## WEBVTT

00:00:00.000 --> 00:00:02.196 Funding for Yale Cancer Answers is NOTE Confidence: 0.936440445454545  $00{:}00{:}02{.}196 \dashrightarrow 00{:}00{:}04{.}280$  provided by Smilow Cancer Hospital. NOTE Confidence: 0.7860740866666667 00:00:06.520 --> 00:00:08.720 Welcome to Yale Cancer Answers NOTE Confidence: 0.7860740866666667  $00:00:08.720 \rightarrow 00:00:10.480$  with Doctor Anees Chappar. NOTE Confidence: 0.7860740866666667 00:00:10.480 --> 00:00:12.300 Yale Cancer Answers features the NOTE Confidence: 0.7860740866666667  $00{:}00{:}12.300 \dashrightarrow 00{:}00{:}14.120$  latest information on cancer care NOTE Confidence: 0.7860740866666667  $00:00:14.179 \rightarrow 00:00:15.611$  by welcoming oncologists and NOTE Confidence: 0.7860740866666667  $00{:}00{:}15.611 \dashrightarrow 00{:}00{:}17.759$  specialists who are on the forefront NOTE Confidence: 0.7860740866666667  $00:00:17.824 \longrightarrow 00:00:19.480$  of the battle to fight cancer. NOTE Confidence: 0.7860740866666667 00:00:19.480 --> 00:00:21.460 This week it's a conversation about NOTE Confidence: 0.7860740866666667  $00:00:21.460 \rightarrow 00:00:23.180$  caring for patients with bladder NOTE Confidence: 0.7860740866666667 00:00:23.180 --> 00:00:25.198 cancer with doctor Fed Ghali. Dr. NOTE Confidence: 0.7860740866666667 00:00:25.198 --> 00:00:27.106 Ghali is an assistant professor of NOTE Confidence: 0.7860740866666667 00:00:27.106 --> 00:00:29.560 urology at the Yale School of Medicine, NOTE Confidence: 0.7860740866666667  $00:00:29.560 \rightarrow 00:00:32.650$  where Doctor Chagpar is a professor NOTE Confidence: 0.7860740866666667

00:00:32.650 --> 00:00:34.440 of surgical oncology.

NOTE Confidence: 0.96558218631579

 $00{:}00{:}34.440 \dashrightarrow 00{:}00{:}35.892$  Fed, maybe you can start off by telling

NOTE Confidence: 0.96558218631579

 $00:00:35.892 \longrightarrow 00:00:37.437$  us a little bit more about

NOTE Confidence: 0.96558218631579

 $00{:}00{:}37{.}437 \dashrightarrow 00{:}00{:}39{.}236$  yourself and what it is you do.

NOTE Confidence: 0.964566525714286

00:00:39.480 --> 00:00:41.328 I'm in the Department of Urology

NOTE Confidence: 0.964566525714286

 $00:00:41.328 \dashrightarrow 00:00:44.880$  and my focus is urologic cancers.

NOTE Confidence: 0.964566525714286

 $00{:}00{:}44.880 \dashrightarrow 00{:}00{:}47.456$  So that includes cancers of the prostate

NOTE Confidence: 0.964566525714286

 $00{:}00{:}47.456 \dashrightarrow 00{:}00{:}50.573$  and kidney and bladder as well as the

NOTE Confidence: 0.964566525714286

 $00{:}00{:}50{.}573 \dashrightarrow 00{:}00{:}52{.}513$  ure ter and some other malignancies.

NOTE Confidence: 0.964566525714286

 $00:00:52.520 \rightarrow 00:00:54.250$  And my focus even within

NOTE Confidence: 0.964566525714286

 $00:00:54.250 \longrightarrow 00:00:55.634$  that is urothelial cancers,

NOTE Confidence: 0.964566525714286

 $00:00:55.640 \longrightarrow 00:00:58.020$  which would be bladder cancer

NOTE Confidence: 0.964566525714286

 $00:00:58.020 \longrightarrow 00:01:00.400$  and cancers of the ureter.

NOTE Confidence: 0.964566525714286

 $00:01:00.400 \rightarrow 00:01:03.118$  So that's my main clinical focus.

NOTE Confidence: 0.964566525714286

 $00:01:03.120 \dashrightarrow 00:01:05.542$  And I also have some research interests

NOTE Confidence: 0.964566525714286

 $00:01:05.542 \dashrightarrow 00:01:08.487$  at the School of Medicine which also

- NOTE Confidence: 0.964566525714286
- $00:01:08.487 \rightarrow 00:01:10.319$  involve bladder cancer primarily.
- NOTE Confidence: 0.964186467
- 00:01:11.720 --> 00:01:13.280 So let's talk a little bit
- NOTE Confidence: 0.964186467
- $00:01:13.280 \longrightarrow 00:01:14.320$  more about bladder cancer.
- NOTE Confidence: 0.964186467
- 00:01:14.320 --> 00:01:17.155 Can you give us a landscape of
- NOTE Confidence: 0.964186467
- 00:01:17.160 --> 00:01:19.715 how common it is, who gets it?
- NOTE Confidence: 0.964186467
- $00:01:19.715 \longrightarrow 00:01:21.240$  What are the risk factors?
- NOTE Confidence: 0.92431937375
- $00:01:21.520 \longrightarrow 00:01:24.445$  Of course, bladder cancer is
- NOTE Confidence: 0.92431937375
- 00:01:24.445 --> 00:01:26.200 unfortunately quite common.
- NOTE Confidence: 0.92431937375
- $00:01:26.200 \longrightarrow 00:01:27.928$  Depending on the breakdown,
- NOTE Confidence: 0.92431937375
- $00{:}01{:}27{.}928 \dashrightarrow 00{:}01{:}31{.}746$  it's either the 5th or the 6th most
- NOTE Confidence: 0.92431937375
- $00:01:31.746 \rightarrow 00:01:34.038$  common cancer affecting Americans.
- NOTE Confidence: 0.92431937375
- 00:01:34.040 --> 00:01:36.692 Approximately 80 to a little over
- NOTE Confidence: 0.92431937375
- 00:01:36.692 --> 00:01:39.098 82,000 Americans will be diagnosed
- NOTE Confidence: 0.92431937375
- $00:01:39.098 \dashrightarrow 00:01:41.704$  with bladder cancer every year.
- NOTE Confidence: 0.92431937375
- $00:01:41.704 \longrightarrow 00:01:44.064$  So unfortunately it affects a
- NOTE Confidence: 0.92431937375

00:01:44.064 --> 00:01:46.559 lot of patients and of those

NOTE Confidence: 0.92431937375

00:01:46.560 --> 00:01:48.260 patients the mortality is higher

NOTE Confidence: 0.92431937375

 $00:01:48.260 \longrightarrow 00:01:50.280$  than we would like to see.

NOTE Confidence: 0.92431937375

00:01:50.280 --> 00:01:51.892 You know, approximately over

NOTE Confidence: 0.92431937375

 $00{:}01{:}51.892 \dashrightarrow 00{:}01{:}53.504$ 16,000 Americans succumb to

NOTE Confidence: 0.92431937375

 $00:01:53.504 \longrightarrow 00:01:55.000$  bladder cancer every year.

NOTE Confidence: 0.92431937375

 $00{:}01{:}55{.}000 \dashrightarrow 00{:}01{:}57{.}260$  So it's a real medical

NOTE Confidence: 0.92431937375

 $00:01:57.260 \longrightarrow 00:01:59.920$  problem that we see.

NOTE Confidence: 0.924148254545455

00:02:01.960 --> 00:02:03.034 Bladder cancer primarily

NOTE Confidence: 0.924148254545455

 $00:02:03.034 \rightarrow 00:02:06.040$  affects both men and women of course,

NOTE Confidence: 0.924148254545455

 $00:02:06.040 \dashrightarrow 00:02:08.920$  but it affects men more commonly than women,

NOTE Confidence: 0.924148254545455

 $00:02:08.920 \dashrightarrow 00:02:10.995$  actually about three times more

NOTE Confidence: 0.924148254545455

 $00:02:10.995 \longrightarrow 00:02:13.300$  commonly than women and

NOTE Confidence: 0.924148254545455

 $00:02:13.300 \rightarrow 00:02:15.526$  that's what we see in practice as well.

NOTE Confidence: 0.924148254545455

 $00:02:15.526 \longrightarrow 00:02:17.542$  We definitely see it affecting

NOTE Confidence: 0.924148254545455

 $00:02:17.542 \rightarrow 00:02:19.394$  male patients more frequently,

 $00:02:19.394 \rightarrow 00:02:21.753$  not that female patients don't get it,

NOTE Confidence: 0.924148254545455

 $00:02:21.760 \longrightarrow 00:02:25.280$  but just less commonly.

NOTE Confidence: 0.924148254545455

 $00:02:25.280 \dashrightarrow 00:02:28.045$  So that's sort of a basic landscape

NOTE Confidence: 0.924148254545455

 $00:02:28.045 \rightarrow 00:02:31.062$  and there are some risk factors

NOTE Confidence: 0.924148254545455

 $00:02:31.062 \longrightarrow 00:02:33.678$  like you say for bladder cancer.

NOTE Confidence: 0.924148254545455

 $00:02:33.680 \dashrightarrow 00:02:38.556$  By far the most common risk factor we

NOTE Confidence: 0.924148254545455

 $00:02:38.556 \dashrightarrow 00:02:41.559$  see here in the United States is smoking.

NOTE Confidence: 0.924148254545455

 $00:02:41.560 \rightarrow 00:02:45.110$  Smoking increases patients risks for

NOTE Confidence: 0.924148254545455

 $00:02:45.110 \longrightarrow 00:02:48.413$  developing bladder cancer three to four

NOTE Confidence: 0.924148254545455

 $00:02:48.413 \rightarrow 00:02:50.759$  times higher than the general population.

NOTE Confidence: 0.924148254545455

 $00:02:50.760 \longrightarrow 00:02:53.088$  It's a really important

NOTE Confidence: 0.924148254545455

 $00:02:53.088 \longrightarrow 00:02:54.799$  one because it's so modifiable.

 $00:02:56.320 \longrightarrow 00:02:58.944$  That's something we have a

NOTE Confidence: 0.924148254545455

 $00:02:58.944 \rightarrow 00:03:02.240$  clear impact on in terms of our health.

NOTE Confidence: 0.924148254545455

 $00:03:02.240 \longrightarrow 00:03:03.560$  There are other risk factors.

NOTE Confidence: 0.924148254545455

 $00:03:03.560 \longrightarrow 00:03:05.460$  There are certain chemical

 $00:03:05.460 \longrightarrow 00:03:07.360$  dyes and certain exposures,

NOTE Confidence: 0.924148254545455

00:03:07.360 - 00:03:08.164 workplace exposures,

NOTE Confidence: 0.924148254545455

 $00:03:08.164 \rightarrow 00:03:10.174$  specifically certain types of chemicals

NOTE Confidence: 0.924148254545455

 $00:03:10.174 \longrightarrow 00:03:12.439$  that are associated with bladder cancer.

NOTE Confidence: 0.924148254545455

 $00:03:12.440 \longrightarrow 00:03:15.177$  Those are less commonly seen here in

NOTE Confidence: 0.924148254545455

 $00{:}03{:}15{.}177 \dashrightarrow 00{:}03{:}17{.}799$  the United States but can be seen

NOTE Confidence: 0.924148254545455

 $00{:}03{:}17.800 \dashrightarrow 00{:}03{:}19.870$  and there are certain infections and

NOTE Confidence: 0.924148254545455

 $00:03:19.870 \longrightarrow 00:03:21.824$  other medical exposures that are less

NOTE Confidence: 0.924148254545455

 $00{:}03{:}21.824 \dashrightarrow 00{:}03{:}23.904$  common here in the United States but are

NOTE Confidence: 0.924148254545455

 $00:03:23.958 \rightarrow 00:03:25.910$  seen more in other parts of the world

NOTE Confidence: 0.924148254545455

 $00:03:25.910 \dashrightarrow 00:03:27.760$  that can be related to bladder cancer.

NOTE Confidence: 0.924148254545455

 $00:03:27.760 \longrightarrow 00:03:29.830$  Certain parasite infections of the

NOTE Confidence: 0.924148254545455

 $00{:}03{:}29{.}830 \dashrightarrow 00{:}03{:}32{.}730$  bladder which are seen more in the

NOTE Confidence: 0.924148254545455

 $00{:}03{:}32{.}730 \dashrightarrow 00{:}03{:}34{.}635$  Mediterranean and in North Africa

NOTE Confidence: 0.924148254545455

 $00:03:34.640 \longrightarrow 00:03:36.344$  specifically a parasite called

 $00:03:36.344 \dashrightarrow 00:03:38.900$  schistosomiasis can be related to the

NOTE Confidence: 0.924148254545455

 $00:03:38.970 \longrightarrow 00:03:41.476$  development of a type of bladder cancer.

00:03:42.840 --> 00:03:44.200 So definitely multiple risk factors,

NOTE Confidence: 0.924148254545455

 $00:03:44.200 \rightarrow 00:03:45.872$  but I would say smoking is

NOTE Confidence: 0.924148254545455

 $00{:}03{:}45{.}872 \dashrightarrow 00{:}03{:}47{.}537$  the main one that

NOTE Confidence: 0.924148254545455

 $00{:}03{:}47{.}537 \dashrightarrow 00{:}03{:}49{.}303$  we see here in the in the United

NOTE Confidence: 0.924148254545455

 $00{:}03{:}49{.}303 \dashrightarrow 00{:}03{:}51{.}005$  States and the main one that I

NOTE Confidence: 0.924148254545455

 $00:03:51.005 \rightarrow 00:03:53.280$  like to focus on with my patients

NOTE Confidence: 0.924148254545455

 $00:03:53.280 \rightarrow 00:03:55.278$  because we have such a clear impact on that.

 $00{:}03{:}57{.}320 \dashrightarrow 00{:}03{:}59{.}588$  And one of the

NOTE Confidence: 0.962464408571429

 $00:03:59.588 \rightarrow 00:04:01.539$  things with smoking of course is

NOTE Confidence: 0.962464408571429

 $00:04:01.539 \longrightarrow 00:04:03.400$  that it's really hard to quit.

NOTE Confidence: 0.867307473333333

 $00:04:05.440 \longrightarrow 00:04:07.040$  So a couple of questions

NOTE Confidence: 0.867307473333333

 $00:04:07.040 \longrightarrow 00:04:08.320$  with regards to that.

NOTE Confidence: 0.867307473333333

00:04:08.320 --> 00:04:11.344 First, let's suppose you are a smoker

NOTE Confidence: 0.867307473333333

 $00:04:11.344 \dashrightarrow 00:04:14.759$  and you did develop bladder cancer.

NOTE Confidence: 0.867307473333333

00:04:14.760 --> 00:04:17.840 If you quit,

- NOTE Confidence: 0.867307473333333
- $00:04:17.840 \longrightarrow 00:04:20.878$  does that reduce your risk of recurrence?
- NOTE Confidence: 0.867307473333333
- $00{:}04{:}20.880 \dashrightarrow 00{:}04{:}24.275$  Second, if you're a smoker and you
- NOTE Confidence: 0.867307473333333
- 00:04:24.275 --> 00:04:26.080 haven't developed bladder cancer,
- NOTE Confidence: 0.867307473333333
- $00:04:26.080 \longrightarrow 00:04:27.840$  is it too late?
- NOTE Confidence: 0.867307473333333
- 00:04:27.840 --> 00:04:30.836 In other words, if you quit now,
- NOTE Confidence: 0.867307473333333
- $00:04:30.840 \longrightarrow 00:04:32.725$  do you reduce or potentially
- NOTE Confidence: 0.867307473333333
- $00:04:32.725 \longrightarrow 00:04:34.610$  even eliminate your risk for
- NOTE Confidence: 0.867307473333333
- $00:04:34.679 \rightarrow 00:04:36.398$  developing bladder cancer?
- NOTE Confidence: 0.894738678
- $00:04:37.440 \longrightarrow 00:04:39.440$  Those are both excellent questions.
- NOTE Confidence: 0.894738678
- $00:04:39.440 \longrightarrow 00:04:41.720$  I'm glad that you brought those
- NOTE Confidence: 0.894738678
- 00:04:41.720 --> 00:04:43.888 points up. To your first question,
- NOTE Confidence: 0.894738678
- $00:04:43.888 \longrightarrow 00:04:46.920$  if you have bladder cancer and are a smoker,
- NOTE Confidence: 0.894738678
- $00:04:46.920 \longrightarrow 00:04:48.820$  does squitting smoking improve your
- NOTE Confidence: 0.894738678
- 00:04:48.820 --> 00:04:50.720 outcomes in any meaningful way?
- NOTE Confidence: 0.894738678
- $00{:}04{:}50{.}720 \dashrightarrow 00{:}04{:}52{.}238$  And the answer to that is
- NOTE Confidence: 0.894738678

 $00:04:52.238 \longrightarrow 00:04:53.922$  almost certainly yes, it does.

NOTE Confidence: 0.894738678

 $00{:}04{:}53{.}922 \dashrightarrow 00{:}04{:}56{.}227$  We know that quitting smoking

NOTE Confidence: 0.894738678

 $00:04:56.227 \rightarrow 00:04:58.480$  even after diagnosis decreases some but not all.

 $00:04:59.520 \longrightarrow 00:05:00.988$  It's not a huge, huge margin.

NOTE Confidence: 0.894738678

00:05:00.988 --> 00:05:02.272 It's not the same as some

NOTE Confidence: 0.894738678

 $00:05:02.272 \rightarrow 00:05:03.560$  of the other treatments,

NOTE Confidence: 0.894738678

 $00:05:03.560 \rightarrow 00:05:05.790$  but it's definitely detectable that

NOTE Confidence: 0.894738678

 $00{:}05{:}05{.}790 \dashrightarrow 00{:}05{:}08{.}572$  it decreases the risk of bladder

NOTE Confidence: 0.894738678

 $00:05:08.572 \dashrightarrow 00:05:11.434$  cancer recurring again in the future.

NOTE Confidence: 0.894738678

 $00:05:11.440 \longrightarrow 00:05:13.570$  So it's something that I encourage

NOTE Confidence: 0.894738678

 $00:05:13.570 \longrightarrow 00:05:15.172$  all my patients

NOTE Confidence: 0.894738678

 $00:05:15.172 \longrightarrow 00:05:17.034$  to really think about and

NOTE Confidence: 0.894738678

 $00{:}05{:}17.034 \dashrightarrow 00{:}05{:}18.918$  consider because sometimes,

NOTE Confidence: 0.894738678

 $00:05:18.920 \longrightarrow 00:05:19.934$  like you say,

NOTE Confidence: 0.894738678

 $00:05:19.934 \longrightarrow 00:05:21.962$  quitting smoking is a very big

NOTE Confidence: 0.894738678

 $00:05:21.962 \dashrightarrow 00:05:23.786$  challenge and sometimes the diagnosis

 $00:05:23.786 \longrightarrow 00:05:25.922$  like this is just the impetus

NOTE Confidence: 0.894738678

 $00{:}05{:}25{.}992 \dashrightarrow 00{:}05{:}27{.}816$  and just the motivation one needs

NOTE Confidence: 0.894738678

 $00:05:27.816 \longrightarrow 00:05:30.358$  to take that leap.

 $00:05:33.440 \rightarrow 00:05:36.996$  Your second question is if you quit

NOTE Confidence: 0.894738678

 $00:05:36.996 \rightarrow 00:05:39.600$  smoking before a diagnosis of bladder cancer,

NOTE Confidence: 0.894738678

 $00{:}05{:}39{.}600 \dashrightarrow 00{:}05{:}41{.}058$  does it decrease your risk of

NOTE Confidence: 0.894738678

 $00:05:41.058 \dashrightarrow 00:05:42.840$  developing it or once you're a smoker,

NOTE Confidence: 0.894738678

 $00:05:42.840 \rightarrow 00:05:44.120$  sort of always a smoker,

NOTE Confidence: 0.894738678

 $00:05:44.120 \longrightarrow 00:05:46.776$  you've incurred that risk.

NOTE Confidence: 0.894738678

00:05:46.776 --> 00:05:48.136 And again,

NOTE Confidence: 0.894738678

 $00:05:48.136 \rightarrow 00:05:51.242$  there's pretty good population

NOTE Confidence: 0.894738678

 $00:05:51.242 \rightarrow 00:05:53.496$  level evidence that the risk of smoking

NOTE Confidence: 0.894738678

 $00:05:53.496 \dashrightarrow 00:05:55.678$  is first of all it's dose dependent,

 $00:05:56.852 \rightarrow 00:05:59.759$  if you smoke more and if you smoke longer,

NOTE Confidence: 0.894738678

00:05:59.760 --> 00:06:03.876 that risk of developing malignancy increases.

NOTE Confidence: 0.894738678

 $00:06:03.880 \longrightarrow 00:06:05.100$  On top of that,

NOTE Confidence: 0.894738678

 $00:06:05.100 \rightarrow 00:06:06.320$  when you quit smoking,

 $00:06:06.320 \rightarrow 00:06:09.320$  your risk reduction improves with time.

NOTE Confidence: 0.894738678

00:06:09.320 --> 00:06:11.637 Sort of the longer ago you quit,

NOTE Confidence: 0.894738678

 $00:06:11.640 \rightarrow 00:06:14.040$  the lower your risk of developing

NOTE Confidence: 0.894738678

 $00:06:14.040 \longrightarrow 00:06:16.441$  cancer goes and it sort of

NOTE Confidence: 0.894738678

 $00{:}06{:}16{.}441 \dashrightarrow 00{:}06{:}19{.}335$  starts to mirror the risk of the

NOTE Confidence: 0.894738678

00:06:19.335 --> 00:06:21.275 general population over time.

NOTE Confidence: 0.894738678

 $00:06:21.280 \longrightarrow 00:06:23.616$  So that at about 10 to 15 years

NOTE Confidence: 0.894738678

00:06:23.616 --> 00:06:25.199 after you quit smoking,

NOTE Confidence: 0.894738678

00:06:25.200 --> 00:06:27.600 after a patient quits smoking,

NOTE Confidence: 0.894738678

 $00{:}06{:}27.600 \dashrightarrow 00{:}06{:}29.973$  I tell my patients that at around

NOTE Confidence: 0.894738678

 $00{:}06{:}29{.}973 \dashrightarrow 00{:}06{:}32{.}794$  that time you're sort of close to the

NOTE Confidence: 0.894738678

 $00:06:32.794 \rightarrow 00:06:35.042$  baseline exposure or excuse me the

NOTE Confidence: 0.894738678

 $00{:}06{:}35{.}042 \dashrightarrow 00{:}06{:}37{.}272$  baseline risk of developing bladder

NOTE Confidence: 0.894738678

 $00{:}06{:}37.272 \dashrightarrow 00{:}06{:}40.440$  cancer as the general population.

 $00{:}06{:}40.787 \dashrightarrow 00{:}06{:}43.216$  So on both sides whether before

NOTE Confidence: 0.894738678

 $00:06:43.216 \rightarrow 00:06:46.120$  or after a diagnosis of bladder cancer,

- NOTE Confidence: 0.894738678
- $00{:}06{:}46{.}120 \dashrightarrow 00{:}06{:}48{.}200$  there's still a clear indication

 $00{:}06{:}48{.}200 \dashrightarrow 00{:}06{:}50{.}673$  to quit smoking and

NOTE Confidence: 0.894738678

 $00:06:50.673 \rightarrow 00:06:52.638$  kick that habit if possible.

 $00:06:54.048 \longrightarrow 00:06:55.808$  I tell patients in clinic

NOTE Confidence: 0.894738678

 $00:06:55.808 \longrightarrow 00:06:56.880$  frequently that

NOTE Confidence: 0.894738678

 $00{:}06{:}56{.}880 \dashrightarrow 00{:}06{:}58{.}620$  it's so easy for me to say and it's so

NOTE Confidence: 0.894738678

 $00:06:58.668 \rightarrow 00:07:00.636$  easy to just talk about casually like this.

NOTE Confidence: 0.894738678

00:07:00.640 --> 00:07:01.399 But you know,

NOTE Confidence: 0.894738678

 $00{:}07{:}01{.}399 \dashrightarrow 00{:}07{:}02{.}917$  I acknowledge that it's a really

NOTE Confidence: 0.894738678

 $00{:}07{:}02{.}917 \dashrightarrow 00{:}07{:}03{.}880$  challenging thing for them.

NOTE Confidence: 0.68693525

00:07:06.040 --> 00:07:07.960 And true enough

NOTE Confidence: 0.8252297466666667

00:07:07.960 --> 00:07:09.372 it certainly is challenging,

NOTE Confidence: 0.8252297466666667

 $00{:}07{:}09{.}372 \dashrightarrow 00{:}07{:}11{.}324$  but there are resources that

NOTE Confidence: 0.8252297466666667

 $00:07:11.324 \rightarrow 00:07:13.200$  can help people quit smoking.

NOTE Confidence: 0.8252297466666667

00:07:13.200 --> 00:07:15.440 Can you talk a little bit about

NOTE Confidence: 0.8252297466666667

 $00:07:15.440 \longrightarrow 00:07:17.918$  what are some of the things that

- NOTE Confidence: 0.8252297466666667
- 00:07:17.918 --> 00:07:19.960 you encourage patients to do,
- NOTE Confidence: 0.8252297466666667
- $00:07:19.960 \longrightarrow 00:07:21.640$  whether it's
- NOTE Confidence: 0.8252297466666667
- $00{:}07{:}21.640 \dashrightarrow 00{:}07{:}23.740$  going to a smoking cessation
- NOTE Confidence: 0.8252297466666667
- $00:07:23.740 \longrightarrow 00:07:25.278$  program or a quit line?
- NOTE Confidence: 0.8252297466666667
- $00{:}07{:}25.280 \dashrightarrow 00{:}07{:}28.400$  Are those resources available in
- NOTE Confidence: 0.8252297466666667
- $00:07:28.400 \longrightarrow 00:07:31.040$  the community and do they work?
- NOTE Confidence: 0.941865106
- $00:07:32.360 \longrightarrow 00:07:34.120$  Yes, these are things that
- NOTE Confidence: 0.941865106
- 00:07:34.120 --> 00:07:35.880 I encourage patients to do.
- NOTE Confidence: 0.941865106
- $00:07:35.880 \rightarrow 00:07:38.253$  We do have a smoking cessation program
- NOTE Confidence: 0.941865106
- $00:07:38.253 \dashrightarrow 00:07:40.904$  at the hospital where I work and it's
- NOTE Confidence: 0.941865106
- $00:07:40.904 \rightarrow 00:07:43.158$  really quite robust and there are
- NOTE Confidence: 0.941865106
- $00:07:43.158 \dashrightarrow 00:07:45.154$  providers that specialize specifically
- NOTE Confidence: 0.941865106
- $00:07:45.154 \rightarrow 00:07:47.879$  in helping patients achieve this goal.
- NOTE Confidence: 0.941865106
- $00{:}07{:}47.880 \dashrightarrow 00{:}07{:}49.923$  And so one of the things that
- NOTE Confidence: 0.941865106
- $00{:}07{:}49{.}923 \dashrightarrow 00{:}07{:}52{.}213$  we try to do is make sure to connect
- NOTE Confidence: 0.941865106

 $00:07:52.213 \longrightarrow 00:07:53.879$  patients to resources like this.

NOTE Confidence: 0.941865106

 $00:07:53.880 \longrightarrow 00:07:56.995$  There are multiple prescription medications

NOTE Confidence: 0.941865106

 $00:07:56.995 \rightarrow 00:07:59.487$  like nicotine replacement supplements

NOTE Confidence: 0.941865106

 $00:07:59.487 \longrightarrow 00:08:01.760$  which can also improve patients

NOTE Confidence: 0.941865106

 $00:08:01.760 \dashrightarrow 00:08:04.760$  success rates in quitting smoking.

NOTE Confidence: 0.941865106

 $00:08:04.760 \longrightarrow 00:08:06.412$  On top of that,

NOTE Confidence: 0.941865106

 $00:08:06.412 \longrightarrow 00:08:08.008$  especially for patients

NOTE Confidence: 0.941865106

 $00:08:08.008 \rightarrow 00:08:09.800$  who've been smoking for a long time.

NOTE Confidence: 0.941865106

 $00{:}08{:}09{.}800 \dashrightarrow 00{:}08{:}12{.}520$  And for them it's related to social or

NOTE Confidence: 0.941865106

 $00{:}08{:}12.520 \dashrightarrow 00{:}08{:}15.075$  other sort of benefits that aren't just

00:08:16.960 --> 00:08:18.598 the habit alone,

NOTE Confidence: 0.941865106

 $00:08:18.600 \longrightarrow 00:08:20.550$  but they have other reasons

NOTE Confidence: 0.941865106

 $00{:}08{:}20.550 \dashrightarrow 00{:}08{:}21.720$  that they're smoking.

NOTE Confidence: 0.941865106

 $00:08:21.720 \longrightarrow 00:08:23.700$  It's sometimes helpful to talk to

NOTE Confidence: 0.941865106

 $00{:}08{:}23.700 \dashrightarrow 00{:}08{:}25.463$  mental health providers or other

NOTE Confidence: 0.941865106

 $00:08:25.463 \longrightarrow 00:08:27.003$  practitioners who really are

 $00:08:27.003 \rightarrow 00:08:29.208$  effective at changing harmful habits.

NOTE Confidence: 0.941865106

 $00:08:29.208 \rightarrow 00:08:33.400$  So there are a lot of resources and

 $00:08:34.074 \rightarrow 00:08:36.096$  we're very lucky to have lots

NOTE Confidence: 0.941865106

00:08:36.096 - 00:08:37.784 of resources here, but most

 $00:08:39.280 \longrightarrow 00:08:42.640$  major health centers have some

NOTE Confidence: 0.941865106

 $00:08:42.640 \rightarrow 00:08:44.915$  capacity to help patients achieve this goal.

NOTE Confidence: 0.941865106

00:08:44.920 --> 00:08:45.817 And you know,

NOTE Confidence: 0.941865106

 $00{:}08{:}45{.}817 \dashrightarrow 00{:}08{:}47{.}611$  that speaks to the fact that

NOTE Confidence: 0.941865106

 $00:08:47.611 \longrightarrow 00:08:50.003$  this habit is related to a lot

NOTE Confidence: 0.941865106

00:08:50.003 --> 00:08:51.351 of adverse health outcomes,

NOTE Confidence: 0.941865106

 $00:08:51.360 \rightarrow 00:08:53.880$  not just bladder cancer of course.

NOTE Confidence: 0.941865106

 $00:08:53.880 \rightarrow 00:08:56.225$  And so lots of different groups in

NOTE Confidence: 0.941865106

 $00:08:56.225 \rightarrow 00:08:58.103$  the hospital and different providers

NOTE Confidence: 0.941865106

 $00{:}08{:}58{.}103 \dashrightarrow 00{:}09{:}00{.}515$  have a strong incentive

NOTE Confidence: 0.941865106

 $00{:}09{:}00{.}520$  -->  $00{:}09{:}03{.}316$  to really help patients quit smoking.

NOTE Confidence: 0.907392057692308

00:09:03.800 --> 00:09:05.300 Yeah, absolutely. NOTE Confidence: 0.907392057692308

 $00:09:05.300 \longrightarrow 00:09:08.008$  One of the questions that people may

- NOTE Confidence: 0.907392057692308
- 00:09:08.008 --> 00:09:09.530 ask surrounding quitting smoking
- NOTE Confidence: 0.907392057692308
- $00:09:09.530 \longrightarrow 00:09:11.720$  and the risks of various things,
- NOTE Confidence: 0.907392057692308
- $00{:}09{:}11.720 \dashrightarrow 00{:}09{:}14.036$  whether it's heart disease or cancer,
- NOTE Confidence: 0.907392057692308
- $00:09:14.040 \longrightarrow 00:09:17.358$  but in this case, bladder cancer is
- NOTE Confidence: 0.907392057692308
- $00:09:17.360 \dashrightarrow 00:09:20.920$  if smoking causes bladder cancer,
- NOTE Confidence: 0.907392057692308
- $00:09:20.920 \dashrightarrow 00:09:23.755$  if I replace the smoking with nicotine,
- NOTE Confidence: 0.907392057692308
- $00:09:23.760 \longrightarrow 00:09:25.560$  isn't that still just a chemical?
- NOTE Confidence: 0.907392057692308
- $00:09:25.560 \longrightarrow 00:09:27.020$  And doesn't that chemical
- NOTE Confidence: 0.907392057692308
- 00:09:27.020 --> 00:09:28.480 also increase my risk?
- NOTE Confidence: 0.943962666
- $00:09:29.800 \longrightarrow 00:09:31.640$  It's a good question and
- NOTE Confidence: 0.943962666
- $00:09:31.640 \rightarrow 00:09:33.480$  you know this is an especially important
- NOTE Confidence: 0.943962666
- 00:09:35.665 --> 00:09:37.850 question as we've gotten other
- NOTE Confidence: 0.943962666
- $00:09:37.925 \longrightarrow 00:09:40.400$  cigarette supplements like
- NOTE Confidence: 0.943962666
- $00{:}09{:}40{.}400 \dashrightarrow 00{:}09{:}42{.}320$  electric vapes and things like this,
- NOTE Confidence: 0.943962666
- $00:09:42.320 \longrightarrow 00:09:43.382$  electronic vapes rather.
- 00:09:44.800 --> 00:09:45.754 And you know,

 $00:09:45.754 \longrightarrow 00:09:47.980$  the question is how does the risk

NOTE Confidence: 0.943962666

00:09:48.048 --> 00:09:50.358 from those types of exposures relate

NOTE Confidence: 0.943962666

 $00:09:50.358 \dashrightarrow 00:09:52.919$  to the risk compared to cigarettes.

NOTE Confidence: 0.943962666

 $00:09:52.920 \rightarrow 00:09:56.000$  We don't know a lot of those answers.

NOTE Confidence: 0.943962666

00:09:56.000 --> 00:09:58.212 You know, we're learning more and more

NOTE Confidence: 0.943962666

 $00{:}09{:}58.212 \dashrightarrow 00{:}10{:}00.198$  about the impact of some of these on the

NOTE Confidence: 0.943962666

 $00{:}10{:}01{.}982 \dashrightarrow 00{:}10{:}03{.}852$  lungs and some of these exposures

NOTE Confidence: 0.943962666

 $00:10:03.852 \dashrightarrow 00:10:06.324$  on other parts of the body that we

NOTE Confidence: 0.943962666

 $00{:}10{:}06{.}391 \dashrightarrow 00{:}10{:}08{.}151$  see more immediately because we

NOTE Confidence: 0.943962666

 $00{:}10{:}08{.}151 \dashrightarrow 00{:}10{:}10{.}241$  have shorter term data on them.

NOTE Confidence: 0.943962666

00:10:10.241 --> 00:10:12.488 The risk of long term things like

NOTE Confidence: 0.943962666

 $00{:}10{:}12.488 \dashrightarrow 00{:}10{:}14.239$  the development of bladder cancer,

NOTE Confidence: 0.943962666

 $00:10:14.240 \longrightarrow 00:10:16.120$  which doesn't happen of course

NOTE Confidence: 0.943962666

 $00{:}10{:}16{.}120 \dashrightarrow 00{:}10{:}18{.}000$  immediately but happens over time,

NOTE Confidence: 0.943962666

 $00{:}10{:}18{.}000 \dashrightarrow 00{:}10{:}20{.}706$  it's sort of a cumulative exposure and

- $00:10:20.706 \rightarrow 00:10:25.411$  risk is less well known so
- 00:10:26.760 --> 00:10:28.368 I definitely don't recommend it to
- NOTE Confidence: 0.943962666
- $00{:}10{:}28{.}368 \dashrightarrow 00{:}10{:}30{.}341$  patients but it's hard for
- NOTE Confidence: 0.943962666
- $00:10:30.341 \rightarrow 00:10:31.756$  me to associate specific numbers
- NOTE Confidence: 0.943962666
- $00:10:31.756 \rightarrow 00:10:32.720$  with those things.
- NOTE Confidence: 0.943962666
- $00{:}10{:}32{.}720 \dashrightarrow 00{:}10{:}34{.}360$  These are things we're learning.
- NOTE Confidence: 0.943962666
- $00{:}10{:}34{.}360 \dashrightarrow 00{:}10{:}36{.}720$  What I'll say is that it's
- NOTE Confidence: 0.943962666
- $00:10:36.720 \longrightarrow 00:10:39.450$  hard to imagine that these risks
- NOTE Confidence: 0.943962666
- $00:10:39.450 \longrightarrow 00:10:42.275$  are as bad as smoking.
- 00:10:44.592 --> 00:10:46.587 We know so much about
- NOTE Confidence: 0.943962666
- $00:10:46.587 \longrightarrow 00:10:48.759$  the harms of smoking that it's
- NOTE Confidence: 0.943962666
- $00:10:48.759 \rightarrow 00:10:50.559$  almost certainly a more extreme sort
- NOTE Confidence: 0.943962666
- $00:10:50.560 \rightarrow 00:10:52.555$  of example of some of these risks.
- NOTE Confidence: 0.943962666
- 00:10:52.560 --> 00:10:54.464 But we don't know
- NOTE Confidence: 0.943962666
- $00:10:54.464 \longrightarrow 00:10:55.280$  that for sure.
- NOTE Confidence: 0.859875728571428
- $00:10:55.680 \longrightarrow 00:10:57.565$  Which brings me to other
- NOTE Confidence: 0.859875728571428
- 00:10:57.565 --> 00:10:58.319 occupational exposures.

00:10:58.320 --> 00:11:01.099 So in addition to smoking you had

NOTE Confidence: 0.859875728571428

 $00{:}11{:}01.099 \dashrightarrow 00{:}11{:}03.323$  mentioned that there are various

NOTE Confidence: 0.859875728571428

 $00{:}11{:}03{.}323 \dashrightarrow 00{:}11{:}06{.}136$  chemicals that one can be exposed

NOTE Confidence: 0.859875728571428

 $00:11:06.136 \rightarrow 00:11:07.992$  to either environmentally or

NOTE Confidence: 0.859875728571428

 $00:11:07.992 \longrightarrow 00:11:09.746$  occupationally which increases the

NOTE Confidence: 0.859875728571428

 $00:11:09.746 \longrightarrow 00:11:11.996$  risk of bladder cancer and these

NOTE Confidence: 0.859875728571428

00:11:11.996 --> 00:11:14.599 risks are relatively well known.

NOTE Confidence: 0.859875728571428

 $00:11:14.600 \longrightarrow 00:11:16.720$  So then the question is,

NOTE Confidence: 0.859875728571428

 $00:11:16.720 \longrightarrow 00:11:19.033$  how do I know if I'm in a workplace

NOTE Confidence: 0.859875728571428

 $00:11:19.033 \longrightarrow 00:11:21.318$  or in an environment that has

NOTE Confidence: 0.859875728571428

 $00:11:21.318 \longrightarrow 00:11:23.716$  exposure to these chemicals and

NOTE Confidence: 0.859875728571428

 $00:11:23.716 \rightarrow 00:11:25.918$  if it is an occupational exposure,

NOTE Confidence: 0.859875728571428

 $00:11:25.920 \rightarrow 00:11:27.822$  how come the government isn't banning

NOTE Confidence: 0.859875728571428

 $00{:}11{:}27.822 \dashrightarrow 00{:}11{:}30.202$  them if we know that there's a

NOTE Confidence: 0.859875728571428

 $00:11:30.202 \dashrightarrow 00:11:31.957$  strong risk with bladder cancer?

- $00:11:31.960 \longrightarrow 00:11:32.400$  A lot of the
- NOTE Confidence: 0.964255188888889
- $00{:}11{:}32{.}400 \dashrightarrow 00{:}11{:}33{.}980$  substances that have historically
- NOTE Confidence: 0.964255188888889
- $00{:}11{:}33{.}980 \dashrightarrow 00{:}11{:}35{.}955$  been described these sort of
- NOTE Confidence: 0.964255188888889
- 00:11:35.955 --> 00:11:37.695 particular compounds that
- NOTE Confidence: 0.964255188888889
- $00{:}11{:}37.695 \dashrightarrow 00{:}11{:}39.835$  are associated with certain dyes,
- NOTE Confidence: 0.964255188888889
- $00:11:39.840 \longrightarrow 00:11:41.460$  for example in clothing or hair
- NOTE Confidence: 0.964255188888889
- $00:11:41.460 \rightarrow 00:11:43.759$  dyes is sort of the classic example,
- NOTE Confidence: 0.964255188888889
- $00:11:43.760 \longrightarrow 00:11:47.400$  are not commonly used anymore.
- NOTE Confidence: 0.964255188888889
- 00:11:47.400 --> 00:11:48.960 And so I don't
- NOTE Confidence: 0.9642551888888889
- $00:11:48.960 \longrightarrow 00:11:51.346$  know the exact incidence
- NOTE Confidence: 0.964255188888889
- $00{:}11{:}51{.}346 \dashrightarrow 00{:}11{:}53{.}876$  of bladder cancer associated with
- NOTE Confidence: 0.964255188888889
- $00:11:53.880 \rightarrow 00:11:56.840$  those dyes from contemporary data.
- NOTE Confidence: 0.964255188888889
- $00:11:56.840 \longrightarrow 00:11:59.000$  A lot of these descriptions are
- NOTE Confidence: 0.964255188888889
- $00:11:59.000 \longrightarrow 00:12:02.344$  sort of data that come from
- NOTE Confidence: 0.964255188888889
- $00:12:02.344 \rightarrow 00:12:05.560$  our more historic exposures,
- NOTE Confidence: 0.964255188888889
- $00:12:05.560 \rightarrow 00:12:06.364$  I would say.

- NOTE Confidence: 0.964255188888889
- $00{:}12{:}06{.}364 \dashrightarrow 00{:}12{:}07{.}972$  That's not to say that they
- NOTE Confidence: 0.9642551888888889
- $00:12:07.972 \longrightarrow 00:12:09.119$  don't occur anymore.
- NOTE Confidence: 0.964255188888889
- $00{:}12{:}09{.}120 \dashrightarrow 00{:}12{:}11{.}122$  I would say that
- NOTE Confidence: 0.964255188888889
- $00:12:11.122 \longrightarrow 00:12:12.767$  it's definitely
- NOTE Confidence: 0.9642551888888889
- $00:12:12.767 \longrightarrow 00:12:15.273$  not a common thing that I see
- NOTE Confidence: 0.964255188888889
- 00:12:15.273 --> 00:12:16.478 clinically I should say.
- NOTE Confidence: 0.969741503703704
- $00:12:17.520 \longrightarrow 00:12:19.781$  The other risk factor that
- NOTE Confidence: 0.969741503703704
- $00:12:19.781 \rightarrow 00:12:21.983$  many cancers have but that you really
- NOTE Confidence: 0.969741503703704
- $00:12:21.983 \rightarrow 00:12:24.397$  haven't touched on yet and I was hoping
- NOTE Confidence: 0.969741503703704
- $00:12:24.397 \rightarrow 00:12:27.080$  to get your thoughts on has to do
- NOTE Confidence: 0.969741503703704
- $00:12:27.080 \rightarrow 00:12:29.480$  with genetics and family history.
- NOTE Confidence: 0.969741503703704
- $00:12:29.480 \longrightarrow 00:12:32.840$  Is bladder cancer something that,
- NOTE Confidence: 0.969741503703704
- 00:12:32.840 --> 00:12:35.200 if you have a family history of it,
- NOTE Confidence: 0.969741503703704
- 00:12:35.200 --> 00:12:37.396 it increases your own personal risk?
- $00:12:39.620 \longrightarrow 00:12:40.840$  That's a good question.
- NOTE Confidence: 0.96416664375
- $00:12:40.840 \rightarrow 00:12:43.240$  There are certain genetic risks

- NOTE Confidence: 0.96416664375
- $00:12:43.240 \longrightarrow 00:12:45.160$  associated with bladder cancer.
- NOTE Confidence: 0.96416664375
- $00:12:45.160 \longrightarrow 00:12:47.765$  There's actually a related
- NOTE Confidence: 0.96416664375
- $00{:}12{:}47.765 \dashrightarrow 00{:}12{:}50.680$  malignancy to bladder cancer that
- NOTE Confidence: 0.96416664375
- $00{:}12{:}50.680 \dashrightarrow 00{:}12{:}52.440$  we talked about
- NOTE Confidence: 0.96416664375
- $00:12:52.440 \longrightarrow 00:12:53.720$  which is ureteral cancer,
- NOTE Confidence: 0.96416664375
- $00{:}12{:}53{.}720 \dashrightarrow 00{:}12{:}55{.}891$  cancer of the ureters, the tubes that
- NOTE Confidence: 0.96416664375
- $00{:}12{:}55{.}891 \dashrightarrow 00{:}12{:}57{.}673$  drain the kidneys from the bladder.
- NOTE Confidence: 0.96416664375
- $00:12:57.680 \rightarrow 00:13:00.718$  That has a very clear genetic risk,
- NOTE Confidence: 0.96416664375
- $00:13:00.720 \longrightarrow 00:13:02.228$  specifically with a disorder
- NOTE Confidence: 0.96416664375
- 00:13:02.228 --> 00:13:03.359 called Lynch syndrome.
- NOTE Confidence: 0.96416664375
- $00:13:03.360 \longrightarrow 00:13:06.288$  It's an inheritable genetic risk that's
- NOTE Confidence: 0.96416664375
- $00{:}13{:}06{.}288 \dashrightarrow 00{:}13{:}08{.}240$  associated with urothelial cancers.
- NOTE Confidence: 0.96416664375
- $00{:}13{:}08{.}240 \dashrightarrow 00{:}13{:}11{.}720$  More the ureter than the bladder.
- NOTE Confidence: 0.96416664375
- 00:13:14.200 --> 00:13:16.025 The bladder cancer is
- NOTE Confidence: 0.96416664375
- $00:13:16.025 \longrightarrow 00:13:17.850$  slightly at an increased risk
- NOTE Confidence: 0.96416664375

 $00:13:17.916 \longrightarrow 00:13:20.328$  compared to the general population for

NOTE Confidence: 0.96416664375

 $00:13:20.328 \rightarrow 00:13:22.560$  patients with this genetic disorder,

NOTE Confidence: 0.96416664375

 $00{:}13{:}22{.}560 \dashrightarrow 00{:}13{:}25{.}640$  but definitely not as elevated of a

NOTE Confidence: 0.96416664375

 $00:13:25.640 \rightarrow 00:13:29.238$  risk as in the cancer of the ureters.

NOTE Confidence: 0.96416664375

 $00{:}13{:}29{.}240 \dashrightarrow 00{:}13{:}31{.}921$  This is an associated cancer as

NOTE Confidence: 0.96416664375

 $00{:}13{:}31{.}921 \dashrightarrow 00{:}13{:}35{.}024$  far as whether or not having a parent

NOTE Confidence: 0.96416664375

 $00:13:35.024 \rightarrow 00:13:37.471$  or siblings or first degree relative

NOTE Confidence: 0.96416664375

 $00:13:37.471 \rightarrow 00:13:40.636$  with bladder cancer raises your risk,

NOTE Confidence: 0.96416664375

 $00:13:40.640 \rightarrow 00:13:42.446$  the answer is it does very slightly

NOTE Confidence: 0.96416664375

 $00{:}13{:}42.446 \dashrightarrow 00{:}13{:}44.519$  but not as much as other cancers.

NOTE Confidence: 0.96416664375

 $00{:}13{:}44{.}520 \dashrightarrow 00{:}13{:}47{.}436$  We don't think of it as quite as inheritable.

NOTE Confidence: 0.96416664375

 $00:13:47.440 \longrightarrow 00:13:48.415$  That being said,

NOTE Confidence: 0.96416664375

 $00:13:48.415 \longrightarrow 00:13:50.690$  there's no doubt that a family

NOTE Confidence: 0.96416664375

 $00{:}13{:}50{.}752 \dashrightarrow 00{:}13{:}52{.}999$  with a long history of bladder cancer,

NOTE Confidence: 0.96416664375

 $00:13:53.000 \rightarrow 00:13:56.199$  or especially high rates of bladder cancer,

 $00{:}13{:}57{.}920 \dashrightarrow 00{:}13{:}59{.}979$  it does seem to increase an individual's

00:13:59.979 --> 00:14:01.773 risk slightly in enough to detect

NOTE Confidence: 0.96416664375

 $00{:}14{:}01{.}773 \dashrightarrow 00{:}14{:}03{.}240$  it in population level data.

NOTE Confidence: 0.907127453846154

 $00{:}14{:}04{.}560 \dashrightarrow 00{:}14{:}06{.}569$  Great. Well, we need to take a

NOTE Confidence: 0.907127453846154

 $00:14:06.569 \rightarrow 00:14:08.560$  quick break for a medical minute,

NOTE Confidence: 0.907127453846154

00:14:08.560 --> 00:14:09.616 but please stay tuned

NOTE Confidence: 0.907127453846154

 $00{:}14{:}09{.}616 \dashrightarrow 00{:}14{:}11{.}852$  to learn more about the care of patients

NOTE Confidence: 0.907127453846154

 $00{:}14{:}11.852 \dashrightarrow 00{:}14{:}13.640$  with bladder cancer with my guest,

NOTE Confidence: 0.907127453846154

00:14:13.640 --> 00:14:15.920 doctor Fed Ghali.

NOTE Confidence: 0.85672431111111

 $00{:}14{:}15{.}920 \dashrightarrow 00{:}14{:}17{.}940$  Funding for Yale Cancer Answers comes

NOTE Confidence: 0.85672431111111

00:14:17.940 --> 00:14:19.556 from Smilow Cancer Hospital,

NOTE Confidence: 0.85672431111111

 $00{:}14{:}19.560 \dashrightarrow 00{:}14{:}21.330$  where all patients have access

NOTE Confidence: 0.85672431111111

 $00:14:21.330 \longrightarrow 00:14:22.746$  to cutting edge clinical

NOTE Confidence: 0.85672431111111

 $00{:}14{:}22.746 \dashrightarrow 00{:}14{:}24.477$  trials at several convenient

NOTE Confidence: 0.85672431111111

 $00:14:24.477 \rightarrow 00:14:26.237$  locations throughout the region.

NOTE Confidence: 0.85672431111111

00:14:26.240 --> 00:14:28.400 To learn more,

NOTE Confidence: 0.85672431111111

 $00{:}14{:}28{.}400 \dashrightarrow 00{:}14{:}29{.}520$  visit smilowcancerhospital.org.

- NOTE Confidence: 0.937484528333333
- $00{:}14{:}31{.}560 \dashrightarrow 00{:}14{:}33{.}975$  There are over 16.9 million
- NOTE Confidence: 0.937484528333333
- $00{:}14{:}33{.}975 \dashrightarrow 00{:}14{:}36{.}842$  cancer survivors in the US and
- NOTE Confidence: 0.937484528333333
- $00:14:36.842 \longrightarrow 00:14:38.748$  over 240,000 here in Connecticut.
- NOTE Confidence: 0.937484528333333
- 00:14:38.748 --> 00:14:40.296 Completing treatment for cancer
- NOTE Confidence: 0.937484528333333
- $00:14:40.296 \longrightarrow 00:14:42.559$  is a very exciting milestone,
- NOTE Confidence: 0.937484528333333
- $00{:}14{:}42.560 \dashrightarrow 00{:}14{:}44.558$  but cancer and its treatment can
- NOTE Confidence: 0.937484528333333
- $00:14:44.558 \rightarrow 00:14:46.680$  be a life changing experience.
- NOTE Confidence: 0.937484528333333
- $00:14:46.680 \longrightarrow 00:14:48.685$  The return to normal activities
- NOTE Confidence: 0.937484528333333
- $00{:}14{:}48.685 \dashrightarrow 00{:}14{:}50.690$  and relationships may be difficult
- NOTE Confidence: 0.937484528333333
- $00:14:50.759 \rightarrow 00:14:52.877$  and cancer survivors may face other
- NOTE Confidence: 0.937484528333333
- 00:14:52.877 --> 00:14:54.959 long term side effects of cancer,
- NOTE Confidence: 0.937484528333333
- $00:14:54.960 \longrightarrow 00:14:57.138$  including heart problems,
- NOTE Confidence: 0.937484528333333
- 00:14:57.138 --> 00:14:59.316 osteoporosis, fertility issues,
- NOTE Confidence: 0.937484528333333
- $00{:}14{:}59{.}320 \dashrightarrow 00{:}15{:}02{.}120$  and an increased risk of second cancers.
- NOTE Confidence: 0.937484528333333
- $00{:}15{:}02{.}120 \dashrightarrow 00{:}15{:}04{.}720$  Resources for cancer survivors are
- NOTE Confidence: 0.937484528333333

 $00:15:04.720 \rightarrow 00:15:06.800$  available at federally designated

NOTE Confidence: 0.937484528333333

 $00{:}15{:}06{.}800 \dashrightarrow 00{:}15{:}08{.}736$  comprehensive cancer centers such as

NOTE Confidence: 0.937484528333333

00:15:08.736 --> 00:15:11.215 Yale Cancer Center and Smilow

NOTE Confidence: 0.937484528333333

 $00:15:11.215 \rightarrow 00:15:13.573$  Cancer Hospital to keep cancer survivors

NOTE Confidence: 0.937484528333333

 $00:15:13.573 \rightarrow 00:15:16.107$  well and focused on healthy living.

NOTE Confidence: 0.937484528333333

00:15:16.107 --> 00:15:18.352 The Smilow Cancer Hospital Survivorship

NOTE Confidence: 0.937484528333333

 $00{:}15{:}18.352 \dashrightarrow 00{:}15{:}20.518$  Clinic focuses on providing guidance

NOTE Confidence: 0.937484528333333

 $00:15:20.518 \rightarrow 00:15:22.912$  and direction to empower survivors to

NOTE Confidence: 0.937484528333333

 $00{:}15{:}22.912 \dashrightarrow 00{:}15{:}25.318$  take steps to maximize their health,

NOTE Confidence: 0.937484528333333

00:15:25.320 --> 00:15:26.760 quality of life,

NOTE Confidence: 0.937484528333333

 $00:15:26.760 \rightarrow 00:15:27.720$  and longevity.

NOTE Confidence: 0.937484528333333

 $00{:}15{:}27.720 \dashrightarrow 00{:}15{:}30.640$  More information is available at

NOTE Confidence: 0.937484528333333

 $00:15:30.640 \longrightarrow 00:15:31.177$  yale cancercenter.org.

NOTE Confidence: 0.937484528333333

00:15:31.177 --> 00:15:34.399 You're listening to Connecticut Public Radio.

NOTE Confidence: 0.937484528333333

00:15:34.400 --> 00:15:34.840 Welcome

NOTE Confidence: 0.966782202

 $00:15:34.840 \longrightarrow 00:15:36.560$  back to Yale Cancer Answers.

- NOTE Confidence: 0.966782202
- 00:15:36.560 --> 00:15:38.080 This is Doctor Anees Chagpar,
- NOTE Confidence: 0.966782202
- $00{:}15{:}38.080 \dashrightarrow 00{:}15{:}40.159$  and I'm joined to night by my guest,
- NOTE Confidence: 0.966782202
- $00{:}15{:}40{.}160 \dashrightarrow 00{:}15{:}41{.}180$  Doctor Fed Ghali.
- NOTE Confidence: 0.966782202
- 00:15:41.180 --> 00:15:43.220 We're talking about the care of
- NOTE Confidence: 0.966782202
- $00:15:43.220 \longrightarrow 00:15:44.507$  patients with bladder cancer
- NOTE Confidence: 0.966782202
- 00:15:44.507 --> 00:15:46.271 and before the break we spent
- NOTE Confidence: 0.966782202
- $00:15:46.271 \longrightarrow 00:15:48.273$  a lot of time talking about
- NOTE Confidence: 0.966782202
- $00:15:48.273 \longrightarrow 00:15:49.918$  what exactly is bladder cancer.
- NOTE Confidence: 0.966782202
- 00:15:49.920 --> 00:15:50.366 Interestingly,
- NOTE Confidence: 0.966782202
- $00:15:50.366 \rightarrow 00:15:53.042$  it's perhaps more common than many
- NOTE Confidence: 0.966782202
- $00:15:53.042 \rightarrow 00:15:56.140$  of us think, what one of the 5th
- NOTE Confidence: 0.966782202
- 00:15:56.140 --> 00:15:58.414 or 6th most common cancers we see
- NOTE Confidence: 0.966782202
- 00:15:58.414 --> 00:16:00.968 here in the US? We talked about how
- NOTE Confidence: 0.966782202
- $00{:}16{:}00{.}968 \dashrightarrow 00{:}16{:}02{.}878$  it was associated with smoking
- NOTE Confidence: 0.966782202
- $00{:}16{:}02{.}878 \dashrightarrow 00{:}16{:}06{.}042$  and various chemicals as well as
- NOTE Confidence: 0.966782202

 $00:16:06.042 \rightarrow 00:16:08.512$  slightly related to family history

NOTE Confidence: 0.966782202

 $00{:}16{:}08{.}512 \dashrightarrow 00{:}16{:}11{.}015$  and some genetic syndromes.

NOTE Confidence: 0.966782202

00:16:11.015 --> 00:16:13.080 But what I was hoping that now

NOTE Confidence: 0.966782202

 $00:16:13.080 \longrightarrow 00:16:15.271$  we could kind of pick up the

NOTE Confidence: 0.966782202

00:16:15.271 --> 00:16:16.806 conversation and talk about what

NOTE Confidence: 0.966782202

 $00:16:16.870 \rightarrow 00:16:18.892$  are the signs and symptoms that

NOTE Confidence: 0.966782202

 $00:16:18.892 \rightarrow 00:16:20.577$  people might present with when

NOTE Confidence: 0.966782202

 $00{:}16{:}20.577 \dashrightarrow 00{:}16{:}22.599$  they come in with bladder cancer.

NOTE Confidence: 0.966782202

 $00:16:22.600 \rightarrow 00:16:24.913$  It's not really a cancer that we screen for,

NOTE Confidence: 0.966782202

00:16:24.920 --> 00:16:25.440 right?

NOTE Confidence: 0.945187462222222

 $00{:}16{:}26.000 \dashrightarrow 00{:}16{:}26.976$  That's correct.

NOTE Confidence: 0.945187462222222

 $00:16:26.976 \rightarrow 00:16:30.392$  We don't routinely screen for bladder cancer.

NOTE Confidence: 0.945187462222222

00:16:30.400 --> 00:16:31.920 And just to clarify,

NOTE Confidence: 0.945187462222222

 $00:16:31.920 \rightarrow 00:16:35.076$  by screen we mean taking healthy

NOTE Confidence: 0.945187462222222

00:16:35.076 --> 00:16:36.980 asymptomatic patients and basically

NOTE Confidence: 0.945187462222222

 $00:16:36.980 \longrightarrow 00:16:39.843$  doing some tests or exams to

- NOTE Confidence: 0.945187462222222
- $00{:}16{:}39{.}843 \dashrightarrow 00{:}16{:}41{.}908$  search for bladder cancer when
- NOTE Confidence: 0.945187462222222
- $00:16:41.908 \rightarrow 00:16:44.120$  there's otherwise no good reason.
- NOTE Confidence: 0.945187462222222
- $00:16:44.120 \longrightarrow 00:16:46.000$  We don't routinely do that.
- NOTE Confidence: 0.945187462222222
- $00{:}16{:}46.000 \dashrightarrow 00{:}16{:}49.000$  And it's not recommended by any of our
- NOTE Confidence: 0.945187462222222
- $00:16:49.000 \longrightarrow 00:16:51.214$  national guidelines here
- NOTE Confidence: 0.945187462222222
- $00{:}16{:}51{.}214 \dashrightarrow 00{:}16{:}53{.}800$  in the United States or elsewhere.
- NOTE Confidence: 0.945187462222222
- $00:16:53.800 \rightarrow 00:16:56.302$  And the reason is because screening
- NOTE Confidence: 0.945187462222222
- $00{:}16{:}56{.}302 \dashrightarrow 00{:}16{:}59{.}050$  has both benefits and downsides and
- NOTE Confidence: 0.945187462222222
- $00{:}16{:}59{.}050 \dashrightarrow 00{:}17{:}02{.}279$  the assessment of the
- NOTE Confidence: 0.945187462222222
- $00{:}17{:}02.279 \dashrightarrow 00{:}17{:}05.142$  benefits and risks hasn't shaken
- NOTE Confidence: 0.945187462222222
- $00:17:05.142 \rightarrow 00:17:07.372$  out to recommend routine screening.
- NOTE Confidence: 0.945187462222222
- $00{:}17{:}07{.}372 \dashrightarrow 00{:}17{:}10{.}516$  So we don't screen for bladder
- NOTE Confidence: 0.945187462222222
- $00{:}17{:}10.516 \dashrightarrow 00{:}17{:}12.826$  cancer and instead we wait until
- NOTE Confidence: 0.945187462222222
- $00{:}17{:}12.826 \dashrightarrow 00{:}17{:}14.584$  there's a reason that one should
- NOTE Confidence: 0.945187462222222
- $00:17:14.584 \longrightarrow 00:17:16.079$  look for bladder cancer,
- NOTE Confidence: 0.945187462222222

 $00:17:16.080 \longrightarrow 00:17:18.276$  do a diagnostic assessment for bladder

NOTE Confidence: 0.945187462222222

 $00{:}17{:}18.276 \dashrightarrow 00{:}17{:}20.560$  cancer before we really do a work up.

NOTE Confidence: 0.812986712857143

 $00:17:21.120 \longrightarrow 00:17:24.168$  So presumably then patients

NOTE Confidence: 0.812986712857143

 $00{:}17{:}24.168 \dashrightarrow 00{:}17{:}26.290$  who have bladder cancer would need

NOTE Confidence: 0.812986712857143

 $00:17:26.290 \rightarrow 00:17:28.600$  to present with some sort of symptom.

NOTE Confidence: 0.812986712857143

00:17:28.600 --> 00:17:30.192 Can you can you talk a little bit

NOTE Confidence: 0.812986712857143

 $00:17:30.192 \longrightarrow 00:17:31.638$  about what are the warning signs,

NOTE Confidence: 0.812986712857143

 $00:17:31.640 \rightarrow 00:17:33.440$  what are the symptoms that should

NOTE Confidence: 0.812986712857143

 $00:17:33.440 \rightarrow 00:17:35.431$  prompt people to seek medical attention

NOTE Confidence: 0.812986712857143

 $00:17:35.431 \rightarrow 00:17:37.639$  that might turn into bladder cancer?

NOTE Confidence: 0.966063127142857

00:17:38.040 --> 00:17:41.519 Of course, like most cancers they

NOTE Confidence: 0.966063127142857

 $00{:}17{:}41.520 \dashrightarrow 00{:}17{:}44.240$  can present with a lot of various

NOTE Confidence: 0.966063127142857

 $00:17:44.240 \rightarrow 00:17:46.141$  symptoms depending how long

NOTE Confidence: 0.966063127142857

 $00{:}17{:}46{.}141 \dashrightarrow 00{:}17{:}48{.}495$  it has been there and where it is in

NOTE Confidence: 0.966063127142857

 $00:17:48.495 \dashrightarrow 00:17:50.193$  the Natural History of the disease.

NOTE Confidence: 0.966063127142857

 $00:17:50.200 \rightarrow 00:17:53.598$  But by and large the most common

- NOTE Confidence: 0.966063127142857
- $00{:}17{:}53.598 \dashrightarrow 00{:}17{:}55.392$  symptom that a patient
- NOTE Confidence: 0.966063127142857
- $00:17:55.392 \longrightarrow 00:17:56.880$  would present with that
- NOTE Confidence: 0.966063127142857
- $00:17:56.880 \rightarrow 00:17:58.826$  would trigger a work up for bladder
- NOTE Confidence: 0.966063127142857
- $00:17:58.882 \rightarrow 00:18:00.716$  cancer would be blood in the urine,
- NOTE Confidence: 0.966063127142857
- $00{:}18{:}00{.}720 \dashrightarrow 00{:}18{:}03{.}360$  what we call he maturia.
- NOTE Confidence: 0.966063127142857
- 00:18:03.360 --> 00:18:05.718 That's sort of the classic
- NOTE Confidence: 0.966063127142857
- $00{:}18{:}05{.}718 \dashrightarrow 00{:}18{:}07{.}290$  presentation for bladder cancer
- NOTE Confidence: 0.966063127142857
- $00:18:07.359 \rightarrow 00:18:09.564$  and is definitely what we see most
- NOTE Confidence: 0.966063127142857
- $00:18:09.564 \rightarrow 00:18:11.480$  frequently in the clinic as well.
- NOTE Confidence: 0.894029271764706
- $00:18:12.720 \longrightarrow 00:18:14.694$  And sometimes people
- NOTE Confidence: 0.894029271764706
- $00:18:14.694 \rightarrow 00:18:17.352$  when they go to the doctor just
- NOTE Confidence: 0.894029271764706
- 00:18:17.352 --> 00:18:19.040 for their routine physical,
- NOTE Confidence: 0.894029271764706
- 00:18:19.040 --> 00:18:21.542 they'll get a a urine sample
- NOTE Confidence: 0.894029271764706
- $00{:}18{:}21{.}542 \dashrightarrow 00{:}18{:}23{.}272$  and sometimes when
- NOTE Confidence: 0.894029271764706
- $00:18:23.272 \longrightarrow 00:18:24.912$  we get those reports back,
- NOTE Confidence: 0.894029271764706

 $00:18:24.920 \rightarrow 00:18:27.200$  there is a line there that says blood.

NOTE Confidence: 0.894029271764706

00:18:27.200 --> 00:18:29.792 So even if you haven't seen

NOTE Confidence: 0.894029271764706

 $00:18:29.792 \longrightarrow 00:18:31.520$  blood in the urine,

NOTE Confidence: 0.894029271764706

 $00:18:31.520 \longrightarrow 00:18:34.130$  is there another way that bladder

NOTE Confidence: 0.894029271764706

 $00:18:34.130 \longrightarrow 00:18:36.364$  cancer can be present on one of

NOTE Confidence: 0.894029271764706

 $00:18:36.364 \longrightarrow 00:18:37.596$  these routine urine tests?

NOTE Confidence: 0.853600809090909

 $00:18:38.520 \longrightarrow 00:18:40.782$  Yes, you're touching on an

NOTE Confidence: 0.853600809090909

 $00:18:40.782 \longrightarrow 00:18:42.520$  important distinction here which is

NOTE Confidence: 0.853600809090909

 $00:18:42.520 \longrightarrow 00:18:45.316$  blood that is visible,

NOTE Confidence: 0.853600809090909

 $00:18:45.320 \longrightarrow 00:18:47.000$  that is visible to the patient

NOTE Confidence: 0.853600809090909

00:18:47.000 -> 00:18:49.159 is what we call gross hematuria.

NOTE Confidence: 0.853600809090909

 $00:18:49.160 \rightarrow 00:18:51.285$  And separately what you're describing

NOTE Confidence: 0.853600809090909

 $00{:}18{:}51{.}285 \dashrightarrow 00{:}18{:}54{.}440$  for blood that's seen on just the test,

NOTE Confidence: 0.853600809090909

 $00:18:54.440 \longrightarrow 00:18:55.888$  in other words, what I tell

NOTE Confidence: 0.853600809090909

00:18:55.888 --> 00:18:57.347 my patients is you wouldn't have

NOTE Confidence: 0.853600809090909

 $00:18:57.347 \rightarrow 00:18:58.560$  known there was anything going on.

- NOTE Confidence: 0.853600809090909
- $00:18:58.560 \longrightarrow 00:19:00.944$  We told you there was blood that was
- NOTE Confidence: 0.853600809090909
- $00{:}19{:}00{.}944 \dashrightarrow 00{:}19{:}03{.}196$  seen under the microscope and so on.
- NOTE Confidence: 0.853600809090909
- $00{:}19{:}03{.}200 \dashrightarrow 00{:}19{:}05{.}680$  That's what we call microhematuria.
- $00:19:08.424 \rightarrow 00:19:10.791$  And the presence of either of those occurring
- NOTE Confidence: 0.853600809090909
- $00:19:10.791 \longrightarrow 00:19:14.244$  is a good reason to check
- NOTE Confidence: 0.853600809090909
- $00:19:14.244 \rightarrow 00:19:16.995$  in with a urologist and be evaluated.
- NOTE Confidence: 0.853600809090909
- 00:19:17.000 00:19:19.800 Now like you say, micro
- NOTE Confidence: 0.853600809090909
- $00:19:19.800 \longrightarrow 00:19:23.137$  hematuria is more common than the more
- NOTE Confidence: 0.853600809090909
- 00:19:23.137 --> 00:19:25.937 visible gross hematuria and it's less
- NOTE Confidence: 0.853600809090909
- $00:19:25.937 \longrightarrow 00:19:28.451$  associated with the
- NOTE Confidence: 0.853600809090909
- $00:19:28.451 \rightarrow 00:19:30.988$  diagnosis of bladder cancer than visible
- NOTE Confidence: 0.853600809090909
- $00:19:30.988 \longrightarrow 00:19:34.036$  blood in the urine, or gross hematuria.
- NOTE Confidence: 0.853600809090909
- $00:19:34.040 \longrightarrow 00:19:35.976$  And so the work up is not always
- NOTE Confidence: 0.853600809090909
- $00:19:35.976 \longrightarrow 00:19:36.800$  exactly the same.
- NOTE Confidence: 0.853600809090909
- 00:19:36.800 --> 00:19:38.828 Sometimes we end up doing very
- NOTE Confidence: 0.853600809090909
- $00:19:38.828 \rightarrow 00:19:40.759$  similar things for the work up,

- NOTE Confidence: 0.853600809090909
- $00:19:40.760 \longrightarrow 00:19:43.266$  but both at least warrant a discussion
- NOTE Confidence: 0.853600809090909
- $00{:}19{:}43.266 \dashrightarrow 00{:}19{:}45.903$  about a work up for bladder cancer
- NOTE Confidence: 0.853600809090909
- $00{:}19{:}45{.}903 \dashrightarrow 00{:}19{:}48{.}135$  and an assessment of other risk
- NOTE Confidence: 0.853600809090909
- $00:19:48.210 \longrightarrow 00:19:50.600$  factors like we discussed earlier.
- NOTE Confidence: 0.937559192727273
- $00:19:52.240 \longrightarrow 00:19:54.606$  And so if a patient does have
- NOTE Confidence: 0.937559192727273
- 00:19:54.606 --> 00:19:56.440 risk factors and hematuria,
- NOTE Confidence: 0.937559192727273
- $00:19:56.440 \rightarrow 00:19:59.640$  or presents with gross hematuria,
- NOTE Confidence: 0.937559192727273
- $00:19:59.640 \longrightarrow 00:20:02.080$  what what does the work up look like?
- NOTE Confidence: 0.948846229090909
- $00:20:03.600 \longrightarrow 00:20:05.616$  So what I tell patients is that
- NOTE Confidence: 0.948846229090909
- $00:20:05.616 \rightarrow 00:20:07.611$  blood in the urine doesn't give us
- NOTE Confidence: 0.948846229090909
- $00:20:07.611 \rightarrow 00:20:09.680$  a diagnosis of cancer by any means.
- NOTE Confidence: 0.948846229090909
- 00:20:09.680 --> 00:20:12.208 It just makes our ears perk up a
- NOTE Confidence: 0.948846229090909
- $00{:}20{:}12.208 \dashrightarrow 00{:}20{:}14.516$  little bit and sort of triggers
- NOTE Confidence: 0.948846229090909
- $00{:}20{:}14.516 \dashrightarrow 00{:}20{:}16.516$  us to do more investigation.
- NOTE Confidence: 0.948846229090909
- $00:20:16.520 \rightarrow 00:20:19.544$  And many times when we look more closely
- NOTE Confidence: 0.948846229090909

 $00:20:19.544 \rightarrow 00:20:22.512$  we find other good causes,

NOTE Confidence: 0.948846229090909

 $00:20:22.512 \rightarrow 00:20:25.360$  other benign causes for blood in the urine.

NOTE Confidence: 0.948846229090909

00:20:25.360 --> 00:20:27.616 And so there's a list of non cancerous

NOTE Confidence: 0.948846229090909

 $00:20:27.616 \rightarrow 00:20:29.879$  things that can cause blood in the urine,

NOTE Confidence: 0.948846229090909

 $00:20:29.880 \longrightarrow 00:20:32.556$  which I'd be happy to discuss.

NOTE Confidence: 0.948846229090909

 $00{:}20{:}32{.}560 \dashrightarrow 00{:}20{:}36{.}152$  But once we embark on a work

NOTE Confidence: 0.948846229090909

 $00:20:36.152 \longrightarrow 00:20:38.000$  up for blood in the urine,

NOTE Confidence: 0.948846229090909

 $00:20:38.000 \rightarrow 00:20:39.730$  the work up normally entails

NOTE Confidence: 0.948846229090909

 $00:20:39.730 \longrightarrow 00:20:41.114$  a couple of things.

NOTE Confidence: 0.948846229090909

 $00{:}20{:}41.120 \dashrightarrow 00{:}20{:}44.470$  One is another urine test to ensure

NOTE Confidence: 0.948846229090909

 $00{:}20{:}44.470 \dashrightarrow 00{:}20{:}46.679$  that there's no infection of the urine.

NOTE Confidence: 0.948846229090909

 $00:20:46.680 \longrightarrow 00:20:48.432$  So this is a common cause of blood

NOTE Confidence: 0.948846229090909

 $00:20:48.432 \longrightarrow 00:20:50.392$  in the urine as many patients

NOTE Confidence: 0.948846229090909

 $00:20:50.392 \longrightarrow 00:20:52.310$  or many listeners will know.

NOTE Confidence: 0.948846229090909

 $00{:}20{:}52{.}310 \dashrightarrow 00{:}20{:}55{.}306$  So we confirm that there's not an obvious

NOTE Confidence: 0.948846229090909

 $00:20:55.306 \longrightarrow 00:20:57.917$  reason that there's blood in the urine.

- NOTE Confidence: 0.948846229090909
- $00{:}20{:}57{.}920 \dashrightarrow 00{:}21{:}00{.}632$  We will also see the patient in clinic
- NOTE Confidence: 0.948846229090909
- $00:21:00.632 \rightarrow 00:21:03.800$  and do a full history and physical will
- NOTE Confidence: 0.948846229090909
- $00:21:03.800 \longrightarrow 00:21:06.796$  understand any changes
- NOTE Confidence: 0.948846229090909
- $00:21:06.800 \rightarrow 00:21:09.200$  in their history recently,
- NOTE Confidence: 0.948846229090909
- $00{:}21{:}09{.}200 \dashrightarrow 00{:}21{:}12{.}176$  any recent trauma for example or any other
- NOTE Confidence: 0.948846229090909
- $00:21:12.176 \rightarrow 00:21:14.876$  changes in symptoms that sort of thing.
- NOTE Confidence: 0.948846229090909
- 00:21:14.876 --> 00:21:17.440 We'll understand a bit of their history,
- NOTE Confidence: 0.948846229090909
- $00:21:17.440 \longrightarrow 00:21:20.080$  but ultimately we will decide to
- NOTE Confidence: 0.948846229090909
- $00:21:20.080 \longrightarrow 00:21:23.040$  do some type of imaging of their
- NOTE Confidence: 0.948846229090909
- $00:21:23.040 \longrightarrow 00:21:25.520$  abdomen in order to evaluate
- NOTE Confidence: 0.948846229090909
- $00:21:25.520 \rightarrow 00:21:27.638$  their kidneys and often their ureters,
- NOTE Confidence: 0.948846229090909
- $00:21:27.640 \longrightarrow 00:21:29.080$  those tubes that drain the
- NOTE Confidence: 0.948846229090909
- $00{:}21{:}29.080 \dashrightarrow 00{:}21{:}30.520$  kidneys down into the bladder.
- NOTE Confidence: 0.948846229090909
- $00:21:30.520 \longrightarrow 00:21:32.487$  So some type of imaging is usually
- NOTE Confidence: 0.948846229090909
- $00:21:32.487 \longrightarrow 00:21:33.876$  warranted and the most
- NOTE Confidence: 0.948846229090909
$00:21:33.876 \rightarrow 00:21:35.598$  common form of that is a CT scan,

00:21:36.244 --> 00:21:38.820 it's a special type of CT scan called

NOTE Confidence: 0.948846229090909

 $00{:}21{:}38.893 \dashrightarrow 00{:}21{:}41.124$  ACT urogram which is a specific

NOTE Confidence: 0.948846229090909

 $00:21:41.124 \longrightarrow 00:21:43.848$  protocol that we use that helps

NOTE Confidence: 0.948846229090909

 $00:21:43.848 \rightarrow 00:21:46.140$  us really clearly visualize the

NOTE Confidence: 0.948846229090909

 $00{:}21{:}46.140 \dashrightarrow 00{:}21{:}48.040$  kidney and the ureters especially.

NOTE Confidence: 0.948846229090909

 $00:21:48.040 \longrightarrow 00:21:49.876$  It sort of allows us to zero in on

NOTE Confidence: 0.948846229090909

 $00:21:49.876 \longrightarrow 00:21:51.663$  those parts of the body which are

NOTE Confidence: 0.948846229090909

 $00:21:51.663 \longrightarrow 00:21:53.844$  of course would be common

NOTE Confidence: 0.948846229090909

 $00:21:53.844 \longrightarrow 00:21:56.560$  causes of blood in the urine.

NOTE Confidence: 0.948846229090909

00:21:56.560 --> 00:21:57.700 And finally

NOTE Confidence: 0.948846229090909

 $00:21:57.700 \longrightarrow 00:21:59.980$  the last sort of central part

NOTE Confidence: 0.948846229090909

 $00:21:59.980 \longrightarrow 00:22:02.857$  of a hematuria workup is a small

NOTE Confidence: 0.948846229090909

 $00{:}22{:}02{.}857 \dashrightarrow 00{:}22{:}05{.}559$  procedure that we call a cystoscopy.

NOTE Confidence: 0.948846229090909

00:22:05.560 --> 00:22:07.006 And a cystoscopy is a procedure

NOTE Confidence: 0.948846229090909

 $00{:}22{:}07.006 \dashrightarrow 00{:}22{:}08.560$  most often done in the clinic.

00:22:08.560 --> 00:22:11.640 And it's basically

NOTE Confidence: 0.948846229090909

 $00{:}22{:}11.640 \dashrightarrow 00{:}22{:}13.800$  the insertion of a small camera,

NOTE Confidence: 0.948846229090909

 $00{:}22{:}13.800 \dashrightarrow 00{:}22{:}16.089$  a small flexible camera into the ure thra

NOTE Confidence: 0.948846229090909

 $00:22:16.089 \rightarrow 00:22:18.597$  and through the urethra into the bladder.

NOTE Confidence: 0.948846229090909

 $00:22:18.600 \longrightarrow 00:22:20.200$  And we physically

NOTE Confidence: 0.948846229090909

 $00:22:20.200 \longrightarrow 00:22:21.831$  fill the bladder up with fluid

NOTE Confidence: 0.948846229090909

 $00{:}22{:}21.831 \dashrightarrow 00{:}22{:}23.879$  and we look around in the bladder and

NOTE Confidence: 0.92443698625

 $00{:}22{:}26.000 \dashrightarrow 00{:}22{:}28.128$  make sure that we don't see any lumps

NOTE Confidence: 0.92443698625

 $00{:}22{:}28.128 \dashrightarrow 00{:}22{:}30.518$  or bumps or areas of redness or concern.

NOTE Confidence: 0.92443698625

 $00:22:30.520 \longrightarrow 00:22:34.168$  And we have fully just

NOTE Confidence: 0.92443698625

 $00{:}22{:}34.168 \dashrightarrow 00{:}22{:}35.999$  looked at every little bit of the bladder

NOTE Confidence: 0.92443698625

 $00{:}22{:}35{.}999 \dashrightarrow 00{:}22{:}37{.}880$  to make sure there's nothing

NOTE Confidence: 0.92443698625

 $00{:}22{:}37{.}880 \dashrightarrow 00{:}22{:}40{.}480$  that warrants further treatment.

NOTE Confidence: 0.92443698625

00:22:40.480 --> 00:22:41.840 And so between the urine,

NOTE Confidence: 0.92443698625

 $00{:}22{:}41.840 \dashrightarrow 00{:}22{:}43.880$  history, and

NOTE Confidence: 0.92443698625

 $00:22:43.880 \longrightarrow 00:22:46.402$  physical and then the urine test

- NOTE Confidence: 0.92443698625
- 00:22:46.402 --> 00:22:48.838 ACT scan usually and a cystoscopy,

 $00:22:48.840 \longrightarrow 00:22:50.022$  that's what we sort of think

NOTE Confidence: 0.92443698625

 $00:22:50.022 \longrightarrow 00:22:51.160$  of as a hematuria workup.

NOTE Confidence: 0.9289704575

 $00:22:52.440 \rightarrow 00:22:54.966$  And so presumably if on cystoscopy

NOTE Confidence: 0.9289704575

 $00{:}22{:}54{.}966 \dashrightarrow 00{:}22{:}58{.}762$  you do see a patch of redness or a

NOTE Confidence: 0.9289704575

 $00{:}22{:}58.762 \dashrightarrow 00{:}23{:}01.434$  lump or bump that could potentially

NOTE Confidence: 0.9289704575

 $00:23:01.434 \rightarrow 00:23:05.354$  make you think about a bladder cancer.

NOTE Confidence: 0.9289704575

 $00:23:05.360 \rightarrow 00:23:07.960$  Can biopsies be done at the same time,

NOTE Confidence: 0.927583167777778

 $00{:}23{:}09{.}000 \dashrightarrow 00{:}23{:}11{.}076$  They can occasionally be done at

NOTE Confidence: 0.927583167777778

 $00:23:11.076 \longrightarrow 00:23:13.104$  the same time, but that is not

NOTE Confidence: 0.927583167777778

 $00{:}23{:}13.104 \dashrightarrow 00{:}23{:}15.280$  routine to do it at the same time.

NOTE Confidence: 0.92758316777778

 $00{:}23{:}15{.}280 \dashrightarrow 00{:}23{:}19{.}427$  And the reason is that if we see

NOTE Confidence: 0.927583167777778

 $00:23:19.427 \longrightarrow 00:23:20.872$  a lesion, something that looks

NOTE Confidence: 0.927583167777778

 $00{:}23{:}20{.}872 \dashrightarrow 00{:}23{:}22{.}838$  like a tumor of the bladder,

NOTE Confidence: 0.927583167777778

 $00:23:22.840 \longrightarrow 00:23:25.227$  the next steps will be to

 $00:23:25.227 \longrightarrow 00:23:27.359$  find out what the diagnose,

NOTE Confidence: 0.927583167777778

 $00{:}23{:}27{.}360 \dashrightarrow 00{:}23{:}29{.}532$  what the Histology of

NOTE Confidence: 0.927583167777778

 $00{:}23{:}29{.}532 \dashrightarrow 00{:}23{:}32{.}269$  that lesion is and get a

NOTE Confidence: 0.927583167777778

 $00:23:32.269 \rightarrow 00:23:33.889$  pathologic diagnosis and either

NOTE Confidence: 0.927583167777778

00:23:33.889 --> 00:23:36.558 confirm or rule out bladder cancer.

NOTE Confidence: 0.927583167777778

 $00{:}23{:}36{.}560 \dashrightarrow 00{:}23{:}39{.}194$  And to do that we almost always will

NOTE Confidence: 0.927583167777778

 $00:23:39.194 \longrightarrow 00:23:41.582$  stop the procedure

NOTE Confidence: 0.92758316777778

 $00{:}23{:}41{.}582 \dashrightarrow 00{:}23{:}44{.}401$  at that time and we will suggest to the

NOTE Confidence: 0.92758316777778

 $00{:}23{:}44{.}401 \dashrightarrow 00{:}23{:}46{.}786$  patient that we go to the operating

NOTE Confidence: 0.927583167777778

 $00{:}23{:}46.786 \dashrightarrow 00{:}23{:}50.065$  room and remove the tumor in

NOTE Confidence: 0.927583167777778

 $00{:}23{:}50.065 \dashrightarrow 00{:}23{:}52.584$  its entirety rather than just take

NOTE Confidence: 0.927583167777778

 $00:23:52.584 \longrightarrow 00:23:54.780$  a small biopsy which will give

NOTE Confidence: 0.927583167777778

00:23:54.854 --> 00:23:57.104 us a more successful diagnostic,

NOTE Confidence: 0.92758316777778

 $00{:}23{:}57{.}104 \dashrightarrow 00{:}23{:}59{.}354$  diagnosis rather of the specific

NOTE Confidence: 0.927583167777778

 $00:23:59.432 \rightarrow 00:24:02.048$  cell types and what is growing

NOTE Confidence: 0.927583167777778

 $00{:}24{:}02.048 \dashrightarrow 00{:}24{:}03.792$  under the microscope basically.

 $00:24:03.800 \longrightarrow 00:24:05.928$  But on top of that we know that

NOTE Confidence: 0.927583167777778

 $00:24:05.928 \longrightarrow 00:24:07.494$  a procedure like this where

NOTE Confidence: 0.927583167777778

 $00:24:07.494 \longrightarrow 00:24:09.483$  the whole tumor is removed

00:24:10.209 --> 00:24:12.387 it's not just diagnostic but it's

NOTE Confidence: 0.92758316777778

 $00{:}24{:}12{.}387 \dashrightarrow 00{:}24{:}13{.}640$  also the rapeutic.

NOTE Confidence: 0.927583167777778

 $00{:}24{:}13.640 \dashrightarrow 00{:}24{:}15.355$  You know if there is cancer there,

NOTE Confidence: 0.92758316777778

 $00{:}24{:}15{.}360 \dashrightarrow 00{:}24{:}17{.}166$  it's really important that we remove

NOTE Confidence: 0.92758316777778

 $00:24:17.166 \longrightarrow 00:24:19.240$  the cancer from the patient's body.

NOTE Confidence: 0.927583167777778

00:24:19.240 --> 00:24:21.310 We get a better understanding of

NOTE Confidence: 0.927583167777778

 $00{:}24{:}21{.}310 \dashrightarrow 00{:}24{:}23{.}497$  what we're dealing with and doing a

NOTE Confidence: 0.927583167777778

 $00{:}24{:}23{.}497 \dashrightarrow 00{:}24{:}26{.}132$  a thorough resection of this tumor

NOTE Confidence: 0.927583167777778

 $00:24:26.132 \longrightarrow 00:24:28.543$  we know that it

NOTE Confidence: 0.92758316777778

 $00{:}24{:}28.543 \dashrightarrow 00{:}24{:}29.745$  improves outcomes and decreases the

NOTE Confidence: 0.92758316777778

 $00{:}24{:}29{.}745 \dashrightarrow 00{:}24{:}31{.}317$  chance of recurrence down the road.

NOTE Confidence: 0.92758316777778

 $00:24:31.320 \longrightarrow 00:24:32.853$  And so that's usually what we do

NOTE Confidence: 0.927583167777778

 $00{:}24{:}32{.}853 \dashrightarrow 00{:}24{:}34{.}449$  if we see something suspicious is

 $00:24:34.449 \rightarrow 00:24:36.920$  instead of a small biopsy in the clinic,

NOTE Confidence: 0.927583167777778

00:24:36.920 --> 00:24:39.620 we will normally not put patients

NOTE Confidence: 0.927583167777778

 $00:24:39.620 \rightarrow 00:24:42.440$  through that and instead say you know

NOTE Confidence: 0.927583167777778

 $00:24:42.440 \longrightarrow 00:24:44.012$  there really shouldn't be a

NOTE Confidence: 0.927583167777778

 $00:24:44.012 \longrightarrow 00:24:45.816$  whole lot growing on the inside of

NOTE Confidence: 0.927583167777778

 $00:24:45.816 \longrightarrow 00:24:47.454$  your bladder except with

NOTE Confidence: 0.927583167777778

00:24:47.506 --> 00:24:49.192 really rare exceptions if there's

NOTE Confidence: 0.92758316777778

 $00:24:49.192 \rightarrow 00:24:51.124$  something on the inside of the bladder,

NOTE Confidence: 0.927583167777778

 $00:24:51.124 \longrightarrow 00:24:52.732$  we usually would like to

NOTE Confidence: 0.927583167777778

 $00:24:52.732 \longrightarrow 00:24:54.079$  remove it in its entirety.

NOTE Confidence: 0.937182248571429

 $00:24:55.240 \longrightarrow 00:24:57.599$  So a couple of questions on that.

NOTE Confidence: 0.937182248571429

 $00{:}24{:}57.600 \dashrightarrow 00{:}25{:}01.345$  One, what's the breakdown between how

NOTE Confidence: 0.937182248571429

 $00{:}25{:}01{.}345 \dashrightarrow 00{:}25{:}04{.}223$  many of these lesions turn out to

NOTE Confidence: 0.937182248571429

 $00{:}25{:}04{.}223 \dashrightarrow 00{:}25{:}06{.}569$  be completely benign versus how many

NOTE Confidence: 0.937182248571429

 $00:25:06.569 \rightarrow 00:25:09.279$  actually turn out to be a bladder cancer?

 $00:25:09.280 \longrightarrow 00:25:11.338$  And #2, can you kind of illustrate

NOTE Confidence: 0.937182248571429

 $00{:}25{:}11{.}338 \dashrightarrow 00{:}25{:}13{.}967$  for us a little bit more about what

NOTE Confidence: 0.937182248571429

 $00{:}25{:}13{.}967 \dashrightarrow 00{:}25{:}16{.}400$  you mean by a complete resection?

NOTE Confidence: 0.937182248571429

00:25:16.400 -> 00:25:18.206 Do you mean removing a portion

NOTE Confidence: 0.937182248571429

 $00:25:18.206 \longrightarrow 00:25:20.419$  of the bladder wall or do you

NOTE Confidence: 0.937182248571429

 $00{:}25{:}20{.}419 \dashrightarrow 00{:}25{:}21{.}999$  mean removing the whole bladder,

NOTE Confidence: 0.937182248571429

 $00:25:22.000 \rightarrow 00:25:23.836$  which might be kind of scary

NOTE Confidence: 0.937182248571429

 $00:25:23.836 \longrightarrow 00:25:24.754$  for some patients?

NOTE Confidence: 0.963806945

00:25:25.880 --> 00:25:26.750 Thank you. Yeah,

NOTE Confidence: 0.963806945

 $00:25:26.750 \longrightarrow 00:25:28.200$  that's a really important distinction.

NOTE Confidence: 0.963806945

 $00{:}25{:}28{.}200 \dashrightarrow 00{:}25{:}31{.}595$  Let's talk about that.

NOTE Confidence: 0.963806945

 $00{:}25{:}31.600 \dashrightarrow 00{:}25{:}33.045$  There are certain benign things

NOTE Confidence: 0.963806945

 $00:25:33.045 \longrightarrow 00:25:35.000$  that can grow in the bladder.

NOTE Confidence: 0.963806945

 $00:25:35.000 \rightarrow 00:25:37.850$  There are certain types of inflammatory

NOTE Confidence: 0.963806945

 $00:25:37.850 \rightarrow 00:25:40.825$  lesions or you know certain benign

NOTE Confidence: 0.963806945

 $00:25:40.825 \rightarrow 00:25:43.559$  almost polyp like lesions that can grow.

- NOTE Confidence: 0.963806945
- $00:25:43.560 \longrightarrow 00:25:45.476$  And I would say
- NOTE Confidence: 0.963806945
- $00:25:45.476 \rightarrow 00:25:47.906$  I don't have off the top of my head
- NOTE Confidence: 0.963806945
- $00{:}25{:}47{.}906 \dashrightarrow 00{:}25{:}50{.}510$  a breakdown of the number that is
- NOTE Confidence: 0.963806945
- $00:25:50.510 \rightarrow 00:25:52.959$  malignant and the number that is benign.
- NOTE Confidence: 0.963806945
- $00{:}25{:}52{.}960 \dashrightarrow 00{:}25{:}55{.}438$  But it's not an insignificant
- NOTE Confidence: 0.963806945
- $00{:}25{:}55{.}438 \dashrightarrow 00{:}25{:}58{.}073$  number where we go into the bladder and
- NOTE Confidence: 0.963806945
- $00{:}25{:}58.073 \dashrightarrow 00{:}26{:}01.221$  we see what looks like a small growth or a
- NOTE Confidence: 0.963806945
- $00:26:01.221 \rightarrow 00:26:03.460$  little something like a cyst in the bladder.
- NOTE Confidence: 0.963806945
- $00{:}26{:}03.460 \dashrightarrow 00{:}26{:}05.800$  And when we look at it under the microscope,
- NOTE Confidence: 0.963806945
- $00:26:05.800 \rightarrow 00:26:08.740$  we find that it was some inflammatory
- NOTE Confidence: 0.963806945
- $00:26:08.740 \rightarrow 00:26:11.479$  change or something that wasn't cancer.
- NOTE Confidence: 0.963806945
- $00{:}26{:}11.480 \dashrightarrow 00{:}26{:}14.112$  That being said many and I would
- NOTE Confidence: 0.963806945
- $00:26:14.112 \longrightarrow 00:26:16.321$  say most growths in the bladder
- NOTE Confidence: 0.963806945
- $00:26:16.321 \rightarrow 00:26:18.400$  that we see grossly we can,
- NOTE Confidence: 0.963806945
- $00:26:18.400 \longrightarrow 00:26:20.332$  especially urologists that
- NOTE Confidence: 0.963806945

 $00:26:20.332 \rightarrow 00:26:22.756$  see this type of thing frequently,

NOTE Confidence: 0.963806945

 $00{:}26{:}22.760 \dashrightarrow 00{:}26{:}25.037$  I can have a have a pretty good sense,

NOTE Confidence: 0.963806945

 $00:26:25.040 \longrightarrow 00:26:27.280$  I can look at a bladder,

NOTE Confidence: 0.963806945

 $00:26:27.280 \longrightarrow 00:26:29.296$  lesion and

NOTE Confidence: 0.963806945

 $00{:}26{:}29{.}296 \dashrightarrow 00{:}26{:}30{.}976$  really know with some confidence

NOTE Confidence: 0.963806945

 $00{:}26{:}30{.}976 \dashrightarrow 00{:}26{:}33{.}048$  whether or not this is a concerning

NOTE Confidence: 0.963806945

 $00:26:33.048 \rightarrow 00:26:35.400$  type or more of an inflammatory type.

NOTE Confidence: 0.963806945

 $00:26:35.400 \longrightarrow 00:26:37.192$  And that's sort of the trigger is

NOTE Confidence: 0.963806945

 $00{:}26{:}37.192 \dashrightarrow 00{:}26{:}38.680$  the gross appearance of the lesion.

NOTE Confidence: 0.963806945

 $00:26:38.680 \longrightarrow 00:26:40.970$  If it's suspicious enough that's

NOTE Confidence: 0.963806945

 $00:26:40.970 \longrightarrow 00:26:43.958$  the trigger for doing this more

NOTE Confidence: 0.963806945

 $00:26:43.958 \rightarrow 00:26:45.200$  involved procedure.

NOTE Confidence: 0.963806945

 $00:26:45.200 \longrightarrow 00:26:46.320$  So let me tell you a little

NOTE Confidence: 0.963806945

 $00:26:46.320 \longrightarrow 00:26:47.240$  bit about the procedure.

NOTE Confidence: 0.963806945

 $00{:}26{:}47{.}240 \dashrightarrow 00{:}26{:}48{.}572$  That is the most common procedure

NOTE Confidence: 0.963806945

 $00:26:48.572 \rightarrow 00:26:50.159$  we do for this type of thing,

- NOTE Confidence: 0.963806945
- $00:26:50.160 \longrightarrow 00:26:52.590$  at least initially it's a
- NOTE Confidence: 0.963806945
- $00:26:52.590 \rightarrow 00:26:54.210$  procedure called the transurethral
- NOTE Confidence: 0.963806945
- $00{:}26{:}54.277 \dashrightarrow 00{:}26{:}56.511$  resection of a bladder tumor or TURBT.
- $00:26:57.053 \longrightarrow 00:26:58.679$  It's a bit of a mouthful.
- NOTE Confidence: 0.963806945
- $00:26:58.680 \longrightarrow 00:27:00.440$  And what this procedure is,
- NOTE Confidence: 0.963806945
- $00:27:00.440 \longrightarrow 00:27:03.540$  we basically go under
- NOTE Confidence: 0.963806945
- $00:27:03.540 \rightarrow 00:27:05.040$  anesthesia in the operating room.
- NOTE Confidence: 0.963806945
- $00:27:05.040 \longrightarrow 00:27:07.216$  We use a camera, not unlike the one
- NOTE Confidence: 0.963806945
- 00:27:07.216 --> 00:27:09.630 that's used in clinic except it's a
- NOTE Confidence: 0.963806945
- $00:27:09.630 \rightarrow 00:27:11.435$  little bigger and more sophisticated,
- NOTE Confidence: 0.963806945
- $00{:}27{:}11.440 \dashrightarrow 00{:}27{:}13.030$  and allows us to do more procedures
- NOTE Confidence: 0.963806945
- $00:27:13.030 \rightarrow 00:27:14.680$  through the channel of the camera.
- NOTE Confidence: 0.963806945
- $00:27:14.680 \longrightarrow 00:27:16.800$  So we're not making incisions,
- NOTE Confidence: 0.963806945
- $00:27:16.800 \rightarrow 00:27:18.560$  we're not cutting out parts of the bladder,
- NOTE Confidence: 0.963806945
- $00:27:18.560 \longrightarrow 00:27:21.717$  but instead are using an instrument,
- NOTE Confidence: 0.963806945
- $00:27:21.720 \rightarrow 00:27:25.120$  an endoscopic instrument that's minimally

- NOTE Confidence: 0.963806945
- $00:27:25.120 \rightarrow 00:27:28.405$  invasive meant to hopefully cause the

 $00{:}27{:}28{.}405 \dashrightarrow 00{:}27{:}31{.}840$  least discomfort and morbidity for patients.

NOTE Confidence: 0.963806945

 $00{:}27{:}31{.}840 \dashrightarrow 00{:}27{:}33{.}840$  And we go to the operating room and

NOTE Confidence: 0.963806945

 $00:27:33.840 \longrightarrow 00:27:35.680$  pass that again through the

NOTE Confidence: 0.963806945

 $00{:}27{:}35{.}680 \dashrightarrow 00{:}27{:}36{.}910$ urethra,

NOTE Confidence: 0.963806945

 $00{:}27{:}36{.}910 \dashrightarrow 00{:}27{:}39{.}600$  the channel into the bladder and through

NOTE Confidence: 0.963806945

 $00{:}27{:}39.600 \dashrightarrow 00{:}27{:}42.160$  that instrument we're able to sort of in

NOTE Confidence: 0.963806945

00:27:42.160 --> 00:27:45.760 a piece meal way remove

NOTE Confidence: 0.963806945

 $00{:}27{:}45.760 \dashrightarrow 00{:}27{:}47.560$  this suspicious lesion.

NOTE Confidence: 0.963806945

 $00{:}27{:}47.560 \dashrightarrow 00{:}27{:}48.918$  We don't remove part of the bladder.

NOTE Confidence: 0.963806945

 $00{:}27{:}48{.}920 \dashrightarrow 00{:}27{:}50{.}999$  We remove the tumor and then we

NOTE Confidence: 0.963806945

 $00:27:50.999 \longrightarrow 00:27:53.436$  will try to remove some of the

NOTE Confidence: 0.963806945

 $00:27:53.436 \longrightarrow 00:27:55.271$  underlying bladder in order to

NOTE Confidence: 0.963806945

 $00{:}27{:}55{.}271 \dashrightarrow 00{:}27{:}58{.}112$  get to basically to get an answer

NOTE Confidence: 0.963806945

 $00:27:58.112 \rightarrow 00:28:00.376$  to the question of how advanced,

 $00:28:00.376 \rightarrow 00:28:01.916$  if this is a cancer,

NOTE Confidence: 0.963806945

 $00:28:01.920 \longrightarrow 00:28:03.095$  how advanced is this cancer

NOTE Confidence: 0.963806945

 $00:28:03.095 \longrightarrow 00:28:04.720$  into the wall of the bladder.

NOTE Confidence: 0.963806945

 $00:28:04.720 \longrightarrow 00:28:06.631$  And that ends up being a very

NOTE Confidence: 0.963806945

 $00{:}28{:}06{.}631 \dashrightarrow 00{:}28{:}07{.}781$  important question for deciding

NOTE Confidence: 0.963806945

 $00{:}28{:}07{.}781 \dashrightarrow 00{:}28{:}09{.}449$  next steps for treatment, is what NOTE Confidence: 0.963806945

 $00:28:09.449 \longrightarrow 00:28:11.438$  we call the stage of the disease,

NOTE Confidence: 0.963806945

 $00:28:11.440 \longrightarrow 00:28:13.995$  which if there is a cancer,

NOTE Confidence: 0.963806945

 $00{:}28{:}14.000 \dashrightarrow 00{:}28{:}15.740$  is this cancer early stage

NOTE Confidence: 0.963806945

 $00{:}28{:}15{.}740 \dashrightarrow 00{:}28{:}17{.}480$  in that it's on

NOTE Confidence: 0.908541376521739

 $00{:}28{:}17.563 \dashrightarrow 00{:}28{:}20.209$  the surface of the bladder or is

NOTE Confidence: 0.908541376521739

 $00{:}28{:}20{.}209 \dashrightarrow 00{:}28{:}22{.}314$  this more advanced requiring you

NOTE Confidence: 0.908541376521739

 $00{:}28{:}22{.}314 \dashrightarrow 00{:}28{:}23{.}752$  know having advanced deeper into

NOTE Confidence: 0.908541376521739

 $00:28:23.752 \longrightarrow 00:28:25.444$  the wall of the bladder.

NOTE Confidence: 0.908541376521739

 $00{:}28{:}25{.}444 \dashrightarrow 00{:}28{:}28{.}552$  And and the answer to that

NOTE Confidence: 0.908541376521739

 $00:28:28.552 \rightarrow 00:28:31.100$  question really helps us decide

- NOTE Confidence: 0.908541376521739
- $00:28:31.100 \rightarrow 00:28:33.000$  the best therapy moving forward.
- NOTE Confidence: 0.8608603946666667
- 00:28:33.760 --> 00:28:35.520 Doctor Fed Ghali is an
- NOTE Confidence: 0.8608603946666667
- 00:28:35.520 --> 00:28:36.928 assistant professor of urology
- NOTE Confidence: 0.8608603946666667
- $00:28:36.928 \longrightarrow 00:28:39.078$  at the Yale School of Medicine.
- NOTE Confidence: 0.8608603946666667
- $00:28:39.080 \longrightarrow 00:28:41.068$  If you have questions,
- NOTE Confidence: 0.8608603946666667
- $00:28:41.068 \rightarrow 00:28:43.023$  the address is canceranswers@yale.edu,
- NOTE Confidence: 0.8608603946666667
- $00:28:43.023 \rightarrow 00:28:45.801$  and past editions of the program
- NOTE Confidence: 0.860860394666667
- $00{:}28{:}45{.}801 \dashrightarrow 00{:}28{:}48{.}205$  are available in audio and written
- NOTE Confidence: 0.8608603946666667
- $00{:}28{:}48{.}205 \dashrightarrow 00{:}28{:}49{.}141$  form at yale cancercenter.org.
- NOTE Confidence: 0.8608603946666667
- 00:28:49.141 --> 00:28:51.549 We hope you'll join us next week to
- NOTE Confidence: 0.8608603946666667
- $00{:}28{:}51{.}549 \dashrightarrow 00{:}28{:}53{.}380$  learn more about the fight against
- NOTE Confidence: 0.860860394666667
- $00{:}28{:}53{.}380 \dashrightarrow 00{:}28{:}55{.}200$  cancer here on Connecticut Public Radio.
- NOTE Confidence: 0.8608603946666667
- 00:28:55.200 --> 00:28:57.660 Funding for Yale Cancer Answers is
- NOTE Confidence: 0.8608603946666667
- $00{:}28{:}57{.}660 \dashrightarrow 00{:}29{:}00{.}000$  provided by Smilow Cancer Hospital.