

WEBVTT

00:00:00.000 --> 00:00:02.766 Support for Yale Cancer Answers comes

NOTE Confidence: 0.8556965

00:00:02.766 --> 00:00:05.256 from AstraZeneca, focused on exploring

NOTE Confidence: 0.8556965

00:00:05.256 --> 00:00:07.528 innovative treatment approaches for

NOTE Confidence: 0.8556965

00:00:07.528 --> 00:00:10.368 people living with bladder cancer.

NOTE Confidence: 0.8556965

00:00:10.370 --> 00:00:14.358 Learn more at [astrazeneca-us.com](http://astrazeneca-us.com).

NOTE Confidence: 0.8556965

00:00:14.360 --> 00:00:15.728 Welcome to Yale Cancer

NOTE Confidence: 0.8556965

00:00:15.728 --> 00:00:17.096 Answers with your host

NOTE Confidence: 0.8556965

00:00:17.100 --> 00:00:18.810 Doctor Anees Chagpar.

NOTE Confidence: 0.8556965

00:00:18.810 --> 00:00:20.635 Yale Cancer Answers features the

NOTE Confidence: 0.8556965

00:00:20.635 --> 00:00:22.875 latest information on cancer care by

NOTE Confidence: 0.8556965

00:00:22.875 --> 00:00:24.311 welcoming oncologists and specialists

NOTE Confidence: 0.8556965

00:00:24.311 --> 00:00:26.719 who are on the forefront of the

NOTE Confidence: 0.8556965

00:00:26.719 --> 00:00:28.375 battle to fight cancer. This week,

NOTE Confidence: 0.8556965

00:00:28.380 --> 00:00:30.384 it's a conversation about the diagnosis

NOTE Confidence: 0.8556965

00:00:30.384 --> 00:00:32.140 and treatment of bladder cancer,

NOTE Confidence: 0.8556965

00:00:32.140 --> 00:00:33.536 with doctor John Colberg.  
NOTE Confidence: 0.8556965

00:00:33.536 --> 00:00:35.630 Doctor Colberg is a professor of  
NOTE Confidence: 0.8556965

00:00:35.698 --> 00:00:37.473 urology and director of Urologic  
NOTE Confidence: 0.8556965

00:00:37.473 --> 00:00:39.624 Oncology at the Yale School of  
NOTE Confidence: 0.8556965

00:00:39.624 --> 00:00:41.472 Medicine where Doctor Chagpar is  
NOTE Confidence: 0.8556965

00:00:41.472 --> 00:00:44.280 a professor of surgical oncology.  
00:00:44.620 --> 00:00:47.284 Maybe we can start off by talking  
NOTE Confidence: 0.8637104

00:00:47.284 --> 00:00:50.088 a little bit more about bladder cancer.  
NOTE Confidence: 0.8637104

00:00:50.090 --> 00:00:52.491 It certainly isn't one of the most  
NOTE Confidence: 0.8637104

00:00:52.491 --> 00:00:54.540 common cancers that we think about.  
NOTE Confidence: 0.8637104

00:00:54.540 --> 00:00:57.618 So tell us a little bit more about it.  
NOTE Confidence: 0.8637104

00:00:57.620 --> 00:01:00.350 How common is it? Who gets it, and  
NOTE Confidence: 0.8637104

00:01:00.350 --> 00:01:01.718 how deadly is it?  
00:01:02.999 --> 00:01:05.830 If you look at non skin cancer cancers,  
NOTE Confidence: 0.8637104

00:01:05.830 --> 00:01:08.305 it's the fifth most common  
NOTE Confidence: 0.8637104

00:01:08.305 --> 00:01:10.285 cancer that we diagnose.  
NOTE Confidence: 0.8637104

00:01:10.290 --> 00:01:13.727 It's the fourth most common in males.

NOTE Confidence: 0.8637104

00:01:13.730 --> 00:01:17.174 About 80,000 cases are diagnosed a year.

NOTE Confidence: 0.8637104

00:01:17.180 --> 00:01:20.126 The vast majority are male,

NOTE Confidence: 0.8637104

00:01:20.130 --> 00:01:24.630 about 62,000 versus 19,000 for women and

NOTE Confidence: 0.8637104

00:01:24.630 --> 00:01:29.076 the average age of diagnosis is 73.

NOTE Confidence: 0.8637104

00:01:29.080 --> 00:01:32.083 The chance of a man getting bladder

NOTE Confidence: 0.8637104

00:01:32.083 --> 00:01:35.185 cancer is about one out of 27 and

NOTE Confidence: 0.8637104

00:01:35.185 --> 00:01:37.838 for women about one out of 80.

NOTE Confidence: 0.8917018

00:01:39.670 --> 00:01:42.838 So when you think about it,

NOTE Confidence: 0.8917018

00:01:42.840 --> 00:01:45.297 being in the top five,

NOTE Confidence: 0.8917018

00:01:45.300 --> 00:01:47.412 it actually might be more common

NOTE Confidence: 0.8917018

00:01:47.412 --> 00:01:48.820 than many people realize.

NOTE Confidence: 0.8917018

00:01:48.820 --> 00:01:51.636 So what are the risk factors?

NOTE Confidence: 0.8917018

00:01:51.640 --> 00:01:53.385 Are there modifiable things that

NOTE Confidence: 0.8917018

00:01:53.385 --> 00:01:55.539 people should be thinking about that

NOTE Confidence: 0.8917018

00:01:55.539 --> 00:01:57.269 may predispose to bladder cancer?

NOTE Confidence: 0.8917018

00:01:57.270 --> 00:02:00.045 Absolutely, I think the biggest  
NOTE Confidence: 0.8917018

00:02:00.045 --> 00:02:02.265 one is cigarette smoking.  
NOTE Confidence: 0.8917018

00:02:02.270 --> 00:02:05.638 A cigarette smoker has a three times greater  
NOTE Confidence: 0.8917018

00:02:05.638 --> 00:02:08.589 chance of developing bladder cancer.  
NOTE Confidence: 0.8917018

00:02:08.590 --> 00:02:10.530 There's some environmental and  
NOTE Confidence: 0.8917018

00:02:10.530 --> 00:02:12.955 workplace exposures that you  
NOTE Confidence: 0.8917018

00:02:12.960 --> 00:02:16.068 might want to think about which  
NOTE Confidence: 0.8917018

00:02:16.068 --> 00:02:18.650 includes people who  
NOTE Confidence: 0.8917018

00:02:18.650 --> 00:02:21.710 work in textiles,  
NOTE Confidence: 0.8917018

00:02:21.710 --> 00:02:26.170 maybe professions of painters, truck drivers.  
NOTE Confidence: 0.8917018

00:02:26.170 --> 00:02:28.160 And on top of that,  
NOTE Confidence: 0.8917018

00:02:28.160 --> 00:02:30.946 a lot of these people also smoke,  
NOTE Confidence: 0.8917018

00:02:30.950 --> 00:02:33.338 so they have a much higher risk  
NOTE Confidence: 0.8917018

00:02:33.338 --> 00:02:34.930 of developing bladder cancer.  
NOTE Confidence: 0.8917018

00:02:34.930 --> 00:02:36.915 Now there's no predisposing  
NOTE Confidence: 0.8917018

00:02:36.915 --> 00:02:38.503 genetic factors perse.

NOTE Confidence: 0.8917018

00:02:38.510 --> 00:02:40.596 Most of them are related to being

NOTE Confidence: 0.8917018

00:02:40.596 --> 00:02:42.728 turned on by cigarette smoking

NOTE Confidence: 0.8917018

00:02:42.728 --> 00:02:44.480 or environmental exposures.

00:02:45.670 --> 00:02:47.455 tI hink with the cigarette smoking

NOTE Confidence: 0.840632500000001

00:02:47.455 --> 00:02:50.365 and I'd like to come back to

NOTE Confidence: 0.840632500000001

00:02:50.365 --> 00:02:52.465 that in terms of cumulative risk

NOTE Confidence: 0.840632500000001

00:02:52.465 --> 00:02:54.853 and whether quitting smoking

NOTE Confidence: 0.840632500000001

00:02:54.853 --> 00:02:57.253 actually reduces your risk, but

NOTE Confidence: 0.840632500000001

00:02:57.253 --> 00:02:59.418 in terms of workplace exposures,

NOTE Confidence: 0.840632500000001

00:02:59.420 --> 00:03:01.748 oftentimes if you're a

NOTE Confidence: 0.840632500000001

00:03:01.748 --> 00:03:03.890 painter or a truck driver,

NOTE Confidence: 0.840632500000001

00:03:03.890 --> 00:03:05.920 that's your livelihood.

NOTE Confidence: 0.840632500000001

00:03:05.920 --> 00:03:08.008 Are there things that people are

NOTE Confidence: 0.840632500000001

00:03:08.008 --> 00:03:10.728 doing to reduce some of the exposures

NOTE Confidence: 0.840632500000001

00:03:10.728 --> 00:03:13.248 that people get to various chemicals

NOTE Confidence: 0.840632500000001

00:03:13.248 --> 00:03:15.248 associated with these occupations?

NOTE Confidence: 0.840632500000001  
00:03:15.250 --> 00:03:16.582 So, for example,  
NOTE Confidence: 0.840632500000001  
00:03:16.582 --> 00:03:19.246 are there governmental bans  
NOTE Confidence: 0.840632500000001  
00:03:19.246 --> 00:03:22.598 on some of these chemicals that may be  
NOTE Confidence: 0.840632500000001  
00:03:22.598 --> 00:03:25.398 found in paints and dyes and so on?  
00:03:29.586 --> 00:03:31.704 There's a fairly delayed response to  
NOTE Confidence: 0.8379483  
00:03:31.704 --> 00:03:33.957 getting the cancer after this exposure,  
NOTE Confidence: 0.8379483  
00:03:33.960 --> 00:03:37.000 so a lot of these men and women we see  
NOTE Confidence: 0.8379483  
00:03:37.083 --> 00:03:40.107 have been exposed 20 or 30 years ago or  
NOTE Confidence: 0.8379483  
00:03:40.107 --> 00:03:43.550 40 years ago when there weren't a lot  
NOTE Confidence: 0.8379483  
00:03:43.550 --> 00:03:46.302 of restrictions and new laws in place  
NOTE Confidence: 0.8379483  
00:03:46.302 --> 00:03:48.480 to prevent from limiting their exposure.  
NOTE Confidence: 0.8379483  
00:03:48.480 --> 00:03:51.382 But some of them,  
NOTE Confidence: 0.8379483  
00:03:51.382 --> 00:03:53.909 truck drivers are exposed to diesel fuel  
NOTE Confidence: 0.8379483  
00:03:53.909 --> 00:03:56.923 or people work in the dry cleaning business  
NOTE Confidence: 0.8379483  
00:03:56.923 --> 00:04:00.215 are exposed  
NOTE Confidence: 0.8379483  
00:04:00.220 --> 00:04:03.080 so I think that we are

NOTE Confidence: 0.8379483

00:04:03.152 --> 00:04:06.344 more aware of the exposures now and

NOTE Confidence: 0.8379483

00:04:06.344 --> 00:04:08.549 certainly with cigarette smoking

NOTE Confidence: 0.8379483

00:04:08.550 --> 00:04:10.716 it's pretty easy to say,

NOTE Confidence: 0.87964946

00:04:10.720 --> 00:04:11.917 stop smoking.

NOTE Confidence: 0.87964946

00:04:11.917 --> 00:04:14.311 And sadly though there

NOTE Confidence: 0.87964946

00:04:14.311 --> 00:04:16.604 really is no legal restrictions on

NOTE Confidence: 0.87964946

00:04:16.604 --> 00:04:19.421 smoking and so it really is up to

NOTE Confidence: 0.87964946

00:04:19.421 --> 00:04:21.577 people to take control of their own

NOTE Confidence: 0.87964946

00:04:21.580 --> 00:04:23.445 health with regards to cigarette

NOTE Confidence: 0.87964946

00:04:23.445 --> 00:04:25.711 smoking though one of the questions

NOTE Confidence: 0.87964946

00:04:25.711 --> 00:04:28.049 that often comes up is

NOTE Confidence: 0.87964946

00:04:28.049 --> 00:04:30.305 people who have engaged in smoking

NOTE Confidence: 0.87964946

00:04:30.305 --> 00:04:32.200 often find it very difficult

NOTE Confidence: 0.87964946

00:04:32.200 --> 00:04:35.728 to quit and so they say,

NOTE Confidence: 0.87964946

00:04:35.730 --> 00:04:37.690 if I've already been smoking

NOTE Confidence: 0.87964946

00:04:37.690 --> 00:04:39.258 for 10, 15, 20 years,  
NOTE Confidence: 0.87964946

00:04:39.260 --> 00:04:41.997 the damage is already done,  
NOTE Confidence: 0.87964946

00:04:42.000 --> 00:04:44.415 so why bother quitting smoking?  
NOTE Confidence: 0.87964946

00:04:44.415 --> 00:04:47.488 Is the risk of bladder cancer cumulative?  
NOTE Confidence: 0.87964946

00:04:47.490 --> 00:04:48.639 In other words,  
NOTE Confidence: 0.87964946

00:04:48.639 --> 00:04:51.800 you keep adding to that risk  
NOTE Confidence: 0.87964946

00:04:51.800 --> 00:04:55.328 the more you smoke and after a certain point,  
NOTE Confidence: 0.87964946

00:04:55.330 --> 00:04:58.858 if you say quit for five or ten years,  
NOTE Confidence: 0.87964946

00:04:58.860 --> 00:05:00.820 your risk goes back down.  
NOTE Confidence: 0.87964946

00:05:00.820 --> 00:05:03.220 Or is it that  
NOTE Confidence: 0.87964946

00:05:03.220 --> 00:05:04.824 cigarette smoking causes damage  
NOTE Confidence: 0.87964946

00:05:04.824 --> 00:05:06.829 that once it's done is done,  
NOTE Confidence: 0.87964946

00:05:06.830 --> 00:05:10.439 and even if you quit smoking at that point,  
NOTE Confidence: 0.87964946

00:05:10.440 --> 00:05:12.445 you're still at risk of  
NOTE Confidence: 0.87964946

00:05:12.445 --> 00:05:13.648 developing bladder cancer.  
NOTE Confidence: 0.87964946

00:05:13.650 --> 00:05:15.650 I don't think we know



NOTE Confidence: 0.8668983

00:05:15.650 --> 00:05:17.660 that for certain, but

NOTE Confidence: 0.8668983

00:05:17.660 --> 00:05:20.060 certainly patients who stop smoking,

NOTE Confidence: 0.8668983

00:05:20.060 --> 00:05:22.466 I think the recurrence of the

NOTE Confidence: 0.8668983

00:05:22.466 --> 00:05:24.070 bladder cancer goes down.

NOTE Confidence: 0.8668983

00:05:24.070 --> 00:05:26.506 So I think that even though it

NOTE Confidence: 0.8668983

00:05:26.506 --> 00:05:28.554 may not completely absolve them

NOTE Confidence: 0.8668983

00:05:28.554 --> 00:05:30.884 from getting more bladder cancer,

NOTE Confidence: 0.8668983

00:05:30.890 --> 00:05:32.890 it certainly will help them.

NOTE Confidence: 0.8956487

00:05:34.500 --> 00:05:36.957 And so the other thing that's interesting

NOTE Confidence: 0.8956487

00:05:36.957 --> 00:05:40.066 is that you mentioned that there was this

NOTE Confidence: 0.8956487

00:05:40.070 --> 00:05:42.290 gender difference in terms

NOTE Confidence: 0.8956487

00:05:42.290 --> 00:05:44.513 of bladder cancer, with more men

NOTE Confidence: 0.8956487

00:05:44.513 --> 00:05:46.368 getting bladder cancer than women,

NOTE Confidence: 0.8956487

00:05:46.370 --> 00:05:48.225 I wonder whether that's related

NOTE Confidence: 0.8956487

00:05:48.225 --> 00:05:49.709 to differences in smoking.

NOTE Confidence: 0.8956487

00:05:49.710 --> 00:05:52.041 And now that we are beginning to  
NOTE Confidence: 0.8956487

00:05:52.041 --> 00:05:54.528 see more and more women smoking,  
NOTE Confidence: 0.8956487

00:05:54.530 --> 00:05:55.878 whether they've seen anything  
NOTE Confidence: 0.8956487

00:05:55.878 --> 00:05:58.393 change in terms of the risk of  
NOTE Confidence: 0.8956487

00:05:58.393 --> 00:06:00.097 women developing bladder cancers.  
NOTE Confidence: 0.8787095

00:06:01.070 --> 00:06:02.918 I think that's a reasonable supposition.  
NOTE Confidence: 0.8787095

00:06:02.920 --> 00:06:06.000 We don't see that yet, but I think that  
NOTE Confidence: 0.8787095

00:06:06.000 --> 00:06:08.640 like other types of cancer that may take  
NOTE Confidence: 0.8787095

00:06:08.640 --> 00:06:10.616 several years to kind of catch up.  
NOTE Confidence: 0.8544121

00:06:11.780 --> 00:06:14.804 The other question we've seen in  
NOTE Confidence: 0.8544121

00:06:14.804 --> 00:06:18.015 other cancers is there a synergistic  
NOTE Confidence: 0.8544121

00:06:18.015 --> 00:06:20.215 effect between alcohol and  
NOTE Confidence: 0.8544121

00:06:20.215 --> 00:06:23.700 smoking in terms of cancer risks.  
NOTE Confidence: 0.8544121

00:06:23.700 --> 00:06:26.812 Do we see that in bladder cancer too  
NOTE Confidence: 0.8544121

00:06:26.812 --> 00:06:31.109 or is it really the environmental and  
NOTE Confidence: 0.8544121

00:06:31.109 --> 00:06:34.534 occupational exposures instead of alcohol?

NOTE Confidence: 0.8544121

00:06:34.540 --> 00:06:36.708 I don't think we've

NOTE Confidence: 0.8544121

00:06:36.710 --> 00:06:40.504 seen that with alcohol and bladder cancer.

00:06:43.886 --> 00:06:47.460 Is the risk higher with people who have an

NOTE Confidence: 0.8681989555

00:06:47.460 --> 00:06:50.090 occupational risk like

NOTE Confidence: 0.8681989555

00:06:50.090 --> 00:06:52.634 being exposed to various chemicals in

NOTE Confidence: 0.8681989555

00:06:52.634 --> 00:06:55.628 the workplace if they are also smokers,

NOTE Confidence: 0.8681989555

00:06:55.630 --> 00:06:57.760 is that just additive,

NOTE Confidence: 0.8681989555

00:06:57.760 --> 00:06:59.740 but a synergistic risk?

NOTE Confidence: 0.8681989555

00:06:59.740 --> 00:07:05.018 Or is it

NOTE Confidence: 0.8681989555

00:07:05.020 --> 00:07:06.360 an additive risk?

NOTE Confidence: 0.7951145

00:07:06.360 --> 00:07:08.358 I don't think we know for certain,

NOTE Confidence: 0.7951145

00:07:08.360 --> 00:07:10.030 but I think that anecdotally

NOTE Confidence: 0.7951145

00:07:10.030 --> 00:07:11.366 it's synergy.

NOTE Confidence: 0.7951145

00:07:11.370 --> 00:07:13.368 So typically the worst

NOTE Confidence: 0.7951145

00:07:13.370 --> 00:07:15.514 cancers we see tend to be

NOTE Confidence: 0.7951145

00:07:15.514 --> 00:07:17.372 in people who have environmental

NOTE Confidence: 0.7951145

00:07:17.372 --> 00:07:20.960 exposures and they smoke.

NOTE Confidence: 0.8869073

00:07:20.960 --> 00:07:24.496 And so do we ever see bladder cancer

NOTE Confidence: 0.8869073

00:07:24.496 --> 00:07:28.080 in people who don't have one of those

NOTE Confidence: 0.8869073

00:07:28.080 --> 00:07:30.310 two risk factors?

NOTE Confidence: 0.8551573

00:07:31.330 --> 00:07:33.190 Yes, absolutely.

NOTE Confidence: 0.8551573

00:07:33.190 --> 00:07:35.510 Are these risk different than others in terms

NOTE Confidence: 0.8551573

00:07:35.510 --> 00:07:37.465 of how they look biologically?

NOTE Confidence: 0.8551573

00:07:37.470 --> 00:07:40.930 How they behave, and so on.

NOTE Confidence: 0.8551573

00:07:40.930 --> 00:07:43.618 I don't think we know that for certain,

NOTE Confidence: 0.8551573

00:07:43.620 --> 00:07:46.308 but again, not everybody

NOTE Confidence: 0.8551573

00:07:46.308 --> 00:07:48.228 that smokes gets bladder cancer.

NOTE Confidence: 0.8766133

00:07:48.910 --> 00:07:50.546 And some people

NOTE Confidence: 0.8766133

00:07:50.546 --> 00:07:53.000 get bladder cancer, who

NOTE Confidence: 0.8766133

00:07:53.000 --> 00:07:54.272 don't smoke.

NOTE Confidence: 0.8766133

00:07:54.272 --> 00:07:56.816 But I guess the definitive message is

NOTE Confidence: 0.8766133

00:07:56.816 --> 00:07:59.780 if you smoke you are at greater

NOTE Confidence: 0.8766133

00:07:59.780 --> 00:08:01.872 risk of getting bladder cancer

NOTE Confidence: 0.8766133

00:08:01.872 --> 00:08:04.888 and so doing what you can to quit

NOTE Confidence: 0.8766133

00:08:04.888 --> 00:08:07.390 smoking may help you either to

NOTE Confidence: 0.8766133

00:08:07.390 --> 00:08:09.510 avoid getting bladder cancer to

NOTE Confidence: 0.8766133

00:08:09.596 --> 00:08:12.291 begin with and reducing your risk

NOTE Confidence: 0.8766133

00:08:12.291 --> 00:08:14.270 of getting a recurrence.

NOTE Confidence: 0.8766133

00:08:14.270 --> 00:08:17.910 So let's talk a little bit about bladder

NOTE Confidence: 0.8766133

00:08:17.910 --> 00:08:21.668 cancer in terms of how it presents.

NOTE Confidence: 0.8766133

00:08:21.670 --> 00:08:23.780 How do people actually

NOTE Confidence: 0.8766133

00:08:23.780 --> 00:08:25.046 develop bladder cancer?

NOTE Confidence: 0.8766133

00:08:25.050 --> 00:08:26.746 What symptoms does that

NOTE Confidence: 0.8766133

00:08:26.746 --> 00:08:28.018 present with, typically?

NOTE Confidence: 0.8418908

00:08:28.020 --> 00:08:30.690 Do people with bladder cancer

NOTE Confidence: 0.8418908

00:08:30.690 --> 00:08:33.767 present with blood in the urine?

NOTE Confidence: 0.8418908

00:08:38.580 --> 00:08:40.512 Or is it found when he look under

NOTE Confidence: 0.8418908  
00:08:40.512 --> 00:08:42.166 the microscope?  
00:08:47.480 --> 00:08:49.040 So two questions there.  
NOTE Confidence: 0.86200565  
00:08:49.040 --> 00:08:50.304 The first question is,  
NOTE Confidence: 0.86200565  
00:08:50.304 --> 00:08:51.884 sometimes when people  
NOTE Confidence: 0.86200565  
00:08:51.884 --> 00:08:53.407 find blood in their urine,  
NOTE Confidence: 0.86200565  
00:08:53.410 --> 00:08:56.364 they assume that that's something like  
NOTE Confidence: 0.86200565  
00:08:56.364 --> 00:08:59.329 a kidney stone or something like that.  
NOTE Confidence: 0.86200565  
00:08:59.330 --> 00:09:00.845 How do you differentiate that  
NOTE Confidence: 0.86200565  
00:09:00.845 --> 00:09:03.063 from a bladder cancer and how do  
NOTE Confidence: 0.86200565  
00:09:03.063 --> 00:09:04.663 you actually find microscopic  
NOTE Confidence: 0.86200565  
00:09:04.663 --> 00:09:06.620 material that you can't really see?  
NOTE Confidence: 0.86200565  
00:09:06.620 --> 00:09:08.534 Is that something that would then  
NOTE Confidence: 0.86200565  
00:09:08.534 --> 00:09:10.430 cause people to present very late?  
NOTE Confidence: 0.86200565  
00:09:10.430 --> 00:09:12.960 How is that picked up?  
NOTE Confidence: 0.87472963  
00:09:12.960 --> 00:09:18.756 I think that if you have symptoms,  
NOTE Confidence: 0.87472963  
00:09:18.756 --> 00:09:25.580 maybe even infection or pain with urination,

NOTE Confidence: 0.87472963

00:09:25.580 --> 00:09:27.925 pattern changes, some people will

NOTE Confidence: 0.87472963

00:09:27.925 --> 00:09:31.533 look at your analysis and see if

NOTE Confidence: 0.87472963

00:09:31.533 --> 00:09:33.300 there's microscopic hematuria

NOTE Confidence: 0.87472963

00:09:33.300 --> 00:09:37.010 and that's one way that we find a lot of

NOTE Confidence: 0.87472963

00:09:37.111 --> 00:09:40.828 people just present with blood and

NOTE Confidence: 0.87472963

00:09:40.830 --> 00:09:42.920 that's how they initially present,

NOTE Confidence: 0.8825627

00:09:42.920 --> 00:09:46.248 and so in either of those two circumstances,

NOTE Confidence: 0.8825627

00:09:46.250 --> 00:09:49.162 either you have symptoms of an infection

NOTE Confidence: 0.8825627

00:09:49.162 --> 00:09:52.508 or pain, or frequency of going,

NOTE Confidence: 0.8825627

00:09:52.510 --> 00:09:56.267 or you actually see blood in your urine, you

NOTE Confidence: 0.8825627

00:09:56.267 --> 00:10:00.110 go to your family doctor and they do a

NOTE Confidence: 0.8825627

00:10:00.110 --> 00:10:02.110 test and they find blood in your urine.

NOTE Confidence: 0.8825627

00:10:02.110 --> 00:10:03.860 What's the next step?

NOTE Confidence: 0.8363638

00:10:03.860 --> 00:10:05.065 The first thing you want

NOTE Confidence: 0.8363638

00:10:05.065 --> 00:10:06.610 to look at is

NOTE Confidence: 0.8363638

00:10:06.610 --> 00:10:09.778 do they have symptoms of an infection?  
NOTE Confidence: 0.8363638

00:10:09.780 --> 00:10:11.910 So if they have symptoms of infection,  
NOTE Confidence: 0.8363638

00:10:11.910 --> 00:10:14.750 they need to treat the infection and the blood  
NOTE Confidence: 0.8363638

00:10:14.750 --> 00:10:17.270 should go away, if it doesn't go  
NOTE Confidence: 0.8363638

00:10:17.270 --> 00:10:19.849 away or the symptoms don't  
NOTE Confidence: 0.8363638

00:10:19.849 --> 00:10:22.194 get better after treating infection  
NOTE Confidence: 0.8363638

00:10:22.194 --> 00:10:24.600 then you need what we call the  
NOTE Confidence: 0.8363638

00:10:24.600 --> 00:10:27.250 work up of the blood in the urine  
NOTE Confidence: 0.8363638

00:10:27.250 --> 00:10:29.518 and that work up usually entails  
NOTE Confidence: 0.8363638

00:10:29.518 --> 00:10:32.926 some type of an X Ray study like a CT  
NOTE Confidence: 0.8363638

00:10:32.926 --> 00:10:35.702 scan or an MRI because you can bleed  
NOTE Confidence: 0.8363638

00:10:35.702 --> 00:10:38.180 from any part of the urinary tract,  
NOTE Confidence: 0.8363638

00:10:38.180 --> 00:10:40.998 the lining of the kidneys, the kidney itself,  
00:10:44.040 --> 00:10:45.000 the bladder itself,  
NOTE Confidence: 0.8363638

00:10:45.000 --> 00:10:47.376 so you want to image or  
NOTE Confidence: 0.8363638

00:10:47.376 --> 00:10:49.722 look at the kidneys  
NOTE Confidence: 0.8363638



00:10:49.722 --> 00:10:52.388 with the CT scan  
NOTE Confidence: 0.8363638

00:10:52.390 --> 00:10:55.027 and then  
NOTE Confidence: 0.8363638

00:10:55.027 --> 00:10:57.837 you also want to look into the bladder,  
NOTE Confidence: 0.8363638

00:10:57.840 --> 00:10:59.886 and that's usually an office procedure  
NOTE Confidence: 0.8363638

00:10:59.886 --> 00:11:01.877 where you take a small telescope  
NOTE Confidence: 0.8363638

00:11:01.877 --> 00:11:04.506 with the light at the end of it and  
NOTE Confidence: 0.8363638

00:11:04.506 --> 00:11:06.809 actually look into the bladder and can  
NOTE Confidence: 0.8363638

00:11:06.809 --> 00:11:08.758 visualize the lining of the bladder.  
NOTE Confidence: 0.91712534

00:11:10.320 --> 00:11:14.092 And so if you do that,  
NOTE Confidence: 0.91712534

00:11:14.092 --> 00:11:17.284 people often ask what does  
NOTE Confidence: 0.91712534

00:11:17.284 --> 00:11:20.299 cancer look like? Will you see  
NOTE Confidence: 0.8236216

00:11:20.300 --> 00:11:22.586 in the bladder the tumor growth?  
NOTE Confidence: 0.8236216

00:11:24.500 --> 00:11:26.410 You'll actually see it emanating  
NOTE Confidence: 0.8236216

00:11:26.410 --> 00:11:27.938 from the bladder wall.  
NOTE Confidence: 0.8236216

00:11:27.940 --> 00:11:30.988 It may look a little like cauliflower  
NOTE Confidence: 0.8236216

00:11:30.990 --> 00:11:33.282 or papillary

NOTE Confidence: 0.8236216

00:11:33.282 --> 00:11:34.810 growth in the bladder,

NOTE Confidence: 0.8236216

00:11:34.810 --> 00:11:36.964 or it could be something as subtle

NOTE Confidence: 0.8236216

00:11:36.964 --> 00:11:39.400 as a redness in the bladder,

NOTE Confidence: 0.8236216

00:11:39.400 --> 00:11:43.220 or could be a solid mass in the bladder.

NOTE Confidence: 0.8236216

00:11:43.220 --> 00:11:47.448 So all those are related to

NOTE Confidence: 0.8236216

00:11:47.450 --> 00:11:50.271 what that looks like under the

NOTE Confidence: 0.8236216

00:11:50.271 --> 00:11:52.568 microscope once you take that out,

NOTE Confidence: 0.8236216

00:11:52.570 --> 00:11:54.146 because lower grade tumors

NOTE Confidence: 0.8236216

00:11:54.146 --> 00:11:56.116 tend to be more papillary,

NOTE Confidence: 0.8236216

00:11:56.120 --> 00:11:58.490 meaning they're not as aggressive in

NOTE Confidence: 0.8236216

00:11:58.490 --> 00:12:00.450 higher grade tumors tend to be more solid.

NOTE Confidence: 0.8236216

00:12:01.635 --> 00:12:02.820 So how do

NOTE Confidence: 0.8408894

00:12:02.820 --> 00:12:05.106 you exactly take out this cancer

NOTE Confidence: 0.8408894

00:12:05.106 --> 00:12:07.913 in order to find out under the

NOTE Confidence: 0.8408894

00:12:07.913 --> 00:12:09.908 microscope what it looks like?

NOTE Confidence: 0.8408894

00:12:09.910 --> 00:12:12.668 That sounds like a biopsy to me.

NOTE Confidence: 0.8408894

00:12:12.670 --> 00:12:16.210 So how exactly is that done?

NOTE Confidence: 0.8408894

00:12:16.210 --> 00:12:19.945 We usually schedule the person

NOTE Confidence: 0.8408894

00:12:19.950 --> 00:12:23.358 in the operating room

NOTE Confidence: 0.8408894

00:12:23.358 --> 00:12:26.629 with the anesthesia so that you

NOTE Confidence: 0.8257768

00:12:28.770 --> 00:12:30.960 go in with a telescope, a little

NOTE Confidence: 0.8257768

00:12:30.960 --> 00:12:32.900 bigger telescope and

NOTE Confidence: 0.8257768

00:12:32.900 --> 00:12:35.325 through that telescope we're able

NOTE Confidence: 0.8257768

00:12:35.325 --> 00:12:37.966 to trim or cut the tissue out.

NOTE Confidence: 0.8257768

00:12:37.970 --> 00:12:39.764 Usually we could remove

NOTE Confidence: 0.8257768

00:12:39.764 --> 00:12:42.708 all the tumor itself,

NOTE Confidence: 0.8257768

00:12:42.708 --> 00:12:45.330 and then we take that tissue

NOTE Confidence: 0.8257768

00:12:45.330 --> 00:12:46.814 to pathology so they

NOTE Confidence: 0.8257768

00:12:46.814 --> 00:12:49.040 can analyze it.

NOTE Confidence: 0.86669844

00:12:49.040 --> 00:12:50.900 It sounds like that's a little operation,

NOTE Confidence: 0.86669844

00:12:50.900 --> 00:12:52.755 not a big operation because

NOTE Confidence: 0.86669844

00:12:52.755 --> 00:12:54.610 you're still using a telescope.

NOTE Confidence: 0.86669844

00:12:54.610 --> 00:12:56.434 It doesn't sound like this is

NOTE Confidence: 0.86669844

00:12:56.434 --> 00:12:59.089 a big cut in the abdomen and

NOTE Confidence: 0.86669844

00:12:59.089 --> 00:13:00.909 you're removing the bladder.

NOTE Confidence: 0.86669844

00:13:00.910 --> 00:13:02.770 It sounds minimally

NOTE Confidence: 0.86669844

00:13:02.770 --> 00:13:04.250 invasive. Is that right?

00:13:06.850 --> 00:13:09.070 Yes, oftentimes it's done as an outpatient.

NOTE Confidence: 0.86669844

00:13:09.070 --> 00:13:10.790 Occasionally the patient will require

NOTE Confidence: 0.86669844

00:13:10.790 --> 00:13:13.160 a tube in the bladder overnight,

NOTE Confidence: 0.86669844

00:13:13.160 --> 00:13:16.246 or for a couple days, depending on how

NOTE Confidence: 0.86669844

00:13:16.246 --> 00:13:19.754 much you have to do, but the real

NOTE Confidence: 0.86669844

00:13:19.754 --> 00:13:22.898 risks of the procedure is bleeding,

NOTE Confidence: 0.86669844

00:13:22.900 --> 00:13:25.390 because obviously you're cutting tissue,

NOTE Confidence: 0.86669844

00:13:25.390 --> 00:13:28.330 but you're able to also

NOTE Confidence: 0.86669844

00:13:28.330 --> 00:13:30.682 cauterize the area. Rarely

NOTE Confidence: 0.86669844

00:13:30.690 --> 00:13:33.203 opening the bladder can

NOTE Confidence: 0.86669844

00:13:33.203 --> 00:13:35.850 perforate the bladder,

NOTE Confidence: 0.86669844

00:13:35.850 --> 00:13:37.840 but those are very uncommon.

NOTE Confidence: 0.8967927

00:13:38.720 --> 00:13:41.088 Well, we're going to pick up right after

NOTE Confidence: 0.8967927

00:13:41.088 --> 00:13:43.755 we take a short break for a medical

NOTE Confidence: 0.8967927

00:13:43.755 --> 00:13:45.869 minute learning more about what happens

NOTE Confidence: 0.8967927

00:13:45.869 --> 00:13:48.017 after the diagnosis of bladder cancer

NOTE Confidence: 0.8967927

00:13:48.017 --> 00:13:50.080 with my guest doctor John Colberg.

NOTE Confidence: 0.8575317

00:13:50.660 --> 00:13:53.552 Support for Yale Cancer Answers comes

NOTE Confidence: 0.8575317

00:13:53.552 --> 00:13:56.083 from AstraZeneca, providing important

NOTE Confidence: 0.8575317

00:13:56.083 --> 00:13:58.187 treatment options for patients

NOTE Confidence: 0.8575317

00:13:58.187 --> 00:14:01.270 living with different types of lung,

NOTE Confidence: 0.8575317

00:14:01.270 --> 00:14:02.782 bladder, ovarian, breast,

NOTE Confidence: 0.8575317

00:14:02.782 --> 00:14:04.798 pancreatic and blood cancers.

NOTE Confidence: 0.8575317

00:14:04.800 --> 00:14:08.448 More information at [astrazeneca-us.com](http://astrazeneca-us.com).

NOTE Confidence: 0.8575317

00:14:08.450 --> 00:14:10.535 This is a medical minute

NOTE Confidence: 0.8575317

00:14:10.535 --> 00:14:11.786 about smoking cessation.  
NOTE Confidence: 0.8575317

00:14:11.790 --> 00:14:13.880 There are many obstacles to  
NOTE Confidence: 0.8575317

00:14:13.880 --> 00:14:15.552 face when quitting smoking,  
NOTE Confidence: 0.8575317

00:14:15.560 --> 00:14:18.479 as smoking involves the potent drug nicotine.  
NOTE Confidence: 0.8575317

00:14:18.480 --> 00:14:21.406 But it's a very important lifestyle change,  
NOTE Confidence: 0.8575317

00:14:21.410 --> 00:14:22.664 especially for patients  
NOTE Confidence: 0.8575317

00:14:22.664 --> 00:14:23.918 undergoing cancer treatment.  
NOTE Confidence: 0.8575317

00:14:23.920 --> 00:14:26.170 Quitting smoking has been shown to  
NOTE Confidence: 0.8575317

00:14:26.170 --> 00:14:28.211 positively impact response to treatments  
NOTE Confidence: 0.8575317

00:14:28.211 --> 00:14:30.586 decrease the likelihood that patients  
NOTE Confidence: 0.8575317

00:14:30.586 --> 00:14:32.486 will develop second malignancies  
NOTE Confidence: 0.8575317

00:14:32.550 --> 00:14:34.370 and increase rates of survival.  
NOTE Confidence: 0.8575317

00:14:34.370 --> 00:14:36.010 Tobacco treatment programs are  
NOTE Confidence: 0.8575317

00:14:36.010 --> 00:14:38.060 currently being offered at federally  
NOTE Confidence: 0.8575317

00:14:38.060 --> 00:14:40.049 designated comprehensive cancer centers.  
NOTE Confidence: 0.8575317

00:14:40.050 --> 00:14:41.780 And operate on the principles

NOTE Confidence: 0.8575317

00:14:41.780 --> 00:14:44.185 of the US Public Health Service

NOTE Confidence: 0.8575317

00:14:44.185 --> 00:14:45.997 clinical practice guidelines.

NOTE Confidence: 0.8575317

00:14:46.000 --> 00:14:47.692 All treatment components are

NOTE Confidence: 0.8575317

00:14:47.692 --> 00:14:49.807 evidence based and therefore all

NOTE Confidence: 0.8575317

00:14:49.807 --> 00:14:51.834 patients are treated with FDA

NOTE Confidence: 0.8575317

00:14:51.834 --> 00:14:53.378 approved first line medications

NOTE Confidence: 0.8575317

00:14:53.378 --> 00:14:56.030 for smoking cessation as well as

NOTE Confidence: 0.8575317

00:14:56.030 --> 00:14:57.842 smoking cessation counseling that

NOTE Confidence: 0.8575317

00:14:57.842 --> 00:14:59.636 stresses appropriate coping skills.

NOTE Confidence: 0.8575317

00:14:59.636 --> 00:15:01.851 More information is available at

NOTE Confidence: 0.8575317

00:15:01.851 --> 00:15:03.180 yalecancercenter.org you're listening

NOTE Confidence: 0.8575317

00:15:03.239 --> 00:15:04.699 to Connecticut public radio.

NOTE Confidence: 0.8689771

00:15:05.700 --> 00:15:07.896 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.8689771

00:15:07.900 --> 00:15:09.892 This is doctor Anees Chagpar

NOTE Confidence: 0.8689771

00:15:09.892 --> 00:15:12.099 and I'm joined tonight by

NOTE Confidence: 0.8689771

00:15:12.099 --> 00:15:14.114 my guest doctor John Colberg.  
NOTE Confidence: 0.8689771

00:15:14.120 --> 00:15:16.070 We're talking about the diagnosis  
NOTE Confidence: 0.8689771

00:15:16.070 --> 00:15:18.386 and treatment of bladder cancer and  
NOTE Confidence: 0.8689771

00:15:18.386 --> 00:15:20.528 right before the break you  
NOTE Confidence: 0.8689771

00:15:20.528 --> 00:15:22.760 were telling us about this minimally  
NOTE Confidence: 0.8689771

00:15:22.760 --> 00:15:24.320 invasive endoscopic biopsy that's  
NOTE Confidence: 0.8689771

00:15:24.320 --> 00:15:25.988 done to diagnose bladder cancers.  
NOTE Confidence: 0.8689771

00:15:25.988 --> 00:15:28.946 So I want to pick it up there when  
NOTE Confidence: 0.8689771

00:15:28.946 --> 00:15:31.001 people have this outpatient procedure  
NOTE Confidence: 0.8689771

00:15:31.001 --> 00:15:32.780 to diagnose bladder cancers.  
NOTE Confidence: 0.8689771

00:15:32.780 --> 00:15:34.976 How long does it actually take  
NOTE Confidence: 0.8689771

00:15:34.976 --> 00:15:36.440 to get that diagnosis back?  
NOTE Confidence: 0.8751063

00:15:36.440 --> 00:15:39.728 Usually it takes about three to five days.  
NOTE Confidence: 0.8751063

00:15:39.730 --> 00:15:42.650 It all depends on how complicated or  
NOTE Confidence: 0.8751063

00:15:42.650 --> 00:15:45.002 if there's some differences in what  
NOTE Confidence: 0.8751063

00:15:45.002 --> 00:15:47.308 exactly the pathology is or if the pathologist



NOTE Confidence: 0.8751063

00:15:47.308 --> 00:15:49.988 may need to do some special stains or

NOTE Confidence: 0.8751063

00:15:50.055 --> 00:15:52.179 special studies to really nail down

NOTE Confidence: 0.8751063

00:15:52.179 --> 00:15:55.420 exactly what type of tumor it is.

NOTE Confidence: 0.8759819

00:15:55.420 --> 00:15:57.975 That brings me to my next question,

NOTE Confidence: 0.8759819

00:15:57.980 --> 00:15:59.800 which is, are there different

NOTE Confidence: 0.8759819

00:15:59.800 --> 00:16:01.256 types of bladder cancer?

NOTE Confidence: 0.8759819

00:16:01.260 --> 00:16:03.450 Or is this a homogeneous disease?

NOTE Confidence: 0.8759819

00:16:03.450 --> 00:16:04.910 It sounds like

NOTE Confidence: 0.8759819

00:16:04.910 --> 00:16:06.005 there's different types.

NOTE Confidence: 0.8759819

00:16:06.010 --> 00:16:08.200 Can you tell us a little

NOTE Confidence: 0.8759819

00:16:08.200 --> 00:16:09.660 bit more about that?

NOTE Confidence: 0.83846825

00:16:09.960 --> 00:16:11.808 Sure, there's basically three

NOTE Confidence: 0.83846825

00:16:11.808 --> 00:16:14.118 different types of bladder cancer.

NOTE Confidence: 0.83846825

00:16:14.120 --> 00:16:16.430 There are two very uncommon

NOTE Confidence: 0.83846825

00:16:16.430 --> 00:16:18.278 rare types of cancers.

NOTE Confidence: 0.83846825

00:16:18.280 --> 00:16:20.450 They're called squamous cell cancers that  
NOTE Confidence: 0.83846825

00:16:20.450 --> 00:16:23.194 typically occur in men or women  
NOTE Confidence: 0.83846825

00:16:23.194 --> 00:16:25.210 who have chronic inflammation.  
NOTE Confidence: 0.83846825

00:16:25.210 --> 00:16:28.311 Infections may be in a tube in the  
NOTE Confidence: 0.83846825

00:16:28.311 --> 00:16:31.209 bladder for long periods of time.  
NOTE Confidence: 0.83846825

00:16:31.210 --> 00:16:33.865 The second type is called  
NOTE Confidence: 0.83846825

00:16:33.865 --> 00:16:35.989 adenocarcinoma.  
NOTE Confidence: 0.83846825

00:16:35.990 --> 00:16:37.762 Again, very uncommon.  
NOTE Confidence: 0.83846825

00:16:37.762 --> 00:16:41.670 They usually occur in the top of the bladder.  
NOTE Confidence: 0.83846825

00:16:41.670 --> 00:16:44.050 A little structure that connects  
NOTE Confidence: 0.83846825

00:16:44.050 --> 00:16:47.150 the belly button.  
NOTE Confidence: 0.83846825

00:16:47.150 --> 00:16:49.730 The vast majority of bladder cancers  
NOTE Confidence: 0.83846825

00:16:49.730 --> 00:16:52.839 are what we call urothelial cancers  
NOTE Confidence: 0.83846825

00:16:52.839 --> 00:16:55.439 or transitional cell cancers.  
NOTE Confidence: 0.83846825

00:16:55.440 --> 00:16:56.864 And it's really important that  
NOTE Confidence: 0.83846825

00:16:56.864 --> 00:16:59.000 the pathologist tells you three things.

NOTE Confidence: 0.83846825

00:16:59.000 --> 00:17:01.443 What type of tumor it is, what

NOTE Confidence: 0.83846825

00:17:01.443 --> 00:17:03.269 grade the tumor is,

NOTE Confidence: 0.83846825

00:17:03.270 --> 00:17:05.050 meaning what it looks like under the

NOTE Confidence: 0.83846825

00:17:05.050 --> 00:17:07.186 microscope, is a high grade

NOTE Confidence: 0.83846825

00:17:07.190 --> 00:17:08.970 or is it low grade?

NOTE Confidence: 0.83846825

00:17:08.970 --> 00:17:11.245 And thirdly he will tell you what

NOTE Confidence: 0.83846825

00:17:11.245 --> 00:17:13.600 we call the depth of invasion.

NOTE Confidence: 0.83846825

00:17:13.600 --> 00:17:13.955 Meaning,

NOTE Confidence: 0.83846825

00:17:13.955 --> 00:17:16.795 how deep does it penetrate the bladder wall?

NOTE Confidence: 0.83846825

00:17:16.800 --> 00:17:18.665 or is it superficial, meaning

NOTE Confidence: 0.83846825

00:17:18.665 --> 00:17:20.898 just involving the top layer or

NOTE Confidence: 0.83846825

00:17:20.898 --> 00:17:22.728 the layer right behind the top

NOTE Confidence: 0.83846825

00:17:22.728 --> 00:17:24.630 layer called the lamina propria

NOTE Confidence: 0.83846825

00:17:24.630 --> 00:17:27.060 or is it into the muscle?

NOTE Confidence: 0.83846825

00:17:27.060 --> 00:17:29.566 Because depending on what the grade is,

NOTE Confidence: 0.83846825

00:17:29.570 --> 00:17:30.266 high grade,  
NOTE Confidence: 0.83846825

00:17:30.266 --> 00:17:32.354 low grade and depending on the  
NOTE Confidence: 0.83846825

00:17:32.354 --> 00:17:34.233 depth of invasion that will  
NOTE Confidence: 0.83846825

00:17:34.233 --> 00:17:36.447 dictate or tell us exactly what  
NOTE Confidence: 0.83846825

00:17:36.447 --> 00:17:38.867 the next steps will be.  
NOTE Confidence: 0.7837661

00:17:40.160 --> 00:17:42.716 Tell us more about that.  
00:17:44.420 --> 00:17:46.120 What does the algorithm look  
NOTE Confidence: 0.7837661

00:17:46.120 --> 00:17:48.155 like?  
NOTE Confidence: 0.7837661

00:17:48.155 --> 00:17:50.810 If someone has what we call low grade,  
NOTE Confidence: 0.7837661

00:17:50.810 --> 00:17:52.088 superficial bladder cancer, and  
NOTE Confidence: 0.84545594

00:17:54.250 --> 00:17:55.201 it's small,  
NOTE Confidence: 0.84545594

00:17:55.201 --> 00:17:57.900 meaning less than two or three centimeters,  
NOTE Confidence: 0.84545594

00:17:57.900 --> 00:17:59.560 most people will just  
NOTE Confidence: 0.84545594

00:17:59.560 --> 00:18:01.220 follow those patients,  
NOTE Confidence: 0.84545594

00:18:01.220 --> 00:18:02.880 meaning they will put him  
NOTE Confidence: 0.84545594

00:18:02.880 --> 00:18:04.208 on a surveillance protocol,  
NOTE Confidence: 0.84545594

00:18:04.210 --> 00:18:06.196 meaning they'll come back to the  
NOTE Confidence: 0.84545594

00:18:06.196 --> 00:18:08.230 office every three to six months  
NOTE Confidence: 0.84545594

00:18:08.230 --> 00:18:09.850 and look into the bladder,  
NOTE Confidence: 0.84545594

00:18:09.850 --> 00:18:11.842 because what we know about bladder  
NOTE Confidence: 0.84545594

00:18:11.842 --> 00:18:13.834 cancer is that  
NOTE Confidence: 0.84545594

00:18:13.834 --> 00:18:15.494 the recurrence rates are quite high,  
NOTE Confidence: 0.84545594

00:18:15.500 --> 00:18:17.887 so that you want to make sure  
NOTE Confidence: 0.84545594

00:18:17.887 --> 00:18:19.924 that you follow these men and  
NOTE Confidence: 0.84545594

00:18:19.924 --> 00:18:22.519 women so you can pick up if it  
NOTE Confidence: 0.84545594

00:18:22.519 --> 00:18:24.906 does come back at an early stage.  
NOTE Confidence: 0.84545594

00:18:24.910 --> 00:18:26.800 So it doesn't progress into a  
NOTE Confidence: 0.84545594

00:18:26.800 --> 00:18:28.570 higher grade tumor or muscle  
NOTE Confidence: 0.84545594

00:18:28.570 --> 00:18:30.160 invasive tumor, so let  
NOTE Confidence: 0.86896193

00:18:30.160 --> 00:18:32.960 me just stop you there for one second.  
NOTE Confidence: 0.86896193

00:18:32.960 --> 00:18:35.804 So if they did a biopsy and they've just  
NOTE Confidence: 0.86896193

00:18:35.804 --> 00:18:38.359 taken a piece of this cancer before they

NOTE Confidence: 0.86896193

00:18:38.359 --> 00:18:41.359 put you on this regimen of surveillance,

NOTE Confidence: 0.86896193

00:18:41.360 --> 00:18:43.304 do they actually need to go

NOTE Confidence: 0.86896193

00:18:43.304 --> 00:18:45.560 and take out the whole tumor?

NOTE Confidence: 0.86896193

00:18:45.560 --> 00:18:48.192 Or is this something that they can just

NOTE Confidence: 0.86896193

00:18:48.192 --> 00:18:50.810 watch like a prostate cancer, for example,

NOTE Confidence: 0.86896193

00:18:50.810 --> 00:18:52.910 because it tends to be indolent.

NOTE Confidence: 0.86896193

00:18:52.910 --> 00:18:55.070 So typically when you go in

NOTE Confidence: 0.86896193

00:18:55.070 --> 00:18:57.345 to take the tumor out,

NOTE Confidence: 0.86896193

00:18:59.300 --> 00:19:00.596 you actually resect the

NOTE Confidence: 0.86896193

00:19:00.596 --> 00:19:02.216 whole tumor if you can.

NOTE Confidence: 0.86896193

00:19:02.220 --> 00:19:05.190 So usually for low grade tumors

NOTE Confidence: 0.86896193

00:19:05.190 --> 00:19:07.451 you have muscle in the specimen

NOTE Confidence: 0.86896193

00:19:07.451 --> 00:19:09.500 and if there's no muscle involved

NOTE Confidence: 0.86896193

00:19:09.500 --> 00:19:11.648 then you're basically done.

NOTE Confidence: 0.86896193

00:19:11.650 --> 00:19:14.170 You don't have to go back again.

NOTE Confidence: 0.86896193

00:19:14.170 --> 00:19:16.318 Now there's some caveats of that.

NOTE Confidence: 0.86896193

00:19:16.320 --> 00:19:18.462 If it's a higher grade tumor and

NOTE Confidence: 0.86896193

00:19:18.462 --> 00:19:20.629 you don't have muscle involved,

NOTE Confidence: 0.86896193

00:19:20.630 --> 00:19:23.270 you will go back and re stage or

NOTE Confidence: 0.86896193

00:19:23.270 --> 00:19:25.786 re reset that tumor did to make

NOTE Confidence: 0.86896193

00:19:25.786 --> 00:19:28.529 sure that it's not on the muscle.

NOTE Confidence: 0.86896193

00:19:28.530 --> 00:19:31.070 So for higher grade tumors

NOTE Confidence: 0.86896193

00:19:31.070 --> 00:19:33.610 with no involvement of muscle,

NOTE Confidence: 0.86896193

00:19:33.610 --> 00:19:36.312 you may want to consider what we

NOTE Confidence: 0.86896193

00:19:36.312 --> 00:19:37.991 call intravesical or treatment

NOTE Confidence: 0.86896193

00:19:37.991 --> 00:19:40.655 in the bladder with certain

NOTE Confidence: 0.86896193

00:19:40.655 --> 00:19:42.870 different types of medication.

NOTE Confidence: 0.86896193

00:19:42.870 --> 00:19:44.634 Usually it's installed over

NOTE Confidence: 0.86896193

00:19:44.634 --> 00:19:47.280 once a week for six weeks.

NOTE Confidence: 0.86896193

00:19:47.280 --> 00:19:49.044 The medication we typically

NOTE Confidence: 0.86896193

00:19:49.044 --> 00:19:50.808 use is something called BCG.

NOTE Confidence: 0.86896193

00:19:50.810 --> 00:19:53.576 It's a mycobacterium that

NOTE Confidence: 0.86896193

00:19:53.576 --> 00:19:56.099 causes tuberculosis and what it does,

NOTE Confidence: 0.86896193

00:19:56.100 --> 00:20:00.177 it sets up an immune response of your own

NOTE Confidence: 0.86896193

00:20:00.180 --> 00:20:03.246 to cut down on the

NOTE Confidence: 0.86896193

00:20:03.246 --> 00:20:05.280 recurrence of the tumor.

NOTE Confidence: 0.86896193

00:20:05.280 --> 00:20:08.216 If it is high grade and muscle invasive

NOTE Confidence: 0.86896193

00:20:08.216 --> 00:20:10.890 then that changes the whole scenario

NOTE Confidence: 0.86896193

00:20:10.890 --> 00:20:13.680 as far as your treatment algorithm.

NOTE Confidence: 0.8737979

00:20:14.440 --> 00:20:16.896 I'm going to get to what

NOTE Confidence: 0.8737979

00:20:16.896 --> 00:20:19.837 we do if it's invaded the muscle,

NOTE Confidence: 0.8737979

00:20:19.840 --> 00:20:21.970 but the whole concept of installation

NOTE Confidence: 0.8737979

00:20:21.970 --> 00:20:24.893 of BCG and the fact that it's a

NOTE Confidence: 0.8737979

00:20:24.893 --> 00:20:26.678 mycobacterium kind of like TB,

NOTE Confidence: 0.8737979

00:20:26.680 --> 00:20:29.650 brings up a lot of questions that I think our

NOTE Confidence: 0.8737979

00:20:29.726 --> 00:20:32.438 listeners might be asking themselves.

NOTE Confidence: 0.8737979



00:20:32.440 --> 00:20:34.960 So, for example, if you get this,  
NOTE Confidence: 0.8737979

00:20:34.960 --> 00:20:37.992 does that put you at risk of actually  
NOTE Confidence: 0.8737979

00:20:37.992 --> 00:20:39.998 getting tuberculosis number one, and #2  
NOTE Confidence: 0.8737979

00:20:40.000 --> 00:20:42.880 if you've already had TB in the past,  
NOTE Confidence: 0.8737979

00:20:42.880 --> 00:20:45.202 does that reduce your risk of  
NOTE Confidence: 0.8737979

00:20:45.202 --> 00:20:46.750 getting bladder cancer if  
NOTE Confidence: 0.8737979

00:20:46.750 --> 00:20:48.950 the chemical that we use,  
NOTE Confidence: 0.8737979

00:20:48.950 --> 00:20:51.590 or the medication that we use  
NOTE Confidence: 0.8737979

00:20:51.590 --> 00:20:53.350 is actually a mycobacterium.  
NOTE Confidence: 0.8737979

00:20:53.350 --> 00:20:54.670 You know, people  
NOTE Confidence: 0.8326042

00:20:54.670 --> 00:20:56.870 looked at that because there's  
NOTE Confidence: 0.8326042

00:20:56.870 --> 00:20:59.544 several countries outside the US  
NOTE Confidence: 0.8326042

00:20:59.544 --> 00:21:02.286 that actually vaccinate  
NOTE Confidence: 0.8326042

00:21:02.286 --> 00:21:05.785 people for TB so it doesn't appear to be  
NOTE Confidence: 0.8326042

00:21:05.785 --> 00:21:09.189 a prevent you from getting bladder cancer.  
NOTE Confidence: 0.8326042

00:21:09.190 --> 00:21:12.220 There is a small risk

NOTE Confidence: 0.8326042

00:21:12.220 --> 00:21:15.127 that you can get what we call BCGiosis

NOTE Confidence: 0.8326042

00:21:15.127 --> 00:21:17.999 or systemic BCG from the treatment.

NOTE Confidence: 0.8326042

00:21:18.000 --> 00:21:20.070 It's very, very rare and it's

NOTE Confidence: 0.8326042

00:21:20.070 --> 00:21:21.450 usually associated with the

NOTE Confidence: 0.8326042

00:21:21.513 --> 00:21:23.389 installation of the medication,

NOTE Confidence: 0.8326042

00:21:23.390 --> 00:21:25.844 meaning that when you put the

NOTE Confidence: 0.8326042

00:21:25.844 --> 00:21:29.156 medication in you have to put it

NOTE Confidence: 0.8326042

00:21:29.160 --> 00:21:32.283 through a catheter

00:21:35.710 --> 00:21:38.374 which is a small tube and most of the cases

NOTE Confidence: 0.8326042

00:21:38.374 --> 00:21:42.019 of systemic BCG has been related to

NOTE Confidence: 0.8326042

00:21:42.019 --> 00:21:44.050 what we call traumatic catheterization meaning

NOTE Confidence: 0.8326042

00:21:44.050 --> 00:21:46.507 that when you put the catheter in an d

NOTE Confidence: 0.8326042

00:21:46.507 --> 00:21:48.280 it's been difficult to put in,

NOTE Confidence: 0.8326042

00:21:48.280 --> 00:21:49.905 you've gotten blood back from

NOTE Confidence: 0.8326042

00:21:49.905 --> 00:21:51.530 the catheter and the

NOTE Confidence: 0.8326042

00:21:51.530 --> 00:21:53.480 medication is injected under some force.

NOTE Confidence: 0.8326042

00:21:53.480 --> 00:21:56.080 And obviously you don't want to do that.

NOTE Confidence: 0.8326042

00:21:56.080 --> 00:21:58.272 So typically in our office if someone

NOTE Confidence: 0.8326042

00:21:58.272 --> 00:22:00.377 placed the catheter and they

NOTE Confidence: 0.8326042

00:22:00.377 --> 00:22:02.242 get blood during the catheterization,

NOTE Confidence: 0.8326042

00:22:02.250 --> 00:22:04.525 they will not give the treatment

NOTE Confidence: 0.8326042

00:22:04.525 --> 00:22:05.830 that day.

NOTE Confidence: 0.8353027

00:22:05.830 --> 00:22:07.450 John another question

NOTE Confidence: 0.8353027

00:22:07.450 --> 00:22:10.100 why is it that we use BCG

NOTE Confidence: 0.8353027

00:22:10.183 --> 00:22:12.920 when we think about cancer and

NOTE Confidence: 0.8353027

00:22:12.920 --> 00:22:15.648 talk about cancer on the show

NOTE Confidence: 0.8353027

00:22:15.650 --> 00:22:17.785 often times when we're thinking

NOTE Confidence: 0.8353027

00:22:17.785 --> 00:22:19.920 about medications to treat cancer,

NOTE Confidence: 0.8353027

00:22:19.920 --> 00:22:21.656 we're thinking about chemotherapy.

NOTE Confidence: 0.8353027

00:22:21.656 --> 00:22:24.260 Rarely do we actually think about

NOTE Confidence: 0.8353027

00:22:24.324 --> 00:22:26.748 something like BCG or a mycobacterium.

NOTE Confidence: 0.8353027

00:22:26.750 --> 00:22:29.739 Yes, so it starts to set up  
NOTE Confidence: 0.8288937

00:22:29.740 --> 00:22:32.374 this immune response, which is kind  
NOTE Confidence: 0.8288937

00:22:32.374 --> 00:22:36.148 of a hot topic with a lot of cancers.  
NOTE Confidence: 0.8288937

00:22:36.150 --> 00:22:38.285 Now BCG he's been around  
NOTE Confidence: 0.8288937

00:22:38.285 --> 00:22:40.420 from since the early 1980s,  
NOTE Confidence: 0.8288937

00:22:40.420 --> 00:22:43.876 and it's been shown to cut down on the  
NOTE Confidence: 0.8288937

00:22:43.876 --> 00:22:47.738 the incidence of recurrence by about 50%.  
NOTE Confidence: 0.8288937

00:22:47.740 --> 00:22:50.240 There are other medications used  
NOTE Confidence: 0.8288937

00:22:50.240 --> 00:22:52.240 intramuscularly, and those tend  
NOTE Confidence: 0.8288937

00:22:52.240 --> 00:22:54.740 to be chemotherapy agents,  
NOTE Confidence: 0.8288937

00:22:54.740 --> 00:22:58.170 meaning they kill on contact.  
NOTE Confidence: 0.8288937

00:23:03.620 --> 00:23:05.948 But their  
NOTE Confidence: 0.8288937

00:23:05.950 --> 00:23:09.442 response rates are not as good as BCG  
NOTE Confidence: 0.8117576

00:23:09.450 --> 00:23:11.826 because of this immune  
NOTE Confidence: 0.8117576

00:23:11.826 --> 00:23:13.730 response that it sets up,  
NOTE Confidence: 0.8117576

00:23:13.730 --> 00:23:16.208 it sounds like that's really the mechanism

NOTE Confidence: 0.8117576

00:23:16.208 --> 00:23:18.790 by which it affects these cancers.

NOTE Confidence: 0.8117576

00:23:18.790 --> 00:23:21.506 Which brings me to the question of,

NOTE Confidence: 0.8117576

00:23:21.510 --> 00:23:23.202 well, does immunotherapy work

NOTE Confidence: 0.8117576

00:23:23.202 --> 00:23:25.740 more in these patients where the

NOTE Confidence: 0.8117576

00:23:25.811 --> 00:23:28.198 immune system is kind of revved up?

00:23:32.121 --> 00:23:35.059 That's the hot topic in bladder cancer right now,

NOTE Confidence: 0.7749244

00:23:35.060 --> 00:23:38.714 and there's two situations where

NOTE Confidence: 0.7749244

00:23:38.714 --> 00:23:41.543 we'd use immunotherapy, one is for

NOTE Confidence: 0.7749244

00:23:41.543 --> 00:23:44.210 men or women who have failed BCG

NOTE Confidence: 0.7749244

00:23:44.304 --> 00:23:47.339 but still have superficial disease,

NOTE Confidence: 0.7749244

00:23:47.340 --> 00:23:50.049 and called CIS or carcinoma insitu

NOTE Confidence: 0.7749244

00:23:50.049 --> 00:23:53.625 which is it's

NOTE Confidence: 0.7749244

00:23:53.625 --> 00:23:56.420 own sliver of bladder cancer.

NOTE Confidence: 0.7749244

00:23:56.420 --> 00:23:59.426 And it's been approved,

NOTE Confidence: 0.7749244

00:23:59.430 --> 00:24:01.940 Pembrolizumab has been approved for

NOTE Confidence: 0.7749244

00:24:01.940 --> 00:24:04.450 patients in that particular case.

NOTE Confidence: 0.7749244

00:24:04.450 --> 00:24:08.636 It's also been approved for people who failed

NOTE Confidence: 0.7749244

00:24:08.640 --> 00:24:11.172 or who are ineligible to receive

NOTE Confidence: 0.7749244

00:24:11.172 --> 00:24:12.860 chemotherapy for invasive disease.

NOTE Confidence: 0.7749244

00:24:12.860 --> 00:24:16.010 So we do start to use it more and

NOTE Confidence: 0.7749244

00:24:16.010 --> 00:24:19.188 more in more advanced bladder cancer.

NOTE Confidence: 0.8833491

00:24:21.060 --> 00:24:23.380 And so let's let's talk a little bit

NOTE Confidence: 0.8833491

00:24:23.380 --> 00:24:25.750 more about the advanced bladder cancer.

NOTE Confidence: 0.8833491

00:24:25.750 --> 00:24:27.430 When you say more advanced,

NOTE Confidence: 0.8833491

00:24:27.430 --> 00:24:29.440 do you mean invading the muscle?

NOTE Confidence: 0.8833491

00:24:29.440 --> 00:24:31.778 Which is where we kind of left

NOTE Confidence: 0.8833491

00:24:31.780 --> 00:24:33.460 off in that algorithm, correct?

NOTE Confidence: 0.8833491

00:24:33.460 --> 00:24:35.812 So you're talking about what we call T2

NOTE Confidence: 0.8833491

00:24:35.812 --> 00:24:37.856 or higher stage bladder cancer

NOTE Confidence: 0.8833491

00:24:37.856 --> 00:24:40.490 into the muscle layer of the bladder,

NOTE Confidence: 0.8833491

00:24:40.490 --> 00:24:42.730 as seen on the pathology from the

NOTE Confidence: 0.8833491

00:24:42.730 --> 00:24:45.177 reception that you did with the telescope.

NOTE Confidence: 0.8305577

00:24:45.990 --> 00:24:48.138 And so how are those patients

NOTE Confidence: 0.8305577

00:24:48.140 --> 00:24:50.732 treated?

NOTE Confidence: 0.8305577

00:24:50.732 --> 00:24:53.148 In the old days we would just take their bladders out,

NOTE Confidence: 0.8305577

00:24:53.150 --> 00:24:54.940 or we'd radiate the bladder.

NOTE Confidence: 0.8305577

00:24:54.940 --> 00:24:57.418 We found that that the success rate

NOTE Confidence: 0.8305577

00:24:57.418 --> 00:24:59.950 of survival was pretty poor,

NOTE Confidence: 0.8305577

00:24:59.950 --> 00:25:02.098 less than 50% five year survival.

NOTE Confidence: 0.8305577

00:25:02.100 --> 00:25:03.890 So about 15 years ago

NOTE Confidence: 0.8305577

00:25:03.890 --> 00:25:06.109 there are a couple of very good

NOTE Confidence: 0.8305577

00:25:06.109 --> 00:25:08.545 studies that have looked at using

NOTE Confidence: 0.8305577

00:25:08.545 --> 00:25:10.675 chemotherapy both either in the

NOTE Confidence: 0.8305577

00:25:10.748 --> 00:25:13.464 adjuvant or neo

NOTE Confidence: 0.8305577

00:25:13.464 --> 00:25:16.019 setting meaning before or after surgery.

NOTE Confidence: 0.8305577

00:25:16.019 --> 00:25:17.871 This improved the survival

NOTE Confidence: 0.8305577

00:25:17.871 --> 00:25:19.260 significantly,  
NOTE Confidence: 0.8305577

00:25:19.260 --> 00:25:22.284 so that's been kind of the standard  
NOTE Confidence: 0.8305577

00:25:22.284 --> 00:25:25.028 treatment for most people with  
NOTE Confidence: 0.8305577

00:25:25.028 --> 00:25:27.308 invasive bladder cancer is to  
NOTE Confidence: 0.8305577

00:25:27.308 --> 00:25:29.980 receive some form of chemotherapy,  
NOTE Confidence: 0.8305577

00:25:29.980 --> 00:25:31.375 preferably before surgery,  
NOTE Confidence: 0.8305577

00:25:31.375 --> 00:25:34.165 before you take the bladder out,  
NOTE Confidence: 0.8305577

00:25:34.170 --> 00:25:36.018 and typically the regimens  
NOTE Confidence: 0.8305577

00:25:36.018 --> 00:25:38.790 will include either a two drug  
NOTE Confidence: 0.8305577

00:25:38.869 --> 00:25:40.717 regimen called Cisplatin and  
NOTE Confidence: 0.8305577

00:25:40.717 --> 00:25:43.489 Gemcitabine, or MVAC  
NOTE Confidence: 0.8305577

00:25:43.490 --> 00:25:46.370 which is short for  
NOTE Confidence: 0.8305577

00:25:46.370 --> 00:25:48.458 Methotrexate, Vinblastine, Doxorubicin, Cis-  
platin.

00:25:49.510 --> 00:25:51.446 A lot of patience when you talk to  
NOTE Confidence: 0.8363407

00:25:51.446 --> 00:25:53.466 them about neoadjuvant chemotherapy or  
NOTE Confidence: 0.8363407

00:25:53.466 --> 00:25:55.434 getting chemotherapy before surgery



NOTE Confidence: 0.8363407

00:25:55.440 --> 00:25:57.672 they say why would I need the surgery then

NOTE Confidence: 0.8363407

00:25:57.672 --> 00:26:00.330 if I'm taking the chemotherapy upfront,

NOTE Confidence: 0.8363407

00:26:00.330 --> 00:26:02.647 could that kill off all of the

NOTE Confidence: 0.8363407

00:26:02.647 --> 00:26:05.153 cancer cells and then maybe I can

NOTE Confidence: 0.8363407

00:26:05.153 --> 00:26:06.953 save myself having the surgery,

NOTE Confidence: 0.8363407

00:26:06.960 --> 00:26:09.564 especially if that means that you won't

NOTE Confidence: 0.8363407

00:26:09.564 --> 00:26:12.546 have to take out my bladder.

NOTE Confidence: 0.8363407

00:26:12.550 --> 00:26:14.805 It's a great question and

NOTE Confidence: 0.8363407

00:26:17.530 --> 00:26:20.260 there is a response rate of probably 30% more people

NOTE Confidence: 0.8363407

00:26:20.260 --> 00:26:22.990 become what we call P0 meaning

NOTE Confidence: 0.8363407

00:26:22.990 --> 00:26:25.720 If you do take their bladders out,

NOTE Confidence: 0.8363407

00:26:25.720 --> 00:26:28.840 there will be no cancer in the specimen.

NOTE Confidence: 0.8363407

00:26:28.840 --> 00:26:31.850 There are two issues, one

NOTE Confidence: 0.8363407

00:26:31.850 --> 00:26:33.986 you've got to be very careful

NOTE Confidence: 0.8363407

00:26:33.986 --> 00:26:36.248 because it's often times hard to

NOTE Confidence: 0.8363407

00:26:36.248 --> 00:26:38.163 determine if they have recurrent

NOTE Confidence: 0.8363407

00:26:38.163 --> 00:26:40.699 disease or not in their bladder, and two

NOTE Confidence: 0.8363407

00:26:40.700 --> 00:26:43.150 even though you don't take their bladders

NOTE Confidence: 0.8363407

00:26:43.150 --> 00:26:45.659 out and the disease may be cured,

NOTE Confidence: 0.8363407

00:26:45.660 --> 00:26:47.492 it still can recur.

NOTE Confidence: 0.8363407

00:26:47.492 --> 00:26:50.240 So for some patients it's an

NOTE Confidence: 0.8363407

00:26:50.240 --> 00:26:52.395 option, but it's not one

NOTE Confidence: 0.8363407

00:26:52.395 --> 00:26:53.688 we usually recommend.

NOTE Confidence: 0.89805925

00:26:54.840 --> 00:26:57.634 And I guess

NOTE Confidence: 0.89805925

00:26:57.634 --> 00:26:59.713 the other thing is that you don't

NOTE Confidence: 0.89805925

00:26:59.713 --> 00:27:01.460 really know that every single

NOTE Confidence: 0.89805925

00:27:01.460 --> 00:27:03.536 solitary cell of that cancer has

NOTE Confidence: 0.89805925

00:27:03.598 --> 00:27:05.479 disappeared after chemotherapy,

NOTE Confidence: 0.89805925

00:27:05.480 --> 00:27:08.049 unless you look at every single cell,

NOTE Confidence: 0.89805925

00:27:08.050 --> 00:27:10.246 which often means doing more surgery,

NOTE Confidence: 0.89805925

00:27:10.250 --> 00:27:12.085 so does the surgery mean  
NOTE Confidence: 0.89805925

00:27:12.085 --> 00:27:13.920 taking out the whole bladder?  
NOTE Confidence: 0.89805925

00:27:13.920 --> 00:27:16.688 Is there ever a time when you can  
NOTE Confidence: 0.89805925

00:27:16.688 --> 00:27:19.493 take out just a part of the bladder  
NOTE Confidence: 0.89805925

00:27:19.493 --> 00:27:22.000 and put it back together  
NOTE Confidence: 0.89805925

00:27:22.000 --> 00:27:23.588 again?  
NOTE Confidence: 0.89805925

00:27:23.588 --> 00:27:25.176 Absolutely there are certain tumors  
NOTE Confidence: 0.89805925

00:27:25.180 --> 00:27:27.574 and it all depends on the location.  
NOTE Confidence: 0.89805925

00:27:27.580 --> 00:27:29.638 If it's what we call in  
NOTE Confidence: 0.89805925

00:27:29.640 --> 00:27:31.350 the dome of the bladder,  
NOTE Confidence: 0.89805925

00:27:31.350 --> 00:27:33.639 meaning that top part of the bladder  
NOTE Confidence: 0.89805925

00:27:33.639 --> 00:27:35.808 where you can get good margins,  
NOTE Confidence: 0.89805925

00:27:35.810 --> 00:27:37.868 you can do a partial cystectomy.  
NOTE Confidence: 0.89805925

00:27:37.870 --> 00:27:39.680 Unfortunately, that's not where the  
NOTE Confidence: 0.89805925

00:27:39.680 --> 00:27:41.989 majority of the bladder tumors form,  
NOTE Confidence: 0.89805925

00:27:41.990 --> 00:27:44.830 so the chance of just doing a partial

NOTE Confidence: 0.89805925

00:27:44.830 --> 00:27:46.449 cystectomy is pretty low.

NOTE Confidence: 0.89805925

00:27:46.450 --> 00:27:47.718 But in my practice,

NOTE Confidence: 0.89805925

00:27:47.718 --> 00:27:50.910 if I see three or four patients a year,

NOTE Confidence: 0.89805925

00:27:50.910 --> 00:27:52.968 that's probably a lot that are

NOTE Confidence: 0.89805925

00:27:52.968 --> 00:27:54.340 candidates for partial cystectomy.

NOTE Confidence: 0.89805925

00:27:54.340 --> 00:27:57.204 So yes, you can do a partial cystectomy

NOTE Confidence: 0.89805925

00:27:57.210 --> 00:27:58.968 if it's in the right location

NOTE Confidence: 0.9008096

00:27:58.970 --> 00:28:01.306 and so for the rest of the people,

NOTE Confidence: 0.9008096

00:28:01.310 --> 00:28:03.330 that means that you're taking

NOTE Confidence: 0.9008096

00:28:03.330 --> 00:28:04.946 out their whole bladder.

NOTE Confidence: 0.9008096

00:28:04.950 --> 00:28:06.885 And so the question obviously

NOTE Confidence: 0.9008096

00:28:06.885 --> 00:28:09.175 becomes what does that mean for

NOTE Confidence: 0.9008096

00:28:09.175 --> 00:28:11.463 me in terms of my quality of life?

NOTE Confidence: 0.9008096

00:28:11.470 --> 00:28:13.864 I mean, does this mean a stoma?

NOTE Confidence: 0.9008096

00:28:13.870 --> 00:28:16.264 How does that work exactly?

NOTE Confidence: 0.9008096

00:28:16.270 --> 00:28:18.664 So there are three  
NOTE Confidence: 0.8730591

00:28:18.670 --> 00:28:20.365 options when you take someone's  
NOTE Confidence: 0.8730591

00:28:20.365 --> 00:28:22.462 bladder out as far as where  
NOTE Confidence: 0.8730591

00:28:22.462 --> 00:28:24.642 the urine goes, one is a stoma.  
NOTE Confidence: 0.8730591

00:28:24.642 --> 00:28:27.240 Or we take a small piece of small  
NOTE Confidence: 0.8730591

00:28:27.240 --> 00:28:29.907 intestine and we connect the tubes from  
NOTE Confidence: 0.8730591

00:28:29.907 --> 00:28:33.078 the kidneys and bring it out of the skin  
NOTE Confidence: 0.8730591

00:28:33.080 --> 00:28:35.894 so it drains into a bag,  
NOTE Confidence: 0.8730591

00:28:35.900 --> 00:28:38.960 24 hours, seven days a week.  
NOTE Confidence: 0.8730591

00:28:38.960 --> 00:28:41.156 You can make a continent stoma,  
NOTE Confidence: 0.8730591

00:28:41.160 --> 00:28:43.715 meaning you take part of the patients  
NOTE Confidence: 0.8730591

00:28:43.715 --> 00:28:45.910 right colon  
NOTE Confidence: 0.8730591

00:28:47.010 --> 00:28:49.425 and bring a small piece of intestines up  
NOTE Confidence: 0.8730591

00:28:49.425 --> 00:28:51.290 and they actually catheterized  
NOTE Confidence: 0.8730591

00:28:51.290 --> 00:28:54.322 a stoma four to six times a day.  
NOTE Confidence: 0.8730591

00:28:54.330 --> 00:28:54.982 And thirdly,

NOTE Confidence: 0.8730591

00:28:54.982 --> 00:28:56.938 you can actually make a new

NOTE Confidence: 0.8730591

00:28:56.938 --> 00:28:58.893 bladder where you take several

NOTE Confidence: 0.8730591

00:28:58.893 --> 00:29:00.549 centimeters of small intestine,

NOTE Confidence: 0.8730591

00:29:00.550 --> 00:29:02.746 you fashion it into a sphere,

00:29:06.040 --> 00:29:07.865 so everything's on the inside,

NOTE Confidence: 0.8730591

00:29:07.870 --> 00:29:09.640 so they urinate normally without

NOTE Confidence: 0.8730591

00:29:09.640 --> 00:29:11.900 a bag or without a stoma.

NOTE Confidence: 0.8727357

00:29:12.530 --> 00:29:14.726 Doctor John Colberg is a professor

NOTE Confidence: 0.8727357

00:29:14.726 --> 00:29:16.984 of urology and director of Urologic

NOTE Confidence: 0.8727357

00:29:16.984 --> 00:29:19.532 Oncology at the Yale School of Medicine.

NOTE Confidence: 0.8727357

00:29:19.540 --> 00:29:22.109 If you have questions the address is

NOTE Confidence: 0.8727357

00:29:22.109 --> 00:29:23.584 canceranswers@yale.edu and past editions

NOTE Confidence: 0.8727357

00:29:23.584 --> 00:29:25.775 of the program are available in audio

NOTE Confidence: 0.8727357

00:29:25.775 --> 00:29:28.028 and written form at [Yalecancercenter.org](http://Yalecancercenter.org).

NOTE Confidence: 0.8727357

00:29:28.030 --> 00:29:30.782 We hope you'll join us next week to

NOTE Confidence: 0.8727357

00:29:30.782 --> 00:29:33.459 learn more about the fight against

NOTE Confidence: 0.8727357

00:29:33.459 --> 00:29:36.327 cancer here on Connecticut public radio.