:02.954 --> 00:22:04.838 testosterone receptor blocker,

NOTE Confidence: 0.907076001167297

00:22:04.840 --> 00:22:08.963 it usually is not sufficient to suppress

NOTE Confidence: 0.907076001167297

 $00:22:08.963 \longrightarrow 00:22:13.627$ the effects on the prostate cancer cells.

NOTE Confidence: 0.907076001167297

 $00:22:13.630 \longrightarrow 00:22:18.054$ So usually men with both prostate cancer

00:22:18.060 --> 00:22:21.846 need to get something called Leuprolide,

NOTE Confidence: 0.907076001167297

 $00:22:21.850 \longrightarrow 00:22:25.526$ which is, I'm going to use

NOTE Confidence: 0.907076001167297

 $00:22:25.526 \longrightarrow 00:22:30.260$ the technical term LHRH

NOTE Confidence: 0.907076001167297

 $00:22:30.381 \longrightarrow 00:22:36.191$ agonist, that can shut down the testosterone

NOTE Confidence: 0.907076001167297

00:22:36.191 --> 00:22:39.831 production in a patients body

NOTE Confidence: 0.907076001167297

 $00{:}22{:}39.831 \dashrightarrow 00{:}22{:}43.943$ and we use these shots to cause the

NOTE Confidence: 0.907076001167297

 $00:22:43.950 \longrightarrow 00:22:46.988$ testicles and also the remainder

NOTE Confidence: 0.907076001167297

 $00{:}22{:}46.988 \dashrightarrow 00{:}22{:}50.387$ of the body to turn off test osterone

NOTE Confidence: 0.932894647121429 00:22:50.390 --> 00:22:53.150 production. NOTE Confidence: 0.932894647121429

00:22:53.150 --> 00:22:56.732 So the key point being that the pills

NOTE Confidence: 0.932894647121429

 $00:22:56.732 \longrightarrow 00:23:00.081$ that many breast cancer patients take for

NOTE Confidence: 0.932894647121429

 $00:23:00.081 \longrightarrow 00:23:04.029$ five or ten years is different than these

NOTE Confidence: 0.932894647121429

 $00{:}23{:}04.029 \dashrightarrow 00{:}23{:}07.410$ shots that men get for prostate cancer,

NOTE Confidence: 0.932894647121429

 $00{:}23{:}07.410 \dashrightarrow 00{:}23{:}09.250$ especially advanced prostate cancer.

NOTE Confidence: 0.932894647121429

00:23:09.250 --> 00:23:11.550 They work through different mechanisms.

00:23:11.550 --> 00:23:14.840 They have different targets as it were.

NOTE Confidence: 0.932894647121429

 $00:23:14.840 \longrightarrow 00:23:18.224$ And so the side effects are pretty different,

NOTE Confidence: 0.932894647121429

00:23:18.230 --> 00:23:21.261 so many women, while it's true that

NOTE Confidence: 0.932894647121429

 $00:23:21.261 \longrightarrow 00:23:23.045$ with chemotherapy they certainly

NOTE Confidence: 0.932894647121429

00:23:23.045 --> 00:23:25.859 can get chemo brain or chemo fog,

NOTE Confidence: 0.932894647121429

00:23:25.860 --> 00:23:28.404 it's a little less common for

NOTE Confidence: 0.932894647121429

00:23:28.404 --> 00:23:30.100 women taking endocrine therapy,

NOTE Confidence: 0.932894647121429

00:23:30.100 --> 00:23:32.220 something like tamoxifen or some

NOTE Confidence: 0.932894647121429

 $00:23:32.220 \longrightarrow 00:23:34.340$ of the aromatase inhibitors.

NOTE Confidence: 0.932894647121429

 $00:23:34.340 \longrightarrow 00:23:37.220$ So how common is it that people can

NOTE Confidence: 0.932894647121429

00:23:37.220 --> 00:23:40.736 get this chemo brain or chemo fog

NOTE Confidence: 0.932894647121429

 $00:23:40.736 \longrightarrow 00:23:43.514$ or this cognitive decline when taking

NOTE Confidence: 0.932894647121429

 $00:23:43.514 \longrightarrow 00:23:46.636$ an LHRH agonist for prostate cancer?

NOTE Confidence: 0.922586023807526

00:23:46.650 --> 00:23:49.930 I think that's a very hot topic right

NOTE Confidence: 0.922586023807526

 $00:23:49.930 \longrightarrow 00:23:53.179$ now in prostate cancer research.

NOTE Confidence: 0.922586023807526

00:23:53.180 --> 00:23:56.186 I think for the longest time,

 $00:23:56.190 \longrightarrow 00:23:59.822$ and I would say like

NOTE Confidence: 0.922586023807526

 $00:23:59.822 \longrightarrow 00:24:04.217$ 10 years ago I was equally guilty.

NOTE Confidence: 0.922586023807526

 $00:24:04.220 \longrightarrow 00:24:06.720$ We recognized the potential effect

NOTE Confidence: 0.922586023807526

 $00:24:06.720 \longrightarrow 00:24:10.302$ on the brain and we really just

NOTE Confidence: 0.922586023807526

 $00:24:10.302 \longrightarrow 00:24:13.760$ focus on like how to control cancer.

NOTE Confidence: 0.922586023807526

 $00:24:13.760 \longrightarrow 00:24:15.404$ Because as Oncologists,

NOTE Confidence: 0.922586023807526

 $00:24:15.404 \longrightarrow 00:24:18.144$ we want to control cancer.

NOTE Confidence: 0.922586023807526

 $00:24:18.150 \longrightarrow 00:24:20.740$ Now I think we have to recognize

NOTE Confidence: 0.922586023807526

 $00{:}24{:}20.740 \longrightarrow 00{:}24{:}23.539$ there so many different treatments,

NOTE Confidence: 0.922586023807526

 $00{:}24{:}23.540 \dashrightarrow 00{:}24{:}25.332$ and that's the exciting part about

NOTE Confidence: 0.922586023807526

00:24:25.332 --> 00:24:27.124 being a cancer doctor nowadays.

NOTE Confidence: 0.922586023807526

 $00:24:27.130 \longrightarrow 00:24:29.450$ There's so many different treatments

NOTE Confidence: 0.922586023807526

 $00:24:29.450 \longrightarrow 00:24:32.688$ and you can treat cancer so many

NOTE Confidence: 0.922586023807526

 $00{:}24{:}32.688 \dashrightarrow 00{:}24{:}34.778$ different ways that I think

NOTE Confidence: 0.922586023807526

 $00:24:34.778 \longrightarrow 00:24:37.008$ it's actually very important to

00:24:37.008 --> 00:24:39.253 know what each treatment could

NOTE Confidence: 0.922586023807526

 $00{:}24{:}39.253 \longrightarrow 00{:}24{:}41.962$ cause in terms of side effects,

NOTE Confidence: 0.922586023807526

00:24:41.962 --> 00:24:44.232 whether it's inside the body

NOTE Confidence: 0.922586023807526

 $00:24:44.232 \longrightarrow 00:24:46.438$ or whether it's inside the

NOTE Confidence: 0.92515959342320800:24:46.440 --> 00:24:49.717 brain. NOTE Confidence: 0.925159593423208

1.012 comidence: 0.020100000120200

 $00{:}24{:}49.717 \dashrightarrow 00{:}24{:}52.699$ And what did you find with the

NOTE Confidence: 0.925159593423208

 $00:24:52.699 \longrightarrow 00:24:55.010$ functional imaging study that you

NOTE Confidence: 0.906567990779877 00:24:55.010 --> 00:24:56.938 did?

NOTE Confidence: 0.906567990779877

00:24:56.938 --> 00:24:59.348 It's still a very active,

NOTE Confidence: 0.906567990779877

 $00:24:59.350 \longrightarrow 00:25:00.577$ ongoing study.

NOTE Confidence: 0.906567990779877

 $00{:}25{:}00.577 \dashrightarrow 00{:}25{:}03.991$ We're trying to right now look at the

NOTE Confidence: 0.906567990779877

 $00:25:03.991 \longrightarrow 00:25:06.316$ effect of lowering the testosterone

NOTE Confidence: 0.906567990779877

 $00:25:06.316 \longrightarrow 00:25:09.950$ level what we call androgen deprivation,

NOTE Confidence: 0.906567990779877

 $00:25:09.950 \longrightarrow 00:25:12.836$ what it does over two years.

NOTE Confidence: 0.906567990779877

00:25:12.840 --> 00:25:15.708 My original pilot study only

NOTE Confidence: 0.906567990779877

 $00:25:15.708 \longrightarrow 00:25:18.659$ investigated effects in 30 veterans.

 $00:25:18.660 \longrightarrow 00:25:21.885$ 15 leuprolide injection and

NOTE Confidence: 0.906567990779877

 $00:25:21.885 \longrightarrow 00:25:26.068$ 15 as a control that underwent

NOTE Confidence: 0.906567990779877

00:25:26.068 --> 00:25:30.248 surgery or just radiation alone.

NOTE Confidence: 0.906567990779877

 $00:25:30.250 \longrightarrow 00:25:32.810$ It actually showed that the newer

NOTE Confidence: 0.906567990779877

 $00:25:32.810 \longrightarrow 00:25:35.370$ cognitive testing was the same.

NOTE Confidence: 0.906567990779877

 $00:25:35.370 \longrightarrow 00:25:37.062$ People scored the same,

NOTE Confidence: 0.906567990779877

 $00:25:37.062 \longrightarrow 00:25:40.252$ but when you look at the functional

NOTE Confidence: 0.906567990779877

 $00:25:40.252 \longrightarrow 00:25:43.032$ brain imaging just six months

NOTE Confidence: 0.906567990779877

 $00{:}25{:}43.032 \dashrightarrow 00{:}25{:}45.883$ of hormone the rapy for prostate

NOTE Confidence: 0.906567990779877

 $00:25:45.883 \longrightarrow 00:25:48.573$ cancer completely changed the way

NOTE Confidence: 0.906567990779877

 $00:25:48.573 \longrightarrow 00:25:51.242$ the brain shows activation.

NOTE Confidence: 0.906567990779877

 $00:25:51.242 \longrightarrow 00:25:53.290$ What does this mean?

NOTE Confidence: 0.906567990779877

 $00{:}25{:}53.290 \rightarrow 00{:}25{:}57.898$ That's something I think I need to find out,

NOTE Confidence: 0.906567990779877

 $00:25:57.900 \longrightarrow 00:26:01.484$ but it was very striking

NOTE Confidence: 0.906567990779877

 $00{:}26{:}01.490 \dashrightarrow 00{:}26{:}05.018$ and to be honest I was a bit surprised

 $00:26:05.018 \longrightarrow 00:26:08.583$ because I initially thought if the

NOTE Confidence: 0.906567990779877

 $00:26:08.583 \longrightarrow 00:26:11.858$ newer cognitive test scores are the same,

NOTE Confidence: 0.906567990779877

00:26:11.860 --> 00:26:15.017 why should the brain MRI be different?

NOTE Confidence: 0.906567990779877

 $00:26:15.020 \longrightarrow 00:26:18.485$ And so I was educated that it can be

NOTE Confidence: 0.906567990779877

 $00:26:18.485 \longrightarrow 00:26:21.514$ different and apparently in other disease

NOTE Confidence: 0.906567990779877

 $00:26:21.514 \longrightarrow 00:26:24.490$ processes it can be different too.

NOTE Confidence: 0.906567990779877

 $00:26:24.490 \longrightarrow 00:26:27.410$ Thanks to the support

NOTE Confidence: 0.906567990779877

00:26:27.410 --> 00:26:30.872 of pilot studies through the Yale Cancer

NOTE Confidence: 0.906567990779877

00:26:30.872 --> 00:26:33.517 Center through Dr. Herbst,

NOTE Confidence: 0.906567990779877

 $00:26:33.520 \longrightarrow 00:26:36.090$ who supported this project,

NOTE Confidence: 0.906567990779877

 $00:26:36.090 \longrightarrow 00:26:39.688$ we were able to do an additional study

NOTE Confidence: 0.906567990779877

 $00:26:39.690 \longrightarrow 00:26:43.288$ of these 30 patients.

NOTE Confidence: 0.906567990779877

 $00:26:43.290 \longrightarrow 00:26:46.386$ It actually turns out that certain

NOTE Confidence: 0.906567990779877

 $00:26:46.386 \longrightarrow 00:26:48.450$ circuits that are connecting

NOTE Confidence: 0.906567990779877

00:26:48.536 --> 00:26:50.951 different brain areas to process

NOTE Confidence: 0.906567990779877

 $00:26:50.951 \longrightarrow 00:26:53.985$ things seem to be affected by

00:26:53.985 --> 00:26:56.645 hormone therapy for prostate cancer,

NOTE Confidence: 0.906567990779877

 $00:26:56.650 \longrightarrow 00:27:00.410$ so I suspect that the longer we give

NOTE Confidence: 0.906567990779877

 $00:27:00.410 \longrightarrow 00:27:04.366$ somebody hormone therapy for prostate cancer,

NOTE Confidence: 0.906567990779877

 $00:27:04.370 \longrightarrow 00:27:08.180$ the more effects we can see.

NOTE Confidence: 0.906567990779877

 $00:27:08.180 \longrightarrow 00:27:09.788$ Now that being said,

NOTE Confidence: 0.906567990779877

00:27:09.788 --> 00:27:13.339 I don't want to create any fear among

NOTE Confidence: 0.906567990779877

00:27:13.339 --> 00:27:15.964 patients to get hormone therapy.

NOTE Confidence: 0.906567990779877

 $00:27:15.970 \longrightarrow 00:27:18.260$ I think it's a very,

NOTE Confidence: 0.906567990779877

 $00:27:18.260 \longrightarrow 00:27:20.996$ very important treatment for prostate cancer,

NOTE Confidence: 0.906567990779877

 $00{:}27{:}21.000 \dashrightarrow 00{:}27{:}23.748$ especially for stage four prostate cancer,

NOTE Confidence: 0.906567990779877

 $00:27:23.750 \longrightarrow 00:27:26.084$ and I think this is actually

NOTE Confidence: 0.906567990779877

 $00:27:26.084 \longrightarrow 00:27:28.816$ part of the cognitive

NOTE Confidence: 0.906567990779877

 $00{:}27{:}28.816 \dashrightarrow 00{:}27{:}31.536$ side effects of hormone the rapy.

NOTE Confidence: 0.906567990779877

00:27:31.540 --> 00:27:34.288 That's something we need to study,

NOTE Confidence: 0.906567990779877

 $00:27:34.290 \longrightarrow 00:27:36.966$ and I believe not everybody

 $00:27:36.966 \longrightarrow 00:27:39.380$ is vulnerable to it.

NOTE Confidence: 0.906567990779877

 $00{:}27{:}39.380 \dashrightarrow 00{:}27{:}41.330$ There are certain individual vulnerability

NOTE Confidence: 0.906567990779877

 $00:27:41.330 \longrightarrow 00:27:43.920$ that we have to identify and study.

NOTE Confidence: 0.927918434143066

 $00:27:43.920 \longrightarrow 00:27:45.535$ That was going

NOTE Confidence: 0.927918434143066

 $00:27:45.535 \longrightarrow 00:27:48.070$ to be one of my questions.

NOTE Confidence: 0.927918434143066

 $00{:}27{:}48.070 \dashrightarrow 00{:}27{:}50.248$ Was that in that functional MRI

NOTE Confidence: 0.927918434143066

00:27:50.248 --> 00:27:52.797 study where you had some

NOTE Confidence: 0.927918434143066

 $00{:}27{:}52.797 \dashrightarrow 00{:}27{:}55.184$ patients who had the LHRH agonist

NOTE Confidence: 0.927918434143066

00:27:55.264 --> 00:27:57.898 therapy and some patients who didn't,

NOTE Confidence: 0.927918434143066

 $00:27:57.900 \longrightarrow 00:28:00.168$ and you found that there was a

NOTE Confidence: 0.927918434143066

 $00{:}28{:}00.168 \dashrightarrow 00{:}28{:}02.018$ difference in the functional brain

NOTE Confidence: 0.927918434143066

00:28:02.018 --> 00:28:04.448 imaging between the two groups

NOTE Confidence: 0.927918434143066

 $00:28:04.448 \longrightarrow 00:28:07.671$ were all of the patients who had the

NOTE Confidence: 0.927918434143066

00:28:07.671 --> 00:28:09.519 LHRH agoinst therapy still thinking that

NOTE Confidence: 0.927918434143066

 $00:28:09.519 \longrightarrow 00:28:11.193$ the hormones were frying their brain

NOTE Confidence: 0.927918434143066

 $00:28:11.193 \longrightarrow 00:28:13.360$ or were some of them quite functional?

 $00:28:14.030 \longrightarrow 00:28:17.054$ I would say some of them

NOTE Confidence: 0.901062607765198

 $00:28:17.054 \longrightarrow 00:28:19.070$ were quite functional and

NOTE Confidence: 0.901062607765198

 $00:28:19.070 \longrightarrow 00:28:21.950$ that is the reason why I was

NOTE Confidence: 0.901062607765198

 $00:28:21.950 \longrightarrow 00:28:25.110$ surprised to find on the brain imaging

NOTE Confidence: 0.901062607765198

 $00:28:25.110 \longrightarrow 00:28:27.470$ study that they're still changes.

NOTE Confidence: 0.901062607765198

 $00:28:27.470 \longrightarrow 00:28:29.570$ And some were

NOTE Confidence: 0.901062607765198

 $00:28:29.570 \longrightarrow 00:28:31.670$ complaining of maybe hot flashes.

NOTE Confidence: 0.901062607765198

 $00:28:31.670 \longrightarrow 00:28:34.542$ So I think frequently we say,

NOTE Confidence: 0.901062607765198

 $00{:}28{:}34.542 \dashrightarrow 00{:}28{:}37.621$ maybe you feel more fatigued

NOTE Confidence: 0.901062607765198

00:28:37.621 --> 00:28:40.422 because of hot flashes that you

NOTE Confidence: 0.901062607765198

00:28:40.422 --> 00:28:43.008 can get with those LHRH agonist,

NOTE Confidence: 0.901062607765198

 $00:28:43.010 \longrightarrow 00:28:45.578$ or whether there could be

NOTE Confidence: 0.901062607765198

 $00{:}28{:}45.580 {\:{\mbox{--}}\!>\:} 00{:}28{:}47.644$ some component of depression

NOTE Confidence: 0.901062607765198

00:28:47.644 --> 00:28:49.708 affecting your cognitive out,

NOTE Confidence: 0.901062607765198

 $00:28:49.710 \longrightarrow 00:28:53.734$ but I think that's the reason why it's

00:28:53.734 --> 00:28:56.388 actually important to have something

NOTE Confidence: 0.901062607765198

 $00:28:56.388 \longrightarrow 00:28:59.502$ that's not just subjective,

NOTE Confidence: 0.901062607765198

00:28:59.510 --> 00:29:02.606 it's actually fairly objective for the

00:29:03.492 --> 00:29:06.579 patients to see actually on brain imaging,

NOTE Confidence: 0.901062607765198

 $00:29:06.580 \longrightarrow 00:29:09.280$ there are changes and

NOTE Confidence: 0.901062607765198

 $00:29:09.280 \longrightarrow 00:29:12.494$ while this is all still

NOTE Confidence: 0.901062607765198

00:29:12.494 --> 00:29:15.128 very much a topic of research,

NOTE Confidence: 0.901062607765198

 $00:29:15.130 \longrightarrow 00:29:17.518$ for my patient,

NOTE Confidence: 0.901062607765198

 $00:29:17.520 \longrightarrow 00:29:19.974$ who was the original one to actually

NOTE Confidence: 0.901062607765198

00:29:19.974 --> 00:29:22.710 complain to me about it, was very,

NOTE Confidence: 0.901062607765198

 $00:29:22.710 \longrightarrow 00:29:23.910$ very comforted actually,

NOTE Confidence: 0.901062607765198

 $00:29:23.910 \longrightarrow 00:29:27.492$ to know that it's not just in his mind.

NOTE Confidence: 0.901062607765198

 $00:29:27.500 \longrightarrow 00:29:29.490$ It is actually something that

NOTE Confidence: 0.901062607765198 $00:29:29.490 \longrightarrow 00:29:30.684$ we can see.

NOTE Confidence: 0.930424451828003

00:29:30.690 --> 00:29:33.028 Dr. Herta Chao is the deputy

NOTE Confidence: 0.930424451828003

 $00:29:33.028 \longrightarrow 00:29:35.484$ director at the VA comprehensive Cancer

 $00{:}29{:}35.484 \dashrightarrow 00{:}29{:}37.789$ Center and an associate professor

NOTE Confidence: 0.930424451828003

 $00{:}29{:}37.789 \dashrightarrow 00{:}29{:}39.940$ of Medicine and medical oncology

NOTE Confidence: 0.930424451828003

00:29:39.940 --> 00:29:42.256 at the Yale School of Medicine.

NOTE Confidence: 0.930424451828003

 $00:29:42.260 \longrightarrow 00:29:43.900$ If you have questions,

NOTE Confidence: 0.930424451828003

 $00:29:43.900 \longrightarrow 00:29:45.540$ the address is canceranswers@yale.edu.

NOTE Confidence: 0.930424451828003

 $00{:}29{:}45.540 \dashrightarrow 00{:}29{:}47.262$ And past editions of the program

NOTE Confidence: 0.930424451828003

00:29:47.262 --> 00:29:49.323 are available in audio and written

NOTE Confidence: 0.930424451828003

 $00:29:49.323 \longrightarrow 00:29:50.607$ form at Yale cancercenter.org.

NOTE Confidence: 0.930424451828003

 $00{:}29{:}50.610 \dashrightarrow 00{:}29{:}53.234$ We hope you'll join us next week to

NOTE Confidence: 0.930424451828003

00:29:53.234 --> 00:29:55.794 learn more about the fight against

NOTE Confidence: 0.930424451828003

 $00{:}29{:}55.794 \dashrightarrow 00{:}29{:}58.536$ cancer here on Connecticut public radio.