

WEBVTT

00:00:00.000 --> 00:00:03.144 Funding for Yale Cancer Answers is

NOTE Confidence: 0.90333042

00:00:03.144 --> 00:00:06.120 provided by Smilow Cancer Hospital.

NOTE Confidence: 0.90333042

00:00:06.120 --> 00:00:08.295 Welcome to Yale Cancer Answers

NOTE Confidence: 0.90333042

00:00:08.295 --> 00:00:10.035 with Doctor Anees Chagpar.

NOTE Confidence: 0.90333042

00:00:10.040 --> 00:00:11.890 Yale Cancer Answers features the

NOTE Confidence: 0.90333042

00:00:11.890 --> 00:00:13.370 latest information on cancer

NOTE Confidence: 0.90333042

00:00:13.370 --> 00:00:15.265 care by welcoming oncologists and

NOTE Confidence: 0.90333042

00:00:15.265 --> 00:00:17.455 specialists who are on the forefront

NOTE Confidence: 0.90333042

00:00:17.514 --> 00:00:19.200 of the battle to fight cancer.

NOTE Confidence: 0.90333042

00:00:19.200 --> 00:00:21.138 This week it's a conversation about

NOTE Confidence: 0.90333042

00:00:21.138 --> 00:00:23.321 the use of robotics and minimally

NOTE Confidence: 0.90333042

00:00:23.321 --> 00:00:24.969 invasive surgery for urologic

NOTE Confidence: 0.90333042

00:00:24.969 --> 00:00:27.090 cancers with Doctor Joseph Brito.

NOTE Confidence: 0.90333042

00:00:27.090 --> 00:00:29.046 Dr. Brito is an assistant professor

NOTE Confidence: 0.90333042

00:00:29.046 --> 00:00:30.965 of medicine and urology at the

NOTE Confidence: 0.90333042

00:00:30.965 --> 00:00:33.112 Yale School of Medicine, where Dr.  
NOTE Confidence: 0.90333042

00:00:33.112 --> 00:00:36.689 Chagpar is a professor of surgical oncology.  
00:00:37.090 --> 00:00:39.362 Let's start off by you telling us  
NOTE Confidence: 0.935608953846154

00:00:39.362 --> 00:00:41.301 a little bit more about yourself  
NOTE Confidence: 0.935608953846154

00:00:41.301 --> 00:00:43.810 and what it is you do.  
NOTE Confidence: 0.802047366666667

00:00:44.730 --> 00:00:47.448 I'm a urologist and urologic oncologist  
NOTE Confidence: 0.802047366666667

00:00:47.450 --> 00:00:48.968 focusing on the treatment  
NOTE Confidence: 0.802047366666667

00:00:48.968 --> 00:00:50.370 of cancers of the kidney,  
NOTE Confidence: 0.802047366666667

00:00:50.370 --> 00:00:51.834 bladder, and prostate.  
NOTE Confidence: 0.802047366666667

00:00:51.834 --> 00:00:54.762 We also take care of testicular  
NOTE Confidence: 0.802047366666667

00:00:54.762 --> 00:00:57.050 cancer and this is  
NOTE Confidence: 0.802047366666667

00:00:57.050 --> 00:00:58.490 kidney cancer awareness month,  
NOTE Confidence: 0.802047366666667

00:00:58.490 --> 00:01:01.001 so I am happy to be here and discuss  
NOTE Confidence: 0.802047366666667

00:01:01.001 --> 00:01:02.889 kidney cancer specifically today.  
NOTE Confidence: 0.934383274

00:01:03.510 --> 00:01:06.086 So you know, when we think about  
NOTE Confidence: 0.934383274

00:01:06.086 --> 00:01:07.190 minimally invasive surgery,  
NOTE Confidence: 0.934383274

00:01:07.190 --> 00:01:10.370 I think a lot of people by now have gotten  
NOTE Confidence: 0.934383274

00:01:10.452 --> 00:01:13.784 used to the concept of laparoscopic surgery,  
NOTE Confidence: 0.934383274

00:01:13.790 --> 00:01:17.738 the concept of taking out gallbladders  
NOTE Confidence: 0.934383274

00:01:17.738 --> 00:01:21.446 and appendixes through little tiny incisions.  
NOTE Confidence: 0.934383274

00:01:21.446 --> 00:01:24.666 The concept of robotic surgery  
NOTE Confidence: 0.934383274

00:01:24.666 --> 00:01:27.597 has now taken off as well,  
NOTE Confidence: 0.934383274

00:01:27.600 --> 00:01:31.440 in large part in urology.  
NOTE Confidence: 0.934383274

00:01:31.440 --> 00:01:34.192 But can you tell our audience a little  
NOTE Confidence: 0.934383274

00:01:34.192 --> 00:01:37.304 bit more about what robotic surgery is,  
NOTE Confidence: 0.934383274

00:01:37.304 --> 00:01:40.280 how it's the same or different  
NOTE Confidence: 0.934383274

00:01:40.370 --> 00:01:42.462 from laparoscopic surgery and  
NOTE Confidence: 0.934383274

00:01:42.462 --> 00:01:45.600 what exactly you use it for,  
NOTE Confidence: 0.934383274

00:01:45.600 --> 00:01:47.358 particularly in urology?  
NOTE Confidence: 0.925906086

00:01:47.880 --> 00:01:49.645 Sure. I'm actually really glad  
NOTE Confidence: 0.925906086

00:01:49.645 --> 00:01:51.410 you asked this question because  
NOTE Confidence: 0.925906086

00:01:51.410 --> 00:01:53.210 I feel like I spend a decent amount

NOTE Confidence: 0.925906086

00:01:53.210 --> 00:01:54.996 of my day explaining to patients

NOTE Confidence: 0.925906086

00:01:54.996 --> 00:01:57.130 what the robot does and doesn't do.

NOTE Confidence: 0.925906086

00:01:57.130 --> 00:01:59.490 So laparoscopy, as you said,

NOTE Confidence: 0.925906086

00:01:59.490 --> 00:02:00.974 is essentially making small

NOTE Confidence: 0.925906086

00:02:00.974 --> 00:02:03.200 incisions in the abdomen and then

NOTE Confidence: 0.925906086

00:02:03.270 --> 00:02:04.950 through those incisions filling

NOTE Confidence: 0.925906086

00:02:04.950 --> 00:02:07.050 the abdominal cavity with air.

NOTE Confidence: 0.925906086

00:02:07.050 --> 00:02:09.450 So essentially you're creating a Dome,

NOTE Confidence: 0.925906086

00:02:09.450 --> 00:02:11.564 and that allows us to do surgery

NOTE Confidence: 0.925906086

00:02:11.564 --> 00:02:12.888 inside the abdominal cavity

NOTE Confidence: 0.925906086

00:02:12.888 --> 00:02:14.648 without making a big incision,

NOTE Confidence: 0.925906086

00:02:14.650 --> 00:02:16.938 which is how things used to be done.

NOTE Confidence: 0.925906086

00:02:16.940 --> 00:02:19.820 The robot is laparoscopic surgery.

NOTE Confidence: 0.925906086

00:02:19.820 --> 00:02:21.444 It's just a tool,

NOTE Confidence: 0.925906086

00:02:21.444 --> 00:02:24.220 so it holds the instruments for us.

NOTE Confidence: 0.925906086

00:02:24.220 --> 00:02:26.495 It allows us to make fine movements,  
NOTE Confidence: 0.925906086

00:02:26.500 --> 00:02:28.988 it allows us to work in spaces that  
NOTE Confidence: 0.925906086

00:02:28.988 --> 00:02:30.899 would otherwise be difficult for human  
NOTE Confidence: 0.925906086

00:02:30.899 --> 00:02:33.199 hands or in some cases even laparoscopic  
NOTE Confidence: 0.925906086

00:02:33.199 --> 00:02:35.605 instruments to gain access to.  
NOTE Confidence: 0.925906086

00:02:35.610 --> 00:02:37.824 I think sometimes there's a common  
NOTE Confidence: 0.925906086

00:02:37.824 --> 00:02:39.903 misconception that the robot does the  
NOTE Confidence: 0.925906086

00:02:39.903 --> 00:02:41.878 surgery and we just kind of  
NOTE Confidence: 0.925906086

00:02:41.878 --> 00:02:43.730 turn it on and go have coffee or something.  
00:02:44.060 --> 00:02:45.050 That's not the way it works.  
00:02:46.595 --> 00:02:49.170 It's a two-part operation basically.  
NOTE Confidence: 0.925906086

00:02:49.170 --> 00:02:50.962 So you have a patient of course  
NOTE Confidence: 0.925906086

00:02:50.962 --> 00:02:52.369 on the operating room table,  
NOTE Confidence: 0.925906086

00:02:52.370 --> 00:02:53.820 there's the robot which is  
NOTE Confidence: 0.925906086

00:02:53.820 --> 00:02:54.690 holding the instruments.  
NOTE Confidence: 0.925906086

00:02:54.690 --> 00:02:57.162 There's an assistant at the bedside  
NOTE Confidence: 0.925906086

00:02:57.162 --> 00:02:59.580 who's putting the instruments in and out

NOTE Confidence: 0.925906086

00:02:59.580 --> 00:03:02.250 and maybe running a suction device

NOTE Confidence: 0.925906086

00:03:02.250 --> 00:03:03.642 or helping

NOTE Confidence: 0.925906086

00:03:03.642 --> 00:03:05.399 with various aspects of the case at

NOTE Confidence: 0.925906086

00:03:05.399 --> 00:03:07.428 the bedside and then the surgeon is

NOTE Confidence: 0.925906086

00:03:07.428 --> 00:03:09.138 in the same room generally,

NOTE Confidence: 0.925906086

00:03:09.590 --> 00:03:11.700 maybe four or five feet off to the side,

NOTE Confidence: 0.925906086

00:03:11.700 --> 00:03:13.630 there's a second console that

NOTE Confidence: 0.925906086

00:03:13.630 --> 00:03:15.886 the surgeon sits at and we're

NOTE Confidence: 0.925906086

00:03:15.886 --> 00:03:17.298 operating those robotic arms.

NOTE Confidence: 0.925906086

00:03:17.300 --> 00:03:19.574 So that's sort of the nuts

NOTE Confidence: 0.925906086

00:03:19.574 --> 00:03:21.820 and bolts of robotic surgery.

NOTE Confidence: 0.925906086

00:03:21.820 --> 00:03:23.180 In terms of the benefits,

NOTE Confidence: 0.925906086

00:03:23.180 --> 00:03:24.510 I mean many of the benefits we

NOTE Confidence: 0.925906086

00:03:24.510 --> 00:03:25.564 saw with laparoscopy are what

NOTE Confidence: 0.925906086

00:03:25.564 --> 00:03:27.026 we're seeing with robotics.

NOTE Confidence: 0.925906086

00:03:27.026 --> 00:03:29.856 Generally you're talking about less  
NOTE Confidence: 0.925906086

00:03:29.856 --> 00:03:31.806 operative pain, faster recovery,  
NOTE Confidence: 0.925906086

00:03:31.806 --> 00:03:35.550 less blood loss, shorter hospital stays.  
NOTE Confidence: 0.925906086

00:03:35.550 --> 00:03:37.422 And in cancer specifically,  
NOTE Confidence: 0.925906086

00:03:37.422 --> 00:03:38.826 generally we're preserving  
NOTE Confidence: 0.925906086

00:03:38.826 --> 00:03:40.230 the oncologic benefits,  
NOTE Confidence: 0.925906086

00:03:40.230 --> 00:03:41.970 the cancer benefits of the  
NOTE Confidence: 0.925906086

00:03:41.970 --> 00:03:43.362 operation with those additional  
NOTE Confidence: 0.925906086

00:03:43.362 --> 00:03:45.068 benefits of laparoscopic approach.  
NOTE Confidence: 0.948639766666667

00:03:46.030 --> 00:03:49.374 And so when we think about  
NOTE Confidence: 0.948639766666667

00:03:49.374 --> 00:03:51.989 robotics versus laparoscopic surgery,  
NOTE Confidence: 0.948639766666667

00:03:51.990 --> 00:03:53.985 some of the advantages that you mentioned,  
NOTE Confidence: 0.948639766666667

00:03:53.990 --> 00:03:57.275 I mean you get a little bit more dexterity  
NOTE Confidence: 0.948639766666667

00:03:57.280 --> 00:03:59.968 with using the robot arms instead  
NOTE Confidence: 0.948639766666667

00:03:59.968 --> 00:04:02.880 of the the standard laparoscopic  
NOTE Confidence: 0.948639766666667

00:04:02.880 --> 00:04:06.832 instruments.

NOTE Confidence: 0.948639766666667  
00:04:06.832 --> 00:04:08.899 Have there been studies that have really  
NOTE Confidence: 0.948639766666667  
00:04:08.899 --> 00:04:11.161 looked at tangible differences in terms  
NOTE Confidence: 0.948639766666667  
00:04:11.161 --> 00:04:13.800 of all of the things you mentioned,  
NOTE Confidence: 0.948639766666667  
00:04:13.800 --> 00:04:16.476 blood loss, hospital length of stay,  
NOTE Confidence: 0.948639766666667  
00:04:16.480 --> 00:04:19.420 operative, time cost comparing  
NOTE Confidence: 0.948639766666667  
00:04:19.420 --> 00:04:22.360 laparoscopic versus robotic surgery?  
NOTE Confidence: 0.869995066666667  
00:04:23.310 --> 00:04:24.426 Yeah. So it's a great question.  
NOTE Confidence: 0.869995066666667  
00:04:24.430 --> 00:04:27.526 I mean, most of the studies that are done  
NOTE Confidence: 0.869995066666667  
00:04:27.526 --> 00:04:30.707 are comparing robotic to open.  
NOTE Confidence: 0.869995066666667  
00:04:30.710 --> 00:04:33.118 So what I was just mentioning in terms  
NOTE Confidence: 0.869995066666667  
00:04:33.118 --> 00:04:35.166 of blood loss, hospital stay, pain,  
NOTE Confidence: 0.869995066666667  
00:04:35.166 --> 00:04:37.278 I mean there's no question that  
NOTE Confidence: 0.869995066666667  
00:04:37.278 --> 00:04:39.699 those are generally much better for  
NOTE Confidence: 0.869995066666667  
00:04:39.699 --> 00:04:41.704 a laparoscopic or robotic approach.  
NOTE Confidence: 0.869995066666667  
00:04:41.710 --> 00:04:43.935 When you're comparing laparoscopic and  
NOTE Confidence: 0.869995066666667

00:04:43.935 --> 00:04:46.430 robotic directly, for the most part,  
NOTE Confidence: 0.869995066666667

00:04:46.430 --> 00:04:48.430 it depends on the operation,  
NOTE Confidence: 0.869995066666667

00:04:48.430 --> 00:04:51.240 so for instance in prostatectomy.  
NOTE Confidence: 0.869995066666667

00:04:51.240 --> 00:04:53.202 I think most people would agree  
NOTE Confidence: 0.869995066666667

00:04:53.202 --> 00:04:54.898 that a robotic prostatectomy is  
NOTE Confidence: 0.869995066666667

00:04:54.898 --> 00:04:56.860 really the gold standard and that's  
NOTE Confidence: 0.869995066666667

00:04:56.860 --> 00:04:58.120 even over laparoscopy now.  
NOTE Confidence: 0.869995066666667

00:04:58.120 --> 00:04:59.920 There's probably several reasons for that.  
NOTE Confidence: 0.869995066666667

00:04:59.920 --> 00:05:01.080 Some of its training,  
NOTE Confidence: 0.869995066666667

00:05:01.080 --> 00:05:02.984 some of it's just learning curve,  
NOTE Confidence: 0.869995066666667

00:05:02.984 --> 00:05:05.216 which tends to be a little  
NOTE Confidence: 0.869995066666667

00:05:05.216 --> 00:05:06.719 better with the robot.  
NOTE Confidence: 0.869995066666667

00:05:06.720 --> 00:05:08.880 Cost is generally higher when you're  
NOTE Confidence: 0.869995066666667

00:05:08.880 --> 00:05:10.320 comparing laparoscopy to robotics,  
NOTE Confidence: 0.869995066666667

00:05:10.320 --> 00:05:12.308 although you know it depends on if  
NOTE Confidence: 0.869995066666667

00:05:12.308 --> 00:05:14.478 you're looking at direct operative costs,

NOTE Confidence: 0.869995066666667  
00:05:14.480 --> 00:05:16.559 if you're looking at longer term costs,  
NOTE Confidence: 0.869995066666667  
00:05:16.560 --> 00:05:19.936 like how the impact is on things like  
NOTE Confidence: 0.869995066666667  
00:05:19.940 --> 00:05:22.060 urinary function, return to continent,  
NOTE Confidence: 0.869995066666667  
00:05:22.060 --> 00:05:24.660 sexual function specific to prostate,  
NOTE Confidence: 0.869995066666667  
00:05:24.660 --> 00:05:27.642 some of that cost might wash  
NOTE Confidence: 0.869995066666667  
00:05:27.642 --> 00:05:29.656 out in the kidney specifically.  
NOTE Confidence: 0.869995066666667  
00:05:29.656 --> 00:05:31.551 Generally we're using the robot  
NOTE Confidence: 0.869995066666667  
00:05:31.551 --> 00:05:33.620 for either radical nephrectomy,  
NOTE Confidence: 0.869995066666667  
00:05:33.620 --> 00:05:35.228 which is removal of the whole  
NOTE Confidence: 0.869995066666667  
00:05:35.228 --> 00:05:36.300 kidney or partial nephrectomy,  
NOTE Confidence: 0.869995066666667  
00:05:36.300 --> 00:05:39.258 which is removal of a portion,  
NOTE Confidence: 0.869995066666667  
00:05:39.258 --> 00:05:41.230 specifically the tumor usually.  
NOTE Confidence: 0.869995066666667  
00:05:41.230 --> 00:05:43.350 The real benefit there, robotically,  
NOTE Confidence: 0.869995066666667  
00:05:43.350 --> 00:05:44.510 at least in my opinion,  
NOTE Confidence: 0.869995066666667  
00:05:44.510 --> 00:05:45.994 is again that dexterity.  
NOTE Confidence: 0.869995066666667

00:05:45.994 --> 00:05:47.107 So for instance,  
NOTE Confidence: 0.869995066666667

00:05:47.110 --> 00:05:48.916 when you're doing a partial nephrectomy  
NOTE Confidence: 0.869995066666667

00:05:48.916 --> 00:05:51.227 and we're removing a tumor off the kidney,  
NOTE Confidence: 0.869995066666667

00:05:51.230 --> 00:05:53.270 we then have to close that defect up,  
NOTE Confidence: 0.869995066666667

00:05:53.270 --> 00:05:55.735 and that's generally done with  
NOTE Confidence: 0.869995066666667

00:05:55.735 --> 00:05:57.510 stitches and stitching with the robot  
NOTE Confidence: 0.869995066666667

00:05:57.510 --> 00:06:00.990 I think most would agree is easier,  
NOTE Confidence: 0.869995066666667

00:06:00.990 --> 00:06:02.910 perhaps finer,  
NOTE Confidence: 0.869995066666667

00:06:02.910 --> 00:06:04.842 and I would say probably a shorter  
NOTE Confidence: 0.869995066666667

00:06:04.842 --> 00:06:06.448 learning curve in terms of mastery  
NOTE Confidence: 0.869995066666667

00:06:06.448 --> 00:06:08.121 than it would be with a  
NOTE Confidence: 0.869995066666667

00:06:08.180 --> 00:06:09.668 laparoscopic approach alone.  
NOTE Confidence: 0.930190133333333

00:06:11.210 --> 00:06:13.866 And so you know, I think many  
NOTE Confidence: 0.930190133333333

00:06:13.866 --> 00:06:16.310 people have heard about the  
NOTE Confidence: 0.930190133333333

00:06:16.310 --> 00:06:18.610 robotic approach for prostate,  
NOTE Confidence: 0.930190133333333

00:06:18.610 --> 00:06:20.494 less so for kidney.

00:06:24.410 --> 00:06:27.197 I mean is it something that people  
NOTE Confidence: 0.9301901333333333

00:06:27.197 --> 00:06:29.132 are being offered as standard  
NOTE Confidence: 0.9301901333333333

00:06:29.132 --> 00:06:31.743 practice in terms of having a  
NOTE Confidence: 0.9301901333333333

00:06:31.743 --> 00:06:35.770 robotic nephrectomy?  
NOTE Confidence: 0.9486396983333333

00:06:35.770 --> 00:06:37.846 Absolutely, when it comes to radical nephrectomy,  
NOTE Confidence: 0.9486396983333333

00:06:37.850 --> 00:06:40.042 robotic and laparoscopic approaches,  
NOTE Confidence: 0.9486396983333333

00:06:40.042 --> 00:06:42.454 are basically equivalent in  
NOTE Confidence: 0.9486396983333333

00:06:42.454 --> 00:06:45.520 terms of cancer control and the actual  
NOTE Confidence: 0.9486396983333333

00:06:45.593 --> 00:06:48.419 outcome you're getting from the surgery.  
NOTE Confidence: 0.9486396983333333

00:06:48.420 --> 00:06:50.052 There are plenty of surgeons out  
NOTE Confidence: 0.9486396983333333

00:06:50.052 --> 00:06:51.615 there that are doing laparoscopic  
NOTE Confidence: 0.9486396983333333

00:06:51.615 --> 00:06:53.299 partial nephrectomy as well.  
NOTE Confidence: 0.9486396983333333

00:06:53.300 --> 00:06:55.286 But again, the robot makes that  
NOTE Confidence: 0.9486396983333333

00:06:55.286 --> 00:06:57.938 approach I think a lot more palatable.  
NOTE Confidence: 0.9486396983333333

00:06:57.940 --> 00:06:59.998 There are benefits at the  
NOTE Confidence: 0.9486396983333333

00:06:59.998 --> 00:07:01.898 surgeon level to robotics as well,

NOTE Confidence: 0.948639698333333  
00:07:01.900 --> 00:07:02.964 things like  
NOTE Confidence: 0.948639698333333  
00:07:02.964 --> 00:07:04.560 when you're standing there at the  
NOTE Confidence: 0.948639698333333  
00:07:04.614 --> 00:07:06.278 bedside doing laparoscopic surgery  
NOTE Confidence: 0.948639698333333  
00:07:06.280 --> 00:07:07.318 it can be straining on the neck,  
NOTE Confidence: 0.948639698333333  
00:07:07.320 --> 00:07:08.598 and it can be straining on the back.  
NOTE Confidence: 0.948639698333333  
00:07:08.600 --> 00:07:09.804 The robot takes a lot of that  
NOTE Confidence: 0.948639698333333  
00:07:09.804 --> 00:07:11.079 out of it for the surgeon.  
NOTE Confidence: 0.94427896  
00:07:13.200 --> 00:07:15.560 When it comes to availability,  
NOTE Confidence: 0.94427896  
00:07:15.560 --> 00:07:17.732 I think robotics in general has  
NOTE Confidence: 0.94427896  
00:07:17.732 --> 00:07:19.880 really permeated into the community,  
NOTE Confidence: 0.94427896  
00:07:19.880 --> 00:07:21.595 so I spend the majority of my  
NOTE Confidence: 0.94427896  
00:07:21.595 --> 00:07:23.368 clinical time out in New London  
NOTE Confidence: 0.94427896  
00:07:23.368 --> 00:07:24.680 at Lawrence Memorial Hospital.  
NOTE Confidence: 0.94427896  
00:07:24.680 --> 00:07:26.080 We've had a robot here  
NOTE Confidence: 0.94427896  
00:07:26.080 --> 00:07:27.480 ever since I've been here,  
NOTE Confidence: 0.94427896

00:07:27.480 --> 00:07:29.480 and I think many community sites are similar.

NOTE Confidence: 0.94427896

00:07:29.480 --> 00:07:32.658 So patients are certainly being offered

NOTE Confidence: 0.94427896

00:07:32.658 --> 00:07:35.120 robotic approaches for kidney surgery.

NOTE Confidence: 0.94427896

00:07:35.120 --> 00:07:37.244 Probably in many instances more than

NOTE Confidence: 0.94427896

00:07:37.244 --> 00:07:39.142 they're being operated or offered

NOTE Confidence: 0.94427896

00:07:39.142 --> 00:07:41.237 a laparoscopic only approach.

NOTE Confidence: 0.940711027272727

00:07:42.800 --> 00:07:45.230 And so that brings me to the

NOTE Confidence: 0.940711027272727

00:07:45.230 --> 00:07:47.786 next question which is you did mention

NOTE Confidence: 0.940711027272727

00:07:47.786 --> 00:07:49.839 that there's a difference in cost.

NOTE Confidence: 0.940711027272727

00:07:49.840 --> 00:07:53.400 Is that difference passed on to the patients,

NOTE Confidence: 0.940711027272727

00:07:53.400 --> 00:07:55.758 I mean when they get their

NOTE Confidence: 0.940711027272727

00:07:55.760 --> 00:07:59.845 bill for their copay or

NOTE Confidence: 0.940711027272727

00:07:59.845 --> 00:08:02.328 whatever it is, is it higher?

NOTE Confidence: 0.940711027272727

00:08:02.328 --> 00:08:04.140 Are they paying

NOTE Confidence: 0.940711027272727

00:08:04.204 --> 00:08:06.619 for the robotic approach and is that

NOTE Confidence: 0.940711027272727

00:08:06.619 --> 00:08:08.533 something that many patients are

NOTE Confidence: 0.940711027272727  
00:08:08.533 --> 00:08:10.568 taking into consideration when choosing  
NOTE Confidence: 0.940711027272727  
00:08:10.568 --> 00:08:13.014 whether to go laparoscopic or robotic  
NOTE Confidence: 0.940711027272727  
00:08:13.014 --> 00:08:15.870 or are patients even given the choice?  
NOTE Confidence: 0.950317  
00:08:16.310 --> 00:08:18.710 That's a really good question.  
NOTE Confidence: 0.950317  
00:08:18.710 --> 00:08:19.766 You know, I don't know the  
NOTE Confidence: 0.950317  
00:08:19.766 --> 00:08:20.909 answer to tell you the truth.  
NOTE Confidence: 0.950317  
00:08:20.910 --> 00:08:23.646 I think that it depends on a lot  
NOTE Confidence: 0.950317  
00:08:23.646 --> 00:08:26.112 of factors which I don't have  
NOTE Confidence: 0.950317  
00:08:26.112 --> 00:08:28.232 granular data on. Things like  
NOTE Confidence: 0.950317  
00:08:28.240 --> 00:08:29.888 the various insurance company,  
NOTE Confidence: 0.950317  
00:08:29.888 --> 00:08:32.771 how the hospital manages various  
NOTE Confidence: 0.950317  
00:08:32.771 --> 00:08:35.515 costs and passes that on to the patient.  
NOTE Confidence: 0.950317  
00:08:35.520 --> 00:08:37.960 There is probably no question  
NOTE Confidence: 0.950317  
00:08:37.960 --> 00:08:40.400 that a laparoscopic only radical  
NOTE Confidence: 0.950317  
00:08:40.485 --> 00:08:42.885 nephrectomy for instance may be  
NOTE Confidence: 0.950317

00:08:42.885 --> 00:08:45.285 cheaper at the surgical level  
NOTE Confidence: 0.950317

00:08:45.372 --> 00:08:48.080 than it is for a robotic approach.  
00:08:49.136 --> 00:08:51.152 But again, I can't tell you specifically how  
NOTE Confidence: 0.950317

00:08:51.152 --> 00:08:53.517 that gets passed on to the patient.  
NOTE Confidence: 0.950317

00:08:53.520 --> 00:08:55.160 Like many things in medicine,  
NOTE Confidence: 0.950317

00:08:55.160 --> 00:08:57.098 it probably depends on your surgeon's  
NOTE Confidence: 0.950317

00:08:57.098 --> 00:08:59.178 level of comfort with the various  
NOTE Confidence: 0.950317

00:08:59.178 --> 00:09:00.638 approach or various surgery,  
NOTE Confidence: 0.950317

00:09:00.640 --> 00:09:03.040 what technology they have available.  
NOTE Confidence: 0.950317

00:09:03.040 --> 00:09:04.888 You know some of this is patient  
NOTE Confidence: 0.950317

00:09:04.888 --> 00:09:05.680 driven as well.  
NOTE Confidence: 0.950317

00:09:05.680 --> 00:09:07.328 I think a lot of patients come to  
NOTE Confidence: 0.950317

00:09:07.328 --> 00:09:09.672 see me and I think a lot of surgeons  
NOTE Confidence: 0.950317

00:09:09.672 --> 00:09:11.088 because they're facile with the  
NOTE Confidence: 0.950317

00:09:11.088 --> 00:09:12.756 robot and they've heard about the  
NOTE Confidence: 0.950317

00:09:12.756 --> 00:09:14.564 benefits of robotics and so they're  
NOTE Confidence: 0.950317

00:09:14.564 --> 00:09:16.119 really looking for that approach.  
NOTE Confidence: 0.953671466666667

00:09:17.850 --> 00:09:21.270 You mentioned when we were talking  
NOTE Confidence: 0.953671466666667

00:09:21.270 --> 00:09:24.084 earlier about prostate cancer that  
NOTE Confidence: 0.953671466666667

00:09:24.084 --> 00:09:27.086 while there may be an increased cost  
NOTE Confidence: 0.953671466666667

00:09:27.090 --> 00:09:29.757 to the operation itself that there  
NOTE Confidence: 0.953671466666667

00:09:29.757 --> 00:09:32.967 may be a reduced cost long term in  
NOTE Confidence: 0.953671466666667

00:09:32.967 --> 00:09:36.090 terms of a reduction in side effects.  
NOTE Confidence: 0.953671466666667

00:09:36.090 --> 00:09:39.723 So you know issues with urinary incontinence  
NOTE Confidence: 0.953671466666667

00:09:39.723 --> 00:09:43.650 or stream or sexual function etcetera.  
NOTE Confidence: 0.953671466666667

00:09:43.650 --> 00:09:47.970 Are there data to to support the idea that  
NOTE Confidence: 0.953671466666667

00:09:47.970 --> 00:09:51.012 outcomes are better with robotic surgery  
NOTE Confidence: 0.953671466666667

00:09:51.012 --> 00:09:53.690 versus laparoscopic surgery in terms of  
NOTE Confidence: 0.953671466666667

00:09:53.690 --> 00:09:55.930 preserving nerve function, for example?  
NOTE Confidence: 0.9603804

00:09:56.610 --> 00:09:59.830 So for prostate certainly comparing  
NOTE Confidence: 0.9603804

00:09:59.830 --> 00:10:02.406 open and robotic absolutely,  
NOTE Confidence: 0.9603804

00:10:02.410 --> 00:10:07.274 I mean very clear benefits in terms of

NOTE Confidence: 0.9603804

00:10:07.274 --> 00:10:10.690 sexual function probably as well.

NOTE Confidence: 0.9603804

00:10:10.690 --> 00:10:12.556 You know it's a little

NOTE Confidence: 0.9603804

00:10:12.556 --> 00:10:13.489 difficult to interpret

NOTE Confidence: 0.9603804

00:10:13.490 --> 00:10:16.444 the laparoscopic versus robotic data for prostate,

NOTE Confidence: 0.9603804

00:10:16.450 --> 00:10:18.526 because not a lot of people

NOTE Confidence: 0.9603804

00:10:18.526 --> 00:10:19.564 are doing laparoscopic,

NOTE Confidence: 0.9603804

00:10:19.570 --> 00:10:22.729 pure laparoscopic prostatectomy.

NOTE Confidence: 0.9603804

00:10:22.730 --> 00:10:24.750 It's just something that's very

NOTE Confidence: 0.9603804

00:10:24.750 --> 00:10:25.962 technically challenging and

NOTE Confidence: 0.9603804

00:10:25.962 --> 00:10:28.445 the robot takes a lot of those

NOTE Confidence: 0.9603804

00:10:28.445 --> 00:10:30.450 technical challenges out of the way.

NOTE Confidence: 0.9603804

00:10:30.450 --> 00:10:32.386 But absolutely comparing urinary

NOTE Confidence: 0.9603804

00:10:32.386 --> 00:10:34.322 function and probably sexual

NOTE Confidence: 0.9603804

00:10:34.322 --> 00:10:36.945 function in terms of our ability

NOTE Confidence: 0.9603804

00:10:36.945 --> 00:10:38.533 to accurately spare nerves

NOTE Confidence: 0.9603804

00:10:38.540 --> 00:10:40.070 and really do the finer  
NOTE Confidence: 0.9603804

00:10:40.070 --> 00:10:41.294 aspects of that operation,  
NOTE Confidence: 0.9603804

00:10:41.300 --> 00:10:43.616 which really is a delicate surgery,  
NOTE Confidence: 0.9603804

00:10:43.620 --> 00:10:45.348 especially when it comes to the  
NOTE Confidence: 0.9603804

00:10:45.348 --> 00:10:46.500 reconstruction portion of it.  
00:10:47.174 --> 00:10:49.533 That really is where the robot shines  
NOTE Confidence: 0.9603804

00:10:49.540 --> 00:10:52.140 in such a sort of narrow anatomic space.  
NOTE Confidence: 0.9469625333333333

00:10:53.420 --> 00:10:55.658 And what about for kidney cancers?  
NOTE Confidence: 0.9469625333333333

00:10:55.660 --> 00:10:57.820 Do we see the same kinds of things there?  
NOTE Confidence: 0.953192257142857

00:10:58.700 --> 00:10:59.932 Yeah. So I mean,  
NOTE Confidence: 0.953192257142857

00:10:59.932 --> 00:11:01.180 certainly different concerns, right?  
NOTE Confidence: 0.953192257142857

00:11:01.180 --> 00:11:03.100 When you're talking about kidney surgery,  
NOTE Confidence: 0.953192257142857

00:11:03.100 --> 00:11:05.620 we're not talking about urinary  
NOTE Confidence: 0.953192257142857

00:11:05.620 --> 00:11:07.636 continence or sexual function.  
NOTE Confidence: 0.953192257142857

00:11:07.640 --> 00:11:09.744 But I can say certainly in my hands  
NOTE Confidence: 0.953192257142857

00:11:09.744 --> 00:11:12.400 and I think in a lot of surgeons hands  
NOTE Confidence: 0.953192257142857

00:11:12.400 --> 00:11:15.400 specifically for a partial nephrectomy,  
NOTE Confidence: 0.953192257142857

00:11:15.400 --> 00:11:17.704 doing that reconstruction especially  
NOTE Confidence: 0.953192257142857

00:11:17.704 --> 00:11:21.240 if it's in a difficult part of the kidney,  
NOTE Confidence: 0.953192257142857

00:11:21.240 --> 00:11:23.543 it's very challenging to do some of  
NOTE Confidence: 0.953192257142857

00:11:23.543 --> 00:11:25.719 the finer aspects of that operation,  
NOTE Confidence: 0.953192257142857

00:11:25.720 --> 00:11:26.484 pure laparoscopic.  
NOTE Confidence: 0.953192257142857

00:11:26.484 --> 00:11:29.158 It can certainly be done open and  
NOTE Confidence: 0.953192257142857

00:11:29.158 --> 00:11:31.360 probably with the same efficacy open,  
NOTE Confidence: 0.953192257142857

00:11:31.360 --> 00:11:33.150 but then you're talking about  
NOTE Confidence: 0.953192257142857

00:11:33.150 --> 00:11:34.294 a fairly large incision,  
NOTE Confidence: 0.953192257142857

00:11:34.294 --> 00:11:36.314 which for the kidney is either a  
NOTE Confidence: 0.953192257142857

00:11:36.314 --> 00:11:37.826 big incision under the rib cage,  
NOTE Confidence: 0.953192257142857

00:11:37.830 --> 00:11:39.560 which can be fairly painful  
NOTE Confidence: 0.953192257142857

00:11:39.560 --> 00:11:40.944 during the recovery process,  
NOTE Confidence: 0.953192257142857

00:11:40.950 --> 00:11:42.987 or a big incision in the midline.  
NOTE Confidence: 0.953192257142857

00:11:42.990 --> 00:11:45.710 So again, in those cases you're looking at,

NOTE Confidence: 0.953192257142857  
00:11:45.710 --> 00:11:47.150 especially if you're doing that surgery,  
NOTE Confidence: 0.953192257142857  
00:11:47.150 --> 00:11:49.410 open, a longer hospital  
NOTE Confidence: 0.953192257142857  
00:11:49.410 --> 00:11:51.105 stay, more postoperative  
NOTE Confidence: 0.953192257142857  
00:11:51.110 --> 00:11:52.550 pain medication requirements,  
NOTE Confidence: 0.953192257142857  
00:11:52.550 --> 00:11:53.510 narcotic use,  
NOTE Confidence: 0.953192257142857  
00:11:53.510 --> 00:11:55.771 and then you're dealing with things like  
NOTE Confidence: 0.953192257142857  
00:11:55.771 --> 00:11:57.669 constipation and wound infection issues.  
00:11:57.923 --> 00:11:59.694 Socwhen it comes to some  
NOTE Confidence: 0.953192257142857  
00:11:59.694 --> 00:12:01.390 of those more complex cases,  
NOTE Confidence: 0.953192257142857  
00:12:01.390 --> 00:12:02.986 the robot is a major help.  
NOTE Confidence: 0.9452853  
00:12:04.470 --> 00:12:06.510 Talk a little bit about training.  
NOTE Confidence: 0.9452853  
00:12:06.510 --> 00:12:09.330 I mean when you were describing  
NOTE Confidence: 0.9452853  
00:12:09.330 --> 00:12:12.900 how a robotic case occurs earlier  
NOTE Confidence: 0.9452853  
00:12:12.900 --> 00:12:17.109 you mentioned that the patient  
NOTE Confidence: 0.9452853  
00:12:17.109 --> 00:12:19.347 is on the operating room table.  
NOTE Confidence: 0.9452853  
00:12:19.350 --> 00:12:21.215 There might be an assistant

NOTE Confidence: 0.9452853

00:12:21.215 --> 00:12:23.258 at the bedside who's kind of

NOTE Confidence: 0.9452853

00:12:23.258 --> 00:12:24.628 changing instruments in and out,

NOTE Confidence: 0.9452853

00:12:24.630 --> 00:12:27.357 but the surgeon really sits at a console and

NOTE Confidence: 0.9452853

00:12:27.360 --> 00:12:30.076 manages the arms of the robot.

NOTE Confidence: 0.9452853

00:12:30.080 --> 00:12:32.920 So if you're a trainee,

NOTE Confidence: 0.9452853

00:12:32.920 --> 00:12:35.040 an up and coming surgeon,

NOTE Confidence: 0.9452853

00:12:35.040 --> 00:12:38.154 how do you learn how to work the robot?

00:12:38.560 --> 00:12:40.600 It's a great question and

NOTE Confidence: 0.90447603125

00:12:40.600 --> 00:12:43.104 actually it's somewhat hotly debated

NOTE Confidence: 0.90447603125

00:12:43.104 --> 00:12:45.805 and there's a lot of interest

NOTE Confidence: 0.90447603125

00:12:45.805 --> 00:12:47.788 in how residents and

NOTE Confidence: 0.90447603125

00:12:47.788 --> 00:12:49.758 future surgeons should be trained.

NOTE Confidence: 0.90447603125

00:12:49.760 --> 00:12:51.800 Different institutions do it different ways.

NOTE Confidence: 0.90447603125

00:12:51.800 --> 00:12:54.660 I can tell you when I was a resident we

NOTE Confidence: 0.90447603125

00:12:54.737 --> 00:12:57.073 had a protocol where as the resident,

NOTE Confidence: 0.90447603125

00:12:57.073 --> 00:12:58.838 your job for

NOTE Confidence: 0.90447603125

00:12:58.840 --> 00:13:02.164 X number of cases was to be at the bedside,

NOTE Confidence: 0.90447603125

00:13:02.164 --> 00:13:03.556 being that bedside assistant.

NOTE Confidence: 0.90447603125

00:13:03.560 --> 00:13:05.240 So you knew the steps of the case,

NOTE Confidence: 0.90447603125

00:13:05.240 --> 00:13:06.995 you knew what instruments to put in and out,

NOTE Confidence: 0.90447603125

00:13:07.000 --> 00:13:09.490 at which times and you really learned

NOTE Confidence: 0.90447603125

00:13:09.490 --> 00:13:10.320 the operation.

NOTE Confidence: 0.90447603125

00:13:10.320 --> 00:13:11.460 And of course you were watching

NOTE Confidence: 0.90447603125

00:13:11.460 --> 00:13:12.440 the whole surgery as well.

NOTE Confidence: 0.939923047058824

00:13:14.450 --> 00:13:16.050 There's no real standardized way

NOTE Confidence: 0.939923047058824

00:13:16.050 --> 00:13:18.024 that residencies are doing it

NOTE Confidence: 0.939923047058824

00:13:18.024 --> 00:13:19.926 across the United States for instance.

NOTE Confidence: 0.939923047058824

00:13:19.930 --> 00:13:22.602 But again, there is a lot of

NOTE Confidence: 0.939923047058824

00:13:22.602 --> 00:13:25.134 exposure to that I think broadly

NOTE Confidence: 0.939923047058824

00:13:25.134 --> 00:13:27.369 in urology residency these days.

NOTE Confidence: 0.939923047058824

00:13:27.370 --> 00:13:30.280 And as the robot permeates more

NOTE Confidence: 0.939923047058824

00:13:30.280 --> 00:13:32.490 out into these community  
NOTE Confidence: 0.939923047058824

00:13:32.490 --> 00:13:34.350 hospitals and you have more robots  
NOTE Confidence: 0.939923047058824

00:13:34.405 --> 00:13:35.930 at the major medical centers,  
NOTE Confidence: 0.939923047058824

00:13:35.930 --> 00:13:37.690 there's just a lot more exposure to it.  
NOTE Confidence: 0.939923047058824

00:13:37.690 --> 00:13:40.516 So when residents are graduating now,  
NOTE Confidence: 0.939923047058824

00:13:40.520 --> 00:13:42.200 for the most part, they've seen  
NOTE Confidence: 0.939923047058824

00:13:42.200 --> 00:13:43.935 hundreds probably of  
NOTE Confidence: 0.939923047058824

00:13:43.935 --> 00:13:45.670 robotic procedures and many will  
NOTE Confidence: 0.939923047058824

00:13:45.725 --> 00:13:47.606 then go on to do if they want to  
NOTE Confidence: 0.939923047058824

00:13:47.606 --> 00:13:49.358 focus in oncology or in robotics,  
NOTE Confidence: 0.939923047058824

00:13:49.360 --> 00:13:52.192 they'll go on to do a specific fellowship  
NOTE Confidence: 0.939923047058824

00:13:52.192 --> 00:13:54.080 in minimally invasive surgery,  
NOTE Confidence: 0.939923047058824

00:13:54.080 --> 00:13:54.746 robotic surgery.  
00:13:56.400 --> 00:13:58.746 We'll pick up the  
NOTE Confidence: 0.9346750875

00:13:58.746 --> 00:14:01.035 conversation with that right after we  
NOTE Confidence: 0.9346750875

00:14:01.035 --> 00:14:03.635 take a short break for a medical minute.  
NOTE Confidence: 0.9346750875

00:14:03.640 --> 00:14:05.565 Please stay tuned to learn more about

NOTE Confidence: 0.9346750875

00:14:05.565 --> 00:14:07.769 the use of robotics and minimally

NOTE Confidence: 0.9346750875

00:14:07.769 --> 00:14:09.959 invasive surgery for urologic cancers

NOTE Confidence: 0.9346750875

00:14:09.960 --> 00:14:12.120 with my guest, Dr. Joseph Brito.

NOTE Confidence: 0.920439987

00:14:12.720 --> 00:14:14.760 Funding for Yale Cancer Answers

NOTE Confidence: 0.920439987

00:14:14.760 --> 00:14:16.800 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.920439987

00:14:16.800 --> 00:14:18.656 where their Melanoma program

NOTE Confidence: 0.920439987

00:14:18.656 --> 00:14:20.512 brings together an extensive

NOTE Confidence: 0.920439987

00:14:20.512 --> 00:14:22.199 multidisciplinary team to diagnose,

NOTE Confidence: 0.920439987

00:14:22.200 --> 00:14:24.372 treat, and care for patients with

NOTE Confidence: 0.920439987

00:14:24.372 --> 00:14:26.400 Melanoma and other skin cancers.

NOTE Confidence: 0.920439987

00:14:26.400 --> 00:14:30.798 Smilowcancerhospital.org.

NOTE Confidence: 0.920439987

00:14:30.798 --> 00:14:32.706 Genetic testing can be useful for people

NOTE Confidence: 0.920439987

00:14:32.706 --> 00:14:34.521 with certain types of cancer that

NOTE Confidence: 0.920439987

00:14:34.521 --> 00:14:36.135 seem to run in their families.

NOTE Confidence: 0.920439987

00:14:36.140 --> 00:14:38.010 Genetic counseling is a process

NOTE Confidence: 0.920439987  
00:14:38.010 --> 00:14:39.880 that includes collecting a detailed  
NOTE Confidence: 0.920439987  
00:14:39.937 --> 00:14:41.497 personal and family history,  
NOTE Confidence: 0.920439987  
00:14:41.500 --> 00:14:42.844 a risk assessment,  
NOTE Confidence: 0.920439987  
00:14:42.844 --> 00:14:45.980 and a discussion of genetic testing options.  
NOTE Confidence: 0.920439987  
00:14:45.980 --> 00:14:48.606 Only about 5 to 10% of all cancers  
NOTE Confidence: 0.920439987  
00:14:48.606 --> 00:14:50.316 are inherited and genetic testing  
NOTE Confidence: 0.920439987  
00:14:50.316 --> 00:14:52.618 is not recommended for everyone.  
NOTE Confidence: 0.920439987  
00:14:52.620 --> 00:14:54.966 Individuals who have a personal and  
NOTE Confidence: 0.920439987  
00:14:54.966 --> 00:14:57.050 or family history that includes  
NOTE Confidence: 0.920439987  
00:14:57.050 --> 00:14:59.295 cancer at unusually early ages,  
NOTE Confidence: 0.920439987  
00:14:59.300 --> 00:15:01.364 multiple relatives on the same side  
NOTE Confidence: 0.920439987  
00:15:01.364 --> 00:15:03.829 of the family with the same cancer,  
NOTE Confidence: 0.920439987  
00:15:03.830 --> 00:15:05.670 more than one diagnosis of  
NOTE Confidence: 0.920439987  
00:15:05.670 --> 00:15:07.510 cancer in the same individual,  
NOTE Confidence: 0.920439987  
00:15:07.510 --> 00:15:08.312 rare cancers,  
NOTE Confidence: 0.920439987

00:15:08.312 --> 00:15:11.119 or family history of a known altered  
NOTE Confidence: 0.920439987

00:15:11.119 --> 00:15:13.630 cancer predisposing gene could be  
NOTE Confidence: 0.920439987

00:15:13.630 --> 00:15:15.670 candidates for genetic testing.  
NOTE Confidence: 0.920439987

00:15:15.670 --> 00:15:17.735 Resources for genetic counseling and  
NOTE Confidence: 0.920439987

00:15:17.735 --> 00:15:19.800 testing are available at federally  
NOTE Confidence: 0.920439987

00:15:19.862 --> 00:15:21.083 designated comprehensive cancer  
NOTE Confidence: 0.920439987

00:15:21.083 --> 00:15:23.525 centers such as Yale Cancer Center  
NOTE Confidence: 0.920439987

00:15:23.525 --> 00:15:25.508 and Smilow Cancer Hospital.  
NOTE Confidence: 0.920439987

00:15:25.510 --> 00:15:27.910 More information is available  
NOTE Confidence: 0.920439987

00:15:27.910 --> 00:15:28.938 at [yalecancercenter.org](http://yalecancercenter.org).  
NOTE Confidence: 0.920439987

00:15:28.938 --> 00:15:31.506 You're listening to Connecticut Public Radio.  
NOTE Confidence: 0.950317

00:15:32.290 --> 00:15:34.246 Welcome back to Yale Cancer Answers.  
NOTE Confidence: 0.950317

00:15:34.250 --> 00:15:35.850 This is Doctor Anees Chagpar,  
NOTE Confidence: 0.950317

00:15:35.850 --> 00:15:37.929 and I'm joined tonight by my guest,  
NOTE Confidence: 0.950317

00:15:37.930 --> 00:15:39.040 Doctor Joseph Brito.  
NOTE Confidence: 0.950317

00:15:39.040 --> 00:15:41.260 We're talking about the use of

NOTE Confidence: 0.950317

00:15:41.260 --> 00:15:43.044 robotics and minimally invasive

NOTE Confidence: 0.950317

00:15:43.044 --> 00:15:44.844 surgery for urologic cancers.

NOTE Confidence: 0.950317

00:15:44.850 --> 00:15:47.754 And Joseph, right before the break

NOTE Confidence: 0.950317

00:15:47.754 --> 00:15:51.490 you were talking about training

NOTE Confidence: 0.950317

00:15:51.490 --> 00:15:54.010 of residents and fellows and

NOTE Confidence: 0.950317

00:15:54.010 --> 00:15:56.546 you had mentioned that

NOTE Confidence: 0.950317

00:15:56.546 --> 00:15:58.686 while there is no standardization

NOTE Confidence: 0.950317

00:15:58.686 --> 00:16:00.349 for this training, frequently

NOTE Confidence: 0.950317

00:16:00.349 --> 00:16:03.381 the resident will be at the

NOTE Confidence: 0.950317

00:16:03.381 --> 00:16:05.899 bedside putting instruments in and out.

NOTE Confidence: 0.950317

00:16:05.900 --> 00:16:08.540 They'll get to watch the the robotic surgery,

NOTE Confidence: 0.950317

00:16:08.540 --> 00:16:11.012 but there's a big difference between

NOTE Confidence: 0.950317

00:16:11.012 --> 00:16:13.143 watching the surgery and actually

NOTE Confidence: 0.950317

00:16:13.143 --> 00:16:15.579 doing the surgery at the console.

NOTE Confidence: 0.950317

00:16:15.580 --> 00:16:19.153 So can you talk a little bit about how

NOTE Confidence: 0.950317

00:16:19.153 --> 00:16:21.503 trainees actually gain that facility  
NOTE Confidence: 0.950317

00:16:21.503 --> 00:16:25.060 with using the robot at the console?  
NOTE Confidence: 0.950317

00:16:25.060 --> 00:16:28.525 Because it would seem that that's really  
NOTE Confidence: 0.950317

00:16:28.530 --> 00:16:30.605 a major advantage of robotic  
NOTE Confidence: 0.950317

00:16:30.605 --> 00:16:33.156 surgery is the facility that the  
NOTE Confidence: 0.950317

00:16:33.156 --> 00:16:35.520 surgeon has with using the robot  
NOTE Confidence: 0.950317

00:16:35.520 --> 00:16:37.650 and the dexterity of its arms.  
NOTE Confidence: 0.86953986

00:16:37.890 --> 00:16:38.490 Yeah, of course.  
NOTE Confidence: 0.86953986

00:16:38.490 --> 00:16:41.102 I mean, with any surgical approach,  
NOTE Confidence: 0.86953986

00:16:41.102 --> 00:16:42.996 surgical instrument, the surgeon  
NOTE Confidence: 0.86953986

00:16:42.996 --> 00:16:44.568 needs to have familiarity with it,  
NOTE Confidence: 0.86953986

00:16:44.570 --> 00:16:47.020 be able to use it safely and  
NOTE Confidence: 0.86953986

00:16:47.020 --> 00:16:49.195 with the robot at most  
NOTE Confidence: 0.86953986

00:16:49.195 --> 00:16:50.946 teaching institutions, there is  
NOTE Confidence: 0.86953986

00:16:50.946 --> 00:16:52.978 basically a trainer console.  
NOTE Confidence: 0.86953986

00:16:52.980 --> 00:16:55.468 So it's almost in some ways like a

NOTE Confidence: 0.86953986

00:16:55.468 --> 00:16:58.120 driver's Ed setup where you have the

NOTE Confidence: 0.86953986

00:16:58.120 --> 00:17:00.468 surgeon that has ultimate control over

NOTE Confidence: 0.86953986

00:17:00.468 --> 00:17:02.714 the robot and then you have a trainee

NOTE Confidence: 0.86953986

00:17:02.714 --> 00:17:04.260 who's sitting at another console,

NOTE Confidence: 0.86953986

00:17:04.260 --> 00:17:05.970 usually next to or directly

NOTE Confidence: 0.86953986

00:17:05.970 --> 00:17:07.338 across from the surgeon.

NOTE Confidence: 0.86953986

00:17:07.340 --> 00:17:09.434 So you know the surgeon can

NOTE Confidence: 0.86953986

00:17:09.434 --> 00:17:11.230 essentially control the robot

NOTE Confidence: 0.86953986

00:17:11.230 --> 00:17:13.258 over to the resident or trainee.

NOTE Confidence: 0.86953986

00:17:13.260 --> 00:17:16.133 They can operate for a minute

NOTE Confidence: 0.86953986

00:17:16.133 --> 00:17:17.297 or a few minutes,

NOTE Confidence: 0.86953986

00:17:17.300 --> 00:17:18.800 the surgeon can sort of watch

NOTE Confidence: 0.86953986

00:17:18.800 --> 00:17:20.433 what they're doing and then if

NOTE Confidence: 0.86953986

00:17:20.433 --> 00:17:21.589 something is happening that

NOTE Confidence: 0.86953986

00:17:21.590 --> 00:17:22.922 they don't like or the surgeons

NOTE Confidence: 0.86953986

00:17:22.922 --> 00:17:24.070 ready to take control back,  
NOTE Confidence: 0.86953986

00:17:24.070 --> 00:17:25.590 they can just go ahead and do that.  
NOTE Confidence: 0.86953986

00:17:25.590 --> 00:17:28.068 So it gives the resident  
NOTE Confidence: 0.86953986

00:17:28.070 --> 00:17:30.428 an opportunity to gain some skill,  
NOTE Confidence: 0.86953986

00:17:30.430 --> 00:17:35.330 learn the robot while under a pretty  
NOTE Confidence: 0.86953986

00:17:35.330 --> 00:17:37.430 closely supervised environment.  
NOTE Confidence: 0.86953986

00:17:37.430 --> 00:17:39.103 The other thing I think is important  
NOTE Confidence: 0.86953986

00:17:39.103 --> 00:17:41.212 to note is just that whenever you're  
NOTE Confidence: 0.86953986

00:17:41.212 --> 00:17:43.222 doing a laparoscopic or robotic surgery,  
NOTE Confidence: 0.86953986

00:17:43.230 --> 00:17:45.725 everything that's happening is being  
NOTE Confidence: 0.86953986

00:17:45.725 --> 00:17:48.220 broadcast onto essentially a big TV  
NOTE Confidence: 0.86953986

00:17:48.292 --> 00:17:50.924 screen in the operating room and so  
00:17:51.294 --> 00:17:52.386 not just the surgeon and the  
NOTE Confidence: 0.86953986

00:17:52.386 --> 00:17:53.530 assistant can see what's happening,  
NOTE Confidence: 0.86953986

00:17:53.530 --> 00:17:54.905 but really everyone in the  
NOTE Confidence: 0.86953986

00:17:54.905 --> 00:17:56.690 operating room can see, scrub nurses,  
NOTE Confidence: 0.86953986

00:17:56.690 --> 00:17:59.090 the scrub tech, the anesthesia team.

NOTE Confidence: 0.86953986

00:17:59.090 --> 00:18:01.170 So in a lot of ways the resident

NOTE Confidence: 0.86953986

00:18:01.170 --> 00:18:03.735 and the surgeon really are more

NOTE Confidence: 0.86953986

00:18:03.735 --> 00:18:05.715 closely watched and observed than

NOTE Confidence: 0.86953986

00:18:05.785 --> 00:18:07.927 they would be in an open surgery.

NOTE Confidence: 0.9402536

00:18:08.130 --> 00:18:10.322 Let's take a step back for a moment

NOTE Confidence: 0.9402536

00:18:10.322 --> 00:18:12.379 as you had mentioned earlier,

NOTE Confidence: 0.9402536

00:18:12.380 --> 00:18:15.397 this is kidney cancer

NOTE Confidence: 0.9402536

00:18:15.397 --> 00:18:17.824 awareness month, so let's talk a

NOTE Confidence: 0.9402536

00:18:17.824 --> 00:18:19.779 little bit about kidney cancer.

NOTE Confidence: 0.9402536

00:18:19.780 --> 00:18:23.420 We had talked a little bit about

NOTE Confidence: 0.9402536

00:18:23.420 --> 00:18:25.660 surgery and you had mentioned

NOTE Confidence: 0.9402536

00:18:25.660 --> 00:18:27.900 that for some patients they

NOTE Confidence: 0.9402536

00:18:27.979 --> 00:18:30.179 require a total nephrectomy,

NOTE Confidence: 0.9402536

00:18:30.180 --> 00:18:33.020 others a partial nephrectomy.

NOTE Confidence: 0.9402536

00:18:33.020 --> 00:18:35.463 Talk a little bit about how those

NOTE Confidence: 0.9402536

00:18:35.463 --> 00:18:39.018 decisions are made and kind of situation

NOTE Confidence: 0.9402536

00:18:39.020 --> 00:18:42.242 the treatment of kidney cancer in

NOTE Confidence: 0.9402536

00:18:42.242 --> 00:18:43.853 a multidisciplinary context,

NOTE Confidence: 0.95786455

00:18:44.260 --> 00:18:47.560 Probably first it is important to

NOTE Confidence: 0.95786455

00:18:47.560 --> 00:18:49.812 differentiate between cancers of the

NOTE Confidence: 0.95786455

00:18:49.812 --> 00:18:52.500 cortex or outer portion of the kidney,

NOTE Confidence: 0.95786455

00:18:52.500 --> 00:18:54.523 the sort of meaty part of the

NOTE Confidence: 0.95786455

00:18:54.523 --> 00:18:56.333 kidney and cancers of the lining

NOTE Confidence: 0.95786455

00:18:56.333 --> 00:18:58.097 or central part of the kidney.

00:19:01.580 --> 00:19:03.626 So this is really the urinary

NOTE Confidence: 0.95786455

00:19:03.626 --> 00:19:05.540 drainage part of the kidney.

NOTE Confidence: 0.95786455

00:19:05.540 --> 00:19:07.095 There are tumors that are

NOTE Confidence: 0.95786455

00:19:07.095 --> 00:19:08.339 both types of cancer,

NOTE Confidence: 0.95786455

00:19:08.340 --> 00:19:09.860 but different types and really

NOTE Confidence: 0.95786455

00:19:09.860 --> 00:19:11.380 managed in very different ways.

NOTE Confidence: 0.95786455

00:19:11.380 --> 00:19:13.035 So when we're talking about

NOTE Confidence: 0.95786455

00:19:13.035 --> 00:19:14.690 removing just the kidney or

NOTE Confidence: 0.95786455

00:19:14.752 --> 00:19:16.859 removing just a part of the kidney,

NOTE Confidence: 0.95786455

00:19:16.860 --> 00:19:18.486 usually we're talking

NOTE Confidence: 0.95786455

00:19:18.486 --> 00:19:20.654 about those cortical renal,

NOTE Confidence: 0.95786455

00:19:20.660 --> 00:19:22.785 usually renal cell carcinoma being

NOTE Confidence: 0.95786455

00:19:22.785 --> 00:19:25.470 the most common type renal tumors.

NOTE Confidence: 0.95786455

00:19:25.470 --> 00:19:26.510 When we're talking about the

NOTE Confidence: 0.95786455

00:19:26.510 --> 00:19:27.342 lining of the kidney,

00:19:28.610 --> 00:19:30.290 that's a different type of

NOTE Confidence: 0.95786455

00:19:30.290 --> 00:19:31.550 kidney cancer altogether,

NOTE Confidence: 0.95786455

00:19:31.550 --> 00:19:33.010 what we call urothelial carcinoma

NOTE Confidence: 0.95786455

00:19:33.010 --> 00:19:35.242 or it used to be referred to as

NOTE Confidence: 0.95786455

00:19:35.242 --> 00:19:36.307 transitional cell carcinoma.

NOTE Confidence: 0.95786455

00:19:36.310 --> 00:19:38.018 It's much more akin to bladder cancer

NOTE Confidence: 0.95786455

00:19:38.018 --> 00:19:39.778 really than it is to kidney cancer

NOTE Confidence: 0.95786455

00:19:39.778 --> 00:19:41.518 because the cell type that lines the

NOTE Confidence: 0.95786455

00:19:41.518 --> 00:19:43.093 renal pelvis and the ureter is the

NOTE Confidence: 0.95786455

00:19:43.093 --> 00:19:46.268 same type of cell that lines the bladder.

NOTE Confidence: 0.95786455

00:19:46.270 --> 00:19:48.670 And so our approach to those

NOTE Confidence: 0.95786455

00:19:48.670 --> 00:19:50.270 cancers is generally different.

NOTE Confidence: 0.95786455

00:19:50.270 --> 00:19:52.754 Now sometimes we're still removing the

NOTE Confidence: 0.95786455

00:19:52.754 --> 00:19:55.429 kidney for those renal pelvis tumors.

NOTE Confidence: 0.95786455

00:19:55.430 --> 00:19:56.750 But usually if we're doing that,

NOTE Confidence: 0.95786455

00:19:56.750 --> 00:19:58.046 we're also removing the

NOTE Confidence: 0.95786455

00:19:58.046 --> 00:19:59.666 entire ureter on that side.

NOTE Confidence: 0.95786455

00:19:59.670 --> 00:20:01.847 So taking that kidney tube that drains

NOTE Confidence: 0.95786455

00:20:01.847 --> 00:20:04.567 all the way down into the bladder and

NOTE Confidence: 0.95786455

00:20:04.567 --> 00:20:06.670 removing the entire thing and usually

NOTE Confidence: 0.95786455

00:20:06.670 --> 00:20:09.586 with a small portion of the bladder as well.

NOTE Confidence: 0.95786455

00:20:09.590 --> 00:20:10.928 So you know,

NOTE Confidence: 0.95786455

00:20:10.928 --> 00:20:13.378 again very different types of

NOTE Confidence: 0.95786455

00:20:13.378 --> 00:20:16.148 cancer managed in different ways.

NOTE Confidence: 0.95786455

00:20:16.150 --> 00:20:18.885 One thing I think probably

NOTE Confidence: 0.95786455

00:20:18.885 --> 00:20:21.073 bears bringing up is

NOTE Confidence: 0.95786455

00:20:21.080 --> 00:20:22.830 there are significant efforts afoot

NOTE Confidence: 0.95786455

00:20:22.830 --> 00:20:25.324 to try to spare removing the entire

NOTE Confidence: 0.95786455

00:20:25.324 --> 00:20:27.358 kidney and spare removing the entire

NOTE Confidence: 0.95786455

00:20:27.358 --> 00:20:29.295 kidney and ureter for some of

NOTE Confidence: 0.95786455

00:20:29.295 --> 00:20:31.256 these upper tract types of cancer.

00:20:31.960 --> 00:20:33.675 We didn't really have a lot of

NOTE Confidence: 0.95786455

00:20:33.675 --> 00:20:34.880 options until somewhat recently.

NOTE Confidence: 0.95786455

00:20:34.880 --> 00:20:37.638 Really in the past couple of years

NOTE Confidence: 0.95786455

00:20:37.640 --> 00:20:39.758 we were basically either doing that

NOTE Confidence: 0.95786455

00:20:39.758 --> 00:20:42.422 radical surgery or we were trying to

NOTE Confidence: 0.95786455

00:20:42.422 --> 00:20:44.397 manage what we could endoscopically,

NOTE Confidence: 0.95786455

00:20:44.400 --> 00:20:47.224 you know putting a camera up from below.

NOTE Confidence: 0.95786455

00:20:47.230 --> 00:20:48.112 Maybe doing biopsies,

NOTE Confidence: 0.95786455

00:20:48.112 --> 00:20:50.643 maybe using a laser to try to ablate  
NOTE Confidence: 0.95786455

00:20:50.643 --> 00:20:52.708 some of those tumors endoscopically,  
NOTE Confidence: 0.95786455

00:20:52.710 --> 00:20:54.138 but really only so much we could  
NOTE Confidence: 0.95786455

00:20:54.138 --> 00:20:54.750 do and again,  
NOTE Confidence: 0.95786455

00:20:54.750 --> 00:20:57.390 only treating what we could see.  
NOTE Confidence: 0.95786455

00:20:57.390 --> 00:21:00.046 We've just recently started  
NOTE Confidence: 0.95786455

00:21:00.046 --> 00:21:02.398 using a type of chemotherapeutic  
NOTE Confidence: 0.95786455

00:21:02.398 --> 00:21:03.664 agent called mitomycin,  
NOTE Confidence: 0.95786455

00:21:03.670 --> 00:21:05.278 which has been used in the  
NOTE Confidence: 0.95786455

00:21:05.278 --> 00:21:06.350 bladder for many years,  
NOTE Confidence: 0.95786455

00:21:06.350 --> 00:21:08.494 but it's been reformulated  
NOTE Confidence: 0.95786455

00:21:08.494 --> 00:21:11.470 into a gel type of format.  
NOTE Confidence: 0.95786455

00:21:11.470 --> 00:21:13.285 So the same medication but  
NOTE Confidence: 0.95786455

00:21:13.285 --> 00:21:15.470 sort of suspended in a gel.  
NOTE Confidence: 0.95786455

00:21:15.470 --> 00:21:17.520 And this has been approved since 2021,  
NOTE Confidence: 0.95786455

00:21:17.520 --> 00:21:19.830 but this is can now be instilled

NOTE Confidence: 0.95786455

00:21:19.830 --> 00:21:21.909 directly into the kidney and for

NOTE Confidence: 0.95786455

00:21:21.909 --> 00:21:23.982 some patients offer them basically a

NOTE Confidence: 0.95786455

00:21:23.982 --> 00:21:26.070 nonsurgical option to try to treat

NOTE Confidence: 0.95786455

00:21:26.133 --> 00:21:28.436 and really ablate some of these lower

NOTE Confidence: 0.95786455

00:21:28.436 --> 00:21:30.468 grade tumors and save the kidney.

NOTE Confidence: 0.936228174

00:21:30.870 --> 00:21:34.790 Wow. I mean that sounds really remarkable.

NOTE Confidence: 0.936228174

00:21:34.790 --> 00:21:37.905 So because as you described,

NOTE Confidence: 0.936228174

00:21:37.910 --> 00:21:39.170 the surgery itself,

NOTE Confidence: 0.936228174

00:21:39.170 --> 00:21:41.270 nobody first of all would

NOTE Confidence: 0.936228174

00:21:41.270 --> 00:21:43.867 necessarily want to undergo a surgery period,

NOTE Confidence: 0.936228174

00:21:43.870 --> 00:21:46.696 even if it can be done with small little

NOTE Confidence: 0.936228174

00:21:46.696 --> 00:21:49.029 incisions using a laparoscope or a robot.

NOTE Confidence: 0.936228174

00:21:49.030 --> 00:21:51.190 But when you think about removing the kidney,

NOTE Confidence: 0.936228174

00:21:51.190 --> 00:21:52.735 removing the ureter,

NOTE Confidence: 0.936228174

00:21:52.735 --> 00:21:55.310 removing part of the bladder,

NOTE Confidence: 0.936228174

00:21:55.310 --> 00:21:57.704 you know that sounds rather extensive.

NOTE Confidence: 0.936228174

00:21:57.710 --> 00:22:00.146 If this can be treated with installation

NOTE Confidence: 0.936228174

00:22:00.146 --> 00:22:03.360 of a gel in the kidney that

NOTE Confidence: 0.936228174

00:22:03.360 --> 00:22:05.346 seems much more palatable.

NOTE Confidence: 0.936228174

00:22:05.346 --> 00:22:08.279 Talk a little bit about which patients

NOTE Confidence: 0.936228174

00:22:08.279 --> 00:22:11.086 are eligible for this and how exactly

NOTE Confidence: 0.936228174

00:22:11.086 --> 00:22:14.129 do we get the gel into the kidney?

NOTE Confidence: 0.9402536

00:22:15.410 --> 00:22:17.570 It is important to note,

NOTE Confidence: 0.9402536

00:22:17.570 --> 00:22:20.970 not every patient would be a candidate for

NOTE Confidence: 0.9402536

00:22:20.970 --> 00:22:24.288 this mitomycin gel installation.

NOTE Confidence: 0.9402536

00:22:24.290 --> 00:22:26.735 Really we're talking about patients

NOTE Confidence: 0.9402536

00:22:26.735 --> 00:22:30.127 with low grade tumors of the renal

NOTE Confidence: 0.9402536

00:22:30.127 --> 00:22:32.695 pelvis and in some cases ureter.

NOTE Confidence: 0.9402536

00:22:32.700 --> 00:22:34.398 Generally speaking those are patients that

NOTE Confidence: 0.9402536

00:22:34.398 --> 00:22:36.540 have already had an endoscopic procedure,

NOTE Confidence: 0.9402536

00:22:36.540 --> 00:22:37.952 they've had a biopsy,

NOTE Confidence: 0.9402536

00:22:37.952 --> 00:22:39.717 they've had pathology

NOTE Confidence: 0.9402536

00:22:39.717 --> 00:22:41.020 proving that diagnosis.

NOTE Confidence: 0.9402536

00:22:41.020 --> 00:22:44.620 So what's done is usually it's

NOTE Confidence: 0.9402536

00:22:44.620 --> 00:22:47.626 either instilled by looking into a

NOTE Confidence: 0.9402536

00:22:47.626 --> 00:22:49.636 patient's bladder with the camera

NOTE Confidence: 0.9402536

00:22:49.636 --> 00:22:51.780 cystoscope and then putting a small

NOTE Confidence: 0.9402536

00:22:51.780 --> 00:22:53.620 open-ended catheter or tube up

NOTE Confidence: 0.9402536

00:22:53.620 --> 00:22:56.435 into the ureter up into the renal

NOTE Confidence: 0.9402536

00:22:56.435 --> 00:22:58.680 pelvis and then basically injecting

NOTE Confidence: 0.9402536

00:22:58.680 --> 00:23:00.755 this gel material up directly

NOTE Confidence: 0.9402536

00:23:00.755 --> 00:23:02.975 through that catheter can also be

NOTE Confidence: 0.9402536

00:23:02.975 --> 00:23:04.600 placed through a nephrostomy tube,

NOTE Confidence: 0.9402536

00:23:04.600 --> 00:23:07.029 which is a drain that goes directly

NOTE Confidence: 0.9402536

00:23:07.029 --> 00:23:09.446 into the kidney through a patient's

NOTE Confidence: 0.9402536

00:23:09.446 --> 00:23:11.760 back usually and sort of instilled

NOTE Confidence: 0.9402536

00:23:11.760 --> 00:23:13.920 in an antigrade fashion that way.  
NOTE Confidence: 0.9402536

00:23:13.920 --> 00:23:16.360 It's given as a series of 6 treatments  
NOTE Confidence: 0.9402536

00:23:16.360 --> 00:23:19.231 once a week as sort of an induction phase  
NOTE Confidence: 0.9402536

00:23:19.231 --> 00:23:22.276 and then if patients have a good response,  
NOTE Confidence: 0.9402536

00:23:22.280 --> 00:23:24.728 which is generally judged by another  
NOTE Confidence: 0.9402536

00:23:24.728 --> 00:23:27.179 endoscopic look up into the kidney,  
NOTE Confidence: 0.9402536

00:23:27.180 --> 00:23:29.030 they might be a candidate  
NOTE Confidence: 0.9402536

00:23:29.030 --> 00:23:30.140 for maintenance treatments,  
NOTE Confidence: 0.9402536

00:23:30.140 --> 00:23:32.340 which would be once monthly for up to a year.  
NOTE Confidence: 0.91863912

00:23:32.740 --> 00:23:35.380 That doesn't sound too bad.  
NOTE Confidence: 0.91863912

00:23:35.380 --> 00:23:36.760 It doesn't sound perfect.  
NOTE Confidence: 0.91863912

00:23:36.760 --> 00:23:39.532 It's not like it's a pill that  
NOTE Confidence: 0.91863912

00:23:39.532 --> 00:23:42.140 you can take and be done with it.  
NOTE Confidence: 0.91863912

00:23:42.140 --> 00:23:43.500 It's still somewhat invasive,  
NOTE Confidence: 0.91863912

00:23:43.500 --> 00:23:44.900 but certainly not a surgery.  
NOTE Confidence: 0.91863912

00:23:44.900 --> 00:23:48.980 It sounds like both the cystoscopic

NOTE Confidence: 0.91863912

00:23:48.980 --> 00:23:51.718 procedure or the installation through

NOTE Confidence: 0.91863912

00:23:51.718 --> 00:23:54.161 a nephrostomy tube would be done as

NOTE Confidence: 0.91863912

00:23:54.161 --> 00:23:56.738 an outpatient basis, like a quick

NOTE Confidence: 0.91863912

00:23:56.738 --> 00:23:59.910 pop in and get your installation and leave.

NOTE Confidence: 0.91863912

00:23:59.910 --> 00:24:01.310 Is that kind of how that works?

NOTE Confidence: 0.91863912

00:24:01.510 --> 00:24:03.790 Yep, absolutely.

NOTE Confidence: 0.839614232857143

00:24:03.790 --> 00:24:05.148 You know, it has to be done,

NOTE Confidence: 0.839614232857143

00:24:05.150 --> 00:24:07.268 at least initially, in an environment

NOTE Confidence: 0.839614232857143

00:24:07.268 --> 00:24:09.510 where you can take some X-rays.

NOTE Confidence: 0.839614232857143

00:24:09.510 --> 00:24:11.827 We do fluoroscopic images to measure the

NOTE Confidence: 0.839614232857143

00:24:11.827 --> 00:24:14.918 size of the renal pelvis so we can calculate

NOTE Confidence: 0.839614232857143

00:24:14.918 --> 00:24:17.289 how much medicine we have to put in.

NOTE Confidence: 0.839614232857143

00:24:17.290 --> 00:24:19.210 And once you have that calculation,

NOTE Confidence: 0.839614232857143

00:24:19.210 --> 00:24:20.729 you can do it in the clinic.

NOTE Confidence: 0.839614232857143

00:24:20.730 --> 00:24:23.290 If you have fluoroscopic capabilities,

NOTE Confidence: 0.839614232857143

00:24:23.290 --> 00:24:26.370 you could do it in a radiology suite.  
NOTE Confidence: 0.839614232857143

00:24:26.370 --> 00:24:28.806 In a patient with a nephrostomy tube,  
NOTE Confidence: 0.839614232857143

00:24:28.810 --> 00:24:32.086 once you have the volume of the renal pelvis,  
NOTE Confidence: 0.839614232857143

00:24:32.090 --> 00:24:34.512 you could do it in the clinic  
NOTE Confidence: 0.839614232857143

00:24:34.512 --> 00:24:35.550 even without fluoroscopy.  
NOTE Confidence: 0.839614232857143

00:24:35.550 --> 00:24:38.110 So yeah, I think to your point,  
NOTE Confidence: 0.839614232857143

00:24:38.110 --> 00:24:39.510 it is definitely not perfect,  
NOTE Confidence: 0.839614232857143

00:24:39.510 --> 00:24:40.788 but it is a better option.  
NOTE Confidence: 0.839614232857143

00:24:40.790 --> 00:24:42.309 I'll give you a great example actually.  
NOTE Confidence: 0.839614232857143

00:24:42.310 --> 00:24:43.630 So I have a patient,  
NOTE Confidence: 0.839614232857143

00:24:43.630 --> 00:24:44.605 the solitary kidney,  
NOTE Confidence: 0.839614232857143

00:24:44.605 --> 00:24:47.390 so he doesn't have an option.  
NOTE Confidence: 0.839614232857143

00:24:47.390 --> 00:24:49.588 He's actually already had his other kidney  
NOTE Confidence: 0.839614232857143

00:24:49.588 --> 00:24:51.667 removed for the same disease.  
NOTE Confidence: 0.839614232857143

00:24:51.670 --> 00:24:52.909 So we can't take his kidney out.  
NOTE Confidence: 0.839614232857143

00:24:52.910 --> 00:24:54.582 I mean we could,

NOTE Confidence: 0.839614232857143

00:24:54.582 --> 00:24:57.949 but he'd be on dialysis probably for life.

NOTE Confidence: 0.839614232857143

00:24:57.950 --> 00:25:00.435 So kind of a perfect patient to

NOTE Confidence: 0.839614232857143

00:25:00.435 --> 00:25:02.714 to offer something like this who

NOTE Confidence: 0.839614232857143

00:25:02.714 --> 00:25:04.988 really has no other options.

NOTE Confidence: 0.9352218

00:25:05.780 --> 00:25:07.616 And so how effective is it?

NOTE Confidence: 0.9352218

00:25:07.620 --> 00:25:09.146 I mean you mentioned that it was

NOTE Confidence: 0.9352218

00:25:09.146 --> 00:25:10.780 approved just in the last year or two.

NOTE Confidence: 0.9352218

00:25:10.780 --> 00:25:13.196 Do we have data that after

NOTE Confidence: 0.9352218

00:25:13.196 --> 00:25:15.516 a year of this maintenance therapy

NOTE Confidence: 0.9352218

00:25:15.516 --> 00:25:18.220 if you've had a good response and

NOTE Confidence: 0.9352218

00:25:18.220 --> 00:25:19.420 maybe that's the first question,

NOTE Confidence: 0.9352218

00:25:19.420 --> 00:25:20.556 what proportion of people

NOTE Confidence: 0.9352218

00:25:20.556 --> 00:25:21.976 actually have a good response?

NOTE Confidence: 0.9352218

00:25:21.980 --> 00:25:24.220 And then second after you've

NOTE Confidence: 0.9352218

00:25:24.220 --> 00:25:26.460 had this year of maintenance,

NOTE Confidence: 0.9352218

00:25:26.460 --> 00:25:28.686 are we expecting this to be  
NOTE Confidence: 0.9352218

00:25:28.686 --> 00:25:30.953 durable long term so that you  
NOTE Confidence: 0.9352218

00:25:30.953 --> 00:25:33.417 know that's kind of one and done?  
NOTE Confidence: 0.943913018181818

00:25:33.970 --> 00:25:36.340 Yeah. So like any other medication  
NOTE Confidence: 0.943913018181818

00:25:36.340 --> 00:25:38.694 that gets approved by the FDA,  
NOTE Confidence: 0.943913018181818

00:25:38.694 --> 00:25:41.114 this had to essentially prove  
NOTE Confidence: 0.943913018181818

00:25:41.114 --> 00:25:43.050 its efficacy before that.  
NOTE Confidence: 0.943913018181818

00:25:43.050 --> 00:25:45.190 So there are trials,  
NOTE Confidence: 0.943913018181818

00:25:45.190 --> 00:25:47.330 basically two major trials  
NOTE Confidence: 0.943913018181818

00:25:47.330 --> 00:25:48.670 we actually are  
NOTE Confidence: 0.943913018181818

00:25:48.670 --> 00:25:50.010 seeing complete response in a  
NOTE Confidence: 0.943913018181818

00:25:50.065 --> 00:25:51.530 fair number of these patients,  
NOTE Confidence: 0.943913018181818

00:25:51.530 --> 00:25:53.090 I mean upwards of 50-60,  
NOTE Confidence: 0.943913018181818

00:25:53.090 --> 00:25:57.548 even 70% which is remarkable actually.  
NOTE Confidence: 0.943913018181818

00:25:57.550 --> 00:26:00.133 Again, I think we don't really have  
NOTE Confidence: 0.943913018181818

00:26:00.133 --> 00:26:02.332 101-5 year data because it's only

NOTE Confidence: 0.943913018181818

00:26:02.332 --> 00:26:05.135 been out for a few years and it's

NOTE Confidence: 0.943913018181818

00:26:05.135 --> 00:26:07.585 not a common disease so to speak.

NOTE Confidence: 0.943913018181818

00:26:07.590 --> 00:26:10.579 I mean statistically there are

NOTE Confidence: 0.943913018181818

00:26:10.579 --> 00:26:13.708 about 80,000 new kidney cancers per year,

NOTE Confidence: 0.943913018181818

00:26:13.710 --> 00:26:16.573 about 5% of those are these particular

NOTE Confidence: 0.943913018181818

00:26:16.573 --> 00:26:18.750 upper tract urothelial types, so

NOTE Confidence: 0.943913018181818

00:26:18.750 --> 00:26:21.630 not a huge number of patients,

NOTE Confidence: 0.943913018181818

00:26:21.630 --> 00:26:22.902 but you know, again,

NOTE Confidence: 0.943913018181818

00:26:22.902 --> 00:26:25.187 when you're talking about the option of

NOTE Confidence: 0.943913018181818

00:26:25.187 --> 00:26:27.385 complete removal of the kidney and ureter,

NOTE Confidence: 0.943913018181818

00:26:27.390 --> 00:26:29.560 which is not just surgery

NOTE Confidence: 0.943913018181818

00:26:29.560 --> 00:26:31.030 and recovery from surgery,

NOTE Confidence: 0.943913018181818

00:26:31.030 --> 00:26:33.142 but is also the impact on

NOTE Confidence: 0.943913018181818

00:26:33.142 --> 00:26:34.550 kidney function long term,

NOTE Confidence: 0.943913018181818

00:26:34.550 --> 00:26:35.850 you know, renal insufficiency,

NOTE Confidence: 0.943913018181818

00:26:35.850 --> 00:26:36.825 chronic kidney disease,  
NOTE Confidence: 0.943913018181818

00:26:36.830 --> 00:26:39.668 possibly even dialysis,  
NOTE Confidence: 0.943913018181818

00:26:39.670 --> 00:26:41.270 I think this is a good option  
00:26:41.670 --> 00:26:42.470 for the right patient.  
NOTE Confidence: 0.94629164

00:26:42.870 --> 00:26:45.310 Yeah, and regardless of whether  
NOTE Confidence: 0.94629164

00:26:45.310 --> 00:26:47.750 you go the surgical route  
NOTE Confidence: 0.94629164

00:26:47.750 --> 00:26:51.705 or the installation route,  
NOTE Confidence: 0.94629164

00:26:51.710 --> 00:26:53.420 I mean certainly some people aren't  
NOTE Confidence: 0.94629164

00:26:53.420 --> 00:26:55.655 going to have the option of the latter  
NOTE Confidence: 0.94629164

00:26:55.655 --> 00:26:57.590 if they have a higher grade tumor.  
NOTE Confidence: 0.948879371428571

00:26:59.670 --> 00:27:01.718 Can you talk a little bit about other  
NOTE Confidence: 0.948879371428571

00:27:01.718 --> 00:27:03.709 therapies that these patients might require?  
NOTE Confidence: 0.948879371428571

00:27:03.710 --> 00:27:06.614 I mean how often do these patients also  
NOTE Confidence: 0.948879371428571

00:27:06.614 --> 00:27:08.988 need systemic therapies or radiation?  
NOTE Confidence: 0.937395028571429

00:27:09.430 --> 00:27:12.713 Yeah, so radiation is not commonly used  
NOTE Confidence: 0.937395028571429

00:27:12.713 --> 00:27:16.020 really for either type of kidney cancer.  
NOTE Confidence: 0.937395028571429

00:27:16.020 --> 00:27:18.066 For those cortical tumors or for  
NOTE Confidence: 0.937395028571429

00:27:18.066 --> 00:27:19.900 the upper tract urothelial tumors,  
NOTE Confidence: 0.937395028571429

00:27:19.900 --> 00:27:22.100 chemotherapy, it's interesting really  
NOTE Confidence: 0.937395028571429

00:27:22.100 --> 00:27:27.080 has gained well I should say in the two  
NOTE Confidence: 0.937395028571429

00:27:27.080 --> 00:27:29.735 different disease settings some footing.  
NOTE Confidence: 0.937395028571429

00:27:29.740 --> 00:27:32.460 So for the cortical tumors of the kidney,  
NOTE Confidence: 0.937395028571429

00:27:32.460 --> 00:27:34.345 like those solid renal tumors  
NOTE Confidence: 0.937395028571429

00:27:34.345 --> 00:27:35.853 we discussed earlier on,  
NOTE Confidence: 0.937395028571429

00:27:35.860 --> 00:27:38.872 there's been a lot of interest  
NOTE Confidence: 0.937395028571429

00:27:38.872 --> 00:27:40.378 in using immunotherapy.  
NOTE Confidence: 0.937395028571429

00:27:40.380 --> 00:27:42.630 So people might be familiar with  
NOTE Confidence: 0.937395028571429

00:27:42.630 --> 00:27:45.059 that for things like lung cancer.  
NOTE Confidence: 0.937395028571429

00:27:45.060 --> 00:27:47.064 And that's being used for metastatic  
NOTE Confidence: 0.937395028571429

00:27:47.064 --> 00:27:49.630 disease for some time and now is gaining  
NOTE Confidence: 0.937395028571429

00:27:49.630 --> 00:27:51.828 some use in patients with higher risk  
NOTE Confidence: 0.937395028571429

00:27:51.828 --> 00:27:54.037 tumors that are completely removed for

NOTE Confidence: 0.937395028571429  
00:27:54.037 --> 00:27:56.059 patients with that upper tract urothelial,  
NOTE Confidence: 0.937395028571429  
00:27:56.060 --> 00:27:57.676 the more bladder cancer  
NOTE Confidence: 0.937395028571429  
00:27:57.676 --> 00:28:00.100 type of tumor if you will.  
NOTE Confidence: 0.937395028571429  
00:28:00.100 --> 00:28:01.858 Those patients are sometimes treated with  
NOTE Confidence: 0.937395028571429  
00:28:01.858 --> 00:28:03.660 what we call neoadjuvant chemotherapy.  
NOTE Confidence: 0.937395028571429  
00:28:03.660 --> 00:28:07.300 So they may get chemo before their treatment.  
NOTE Confidence: 0.937395028571429  
00:28:07.300 --> 00:28:09.820 There's a lot of debate about that,  
NOTE Confidence: 0.937395028571429  
00:28:09.820 --> 00:28:11.140 some of that's extrapolated  
NOTE Confidence: 0.937395028571429  
00:28:11.140 --> 00:28:13.860 from bladder cancer data, but  
NOTE Confidence: 0.937395028571429  
00:28:13.860 --> 00:28:14.676 the challenge, of course,  
NOTE Confidence: 0.937395028571429  
00:28:14.676 --> 00:28:15.900 is once the kidney is removed,  
NOTE Confidence: 0.937395028571429  
00:28:15.900 --> 00:28:17.748 those patients may not be able  
NOTE Confidence: 0.937395028571429  
00:28:17.748 --> 00:28:18.980 to tolerate systemic chemotherapy  
NOTE Confidence: 0.937395028571429  
00:28:19.030 --> 00:28:20.860 because of the kidney function issues.  
NOTE Confidence: 0.937395028571429  
00:28:20.860 --> 00:28:24.316 So often they will be seen by a  
NOTE Confidence: 0.937395028571429

00:28:24.316 --> 00:28:26.220 medical oncologist in concurrence  
NOTE Confidence: 0.937395028571429

00:28:26.220 --> 00:28:27.780 with radiation perhaps,  
00:28:29.004 --> 00:28:31.044 but usually it's urology and possibly  
NOTE Confidence: 0.937395028571429

00:28:31.044 --> 00:28:31.860 medical oncology.  
NOTE Confidence: 0.941478970588235

00:28:32.660 --> 00:28:34.814 Doctor Joseph Brito is an assistant  
NOTE Confidence: 0.941478970588235

00:28:34.814 --> 00:28:36.639 professor of medicine and urology  
NOTE Confidence: 0.941478970588235

00:28:36.639 --> 00:28:38.577 at the Yale School of Medicine.  
NOTE Confidence: 0.941478970588235

00:28:38.580 --> 00:28:40.818 If you have questions, the address  
NOTE Confidence: 0.941478970588235

00:28:40.818 --> 00:28:43.260 is cancer Answers at Yale dot Edu.  
NOTE Confidence: 0.941478970588235

00:28:43.260 --> 00:28:45.492 And past editions of the program  
NOTE Confidence: 0.941478970588235

00:28:45.492 --> 00:28:47.695 are available in audio and written  
NOTE Confidence: 0.941478970588235

00:28:47.695 --> 00:28:48.643 form at yalecancercenter.org.  
NOTE Confidence: 0.941478970588235

00:28:48.643 --> 00:28:51.067 We hope you'll join us next week to  
NOTE Confidence: 0.941478970588235

00:28:51.067 --> 00:28:52.910 learn more about the fight against  
NOTE Confidence: 0.941478970588235

00:28:52.910 --> 00:28:54.740 cancer here on Connecticut Public Radio.  
NOTE Confidence: 0.941478970588235

00:28:54.740 --> 00:28:57.434 Funding for Yale Cancer Answers is  
NOTE Confidence: 0.941478970588235

00:28:57.434 --> 00:29:00.000 provided by Smilow Cancer Hospital.