WEBVTT

00:00:00.000 --> 00:00:02.625 Support for Yale Cancer Answers

NOTE Confidence: 0.8646243

00:00:02.625 --> 00:00:05.250 comes from AstraZeneca, working side

NOTE Confidence: 0.8646243

00:00:05.335 --> 00:00:08.347 by side with leading scientists to

NOTE Confidence: 0.8646243

00:00:08.347 --> 00:00:11.494 better understand how complex data

NOTE Confidence: 0.8646243

00:00:11.494 --> 00:00:15.730 can be converted into

NOTE Confidence: 0.8646243

00:00:15.730 --> 00:00:16.789 innovative treatments. More information at astrazeneca-us.com.

NOTE Confidence: 0.8646243

00:00:16.790 --> 00:00:18.932 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.8646243

00:00:18.932 --> 00:00:20.889 your host, Doctor Anees Chagpar.

NOTE Confidence: 0.8646243

00:00:20.889 --> 00:00:22.954 Yale Cancer Answers features the

NOTE Confidence: 0.8646243

00:00:22.954 --> 00:00:24.914 latest information on cancer care

NOTE Confidence: 0.8646243

00:00:24.914 --> 00:00:26.342 by welcoming oncologists and

NOTE Confidence: 0.8646243

00:00:26.342 --> 00:00:28.048 specialists who are on the

NOTE Confidence: 0.8646243

00:00:28.048 --> 00:00:29.782 forefront of the battle to fight

NOTE Confidence: 0.8646243

00:00:29.782 --> 00:00:31.392 cancer. This week it's a

NOTE Confidence: 0.8646243

00:00:31.392 --> 00:00:33.112 conversation about the use of

NOTE Confidence: 0.8646243

00:00:33.112 --> 00:00:34.958 robotic surgery for colon and

NOTE Confidence: 0.8646243

00:00:34.958 --> 00:00:36.773 rectal cancers with Doctor George

NOTE Confidence: 0.8646243

00:00:36.773 --> 00:00:38.660 Yavorek. Doctor Yavorek is a

NOTE Confidence: 0.8646243

00:00:38.660 --> 00:00:40.180 clinical instructor of surgery

NOTE Confidence: 0.8646243

00:00:40.180 --> 00:00:41.696 specializing in gastro bariatrics

NOTE Confidence: 0.8646243

00:00:41.696 --> 00:00:43.772 at the Yale School of Medicine

NOTE Confidence: 0.8646243

00:00:43.772 --> 00:00:45.830 where Doctor Chagpar is a

NOTE Confidence: 0.8646243

00:00:45.830 --> 00:00:47.134 professor of surgical oncology.

NOTE Confidence: 0.88065165

00:00:48.300 --> 00:00:50.470 George, maybe we can

NOTE Confidence: 0.88065165

00:00:50.470 --> 00:00:53.158 start off by talking

NOTE Confidence: 0.88065165

00:00:53.158 --> 00:00:55.263 about screening for colon cancer.

NOTE Confidence: 0.88065165

00:00:55.270 --> 00:00:56.738 I understand that guidelines

NOTE Confidence: 0.88065165

00:00:56.738 --> 00:00:58.206 have recently changed in

NOTE Confidence: 0.88065165

00:00:58.210 --> 00:01:00.040 that regard.

NOTE Confidence: 0.88065165

00:01:00.040 --> 00:01:02.434 Yes, we've seen over the last 10 years

NOTE Confidence: 0.88065165

00:01:02.434 --> 00:01:04.335 that the incidence of colon

NOTE Confidence: 0.88065165

00:01:04.335 --> 00:01:06.340 cancer in younger individuals has

NOTE Confidence: 0.88065165

00:01:06.340 --> 00:01:08.482 increased by about 2% per year

NOTE Confidence: 0.88065165

00:01:08.482 --> 00:01:11.044 over the last five years or so,

NOTE Confidence: 0.88065165

00:01:11.050 --> 00:01:12.650 so the recommendations have

NOTE Confidence: 0.88065165

00:01:12.650 --> 00:01:14.250 changed to start screening

NOTE Confidence: 0.88065165

00:01:14.250 --> 00:01:16.557 at age 45 rather than age 50.

NOTE Confidence: 0.88065165

00:01:16.560 --> 00:01:19.216 Tell us a little bit more about

NOTE Confidence: 0.88065165

00:01:19.216 --> 00:01:21.788 what that screening entails because

NOTE Confidence: 0.88065165

00:01:21.790 --> 00:01:24.841 there seems to be a potpourri of

NOTE Confidence: 0.88065165

00:01:24.841 --> 00:01:27.178 different screening options for people,

NOTE Confidence: 0.88065165

00:01:27.180 --> 00:01:29.973 and they may be wondering about what

NOTE Confidence: 0.88065165

00:01:29.973 --> 00:01:32.570 screening technique is best for them.

NOTE Confidence: 0.86259425

00:01:32.570 --> 00:01:35.120 There are several options and most people

NOTE Confidence: 0.86259425

00:01:35.120 --> 00:01:37.541 would agree that colonoscopy is the

NOTE Confidence: 0.86259425

00:01:37.541 --> 00:01:39.491 best screening tool because it can

NOTE Confidence: 0.86259425

00:01:39.491 --> 00:01:41.807 also be therapeutic at the time.

NOTE Confidence: 0.86259425

00:01:41.810 --> 00:01:46.045 If you do find a polyp or a larger lesion, it

NOTE Confidence: 0.86259425

00:01:46.045 --> 00:01:49.510 can be removed or biopsied at the same time.

NOTE Confidence: 0.86259425

00:01:49.510 --> 00:01:51.414 Other options would include

NOTE Confidence: 0.86259425

00:01:51.414 --> 00:01:53.318 fecal occult blood testing.

NOTE Confidence: 0.86259425

00:01:53.320 --> 00:01:55.680 Which is not as specific.

NOTE Confidence: 0.86259425

00:01:55.680 --> 00:01:58.506 There is now DNA testing, Cologuard,

NOTE Confidence: 0.86259425

00:01:58.510 --> 00:02:01.342 which is rather specific for advanced

NOTE Confidence: 0.86259425

00:02:01.342 --> 00:02:03.612 lesions, tumors or large polyps,

NOTE Confidence: 0.86259425

00:02:03.612 --> 00:02:07.010 but when you get to smaller polyps,

NOTE Confidence: 0.86259425

00:02:07.010 --> 00:02:11.810 the sensitivity is not very good, it is

NOTE Confidence: 0.86259425

00:02:11.810 --> 00:02:13.616 good for people who don't want

NOTE Confidence: 0.86259425

00:02:13.616 --> 00:02:15.680 to go through a colonoscopy,

NOTE Confidence: 0.86259425

00:02:15.680 --> 00:02:17.786 or perhaps because of medical reasons

NOTE Confidence: 0.86259425

00:02:17.790 --> 00:02:18.765 can't do that.

NOTE Confidence: 0.86259425

00:02:18.765 --> 00:02:20.390 Other options might include

NOTE Confidence: 0.86259425

00:02:20.390 --> 00:02:22.370 what they call ECT collography,

NOTE Confidence: 0.86259425

00:02:22.370 --> 00:02:24.476 which is essentially a virtual colonoscopy.

NOTE Confidence: 0.86259425

00:02:24.480 --> 00:02:25.888 The sensitivity is roughly

NOTE Confidence: 0.86259425

00:02:25.888 --> 00:02:27.296 equivalent to a colonoscopy.

NOTE Confidence: 0.86259425

00:02:27.300 --> 00:02:27.621 However,

NOTE Confidence: 0.86259425

00:02:27.621 --> 00:02:29.547 if something is found then you

NOTE Confidence: 0.86259425

00:02:29.547 --> 00:02:31.715 have to go through a colonoscopy

NOTE Confidence: 0.86259425

00:02:31.715 --> 00:02:33.983 to have it removed or biopsied.

NOTE Confidence: 0.8945195

00:02:35.650 --> 00:02:38.066 And so it sounds like there's

NOTE Confidence: 0.8945195

00:02:38.066 --> 00:02:40.477 so many factors that are involved

NOTE Confidence: 0.8945195

00:02:40.477 --> 00:02:43.399 for people to try to parse out.

NOTE Confidence: 0.8945195

00:02:43.400 --> 00:02:45.338 What's the best technique for them?

NOTE Confidence: 0.8945195

00:02:45.340 --> 00:02:46.632 That's probably a discussion that

NOTE Confidence: 0.8945195

00:02:46.632 --> 00:02:48.570 they have with their family doctor.

NOTE Confidence: 0.8385919

00:02:49.460 --> 00:02:52.418 or gastroenterologist

NOTE Confidence: 0.8385919

00:02:52.418 --> 00:02:53.897 or colorectal surgeon.

NOTE Confidence: 0.8385919

00:02:53.900 --> 00:02:56.075 Someone who does screening and

NOTE Confidence: 0.8385919

00:02:56.075 --> 00:02:58.925 can tailor the screening

NOTE Confidence: 0.8385919

00:02:58.925 --> 00:03:01.289 program to the individual.

NOTE Confidence: 0.88586426

00:03:02.640 --> 00:03:04.938 And so now that the screening

NOTE Confidence: 0.88586426

00:03:04.938 --> 00:03:07.046 guidelines have changed and they've

NOTE Confidence: 0.88586426

00:03:07.046 --> 00:03:09.566 recommended starting screening at 45,

NOTE Confidence: 0.88586426

00:03:09.570 --> 00:03:12.882 is that for average risk people or is

NOTE Confidence: 0.88586426

00:03:12.882 --> 00:03:16.057 that for people who may have other

NOTE Confidence: 0.88586426

00:03:16.060 --> 00:03:16.924 predisposing factors?

NOTE Confidence: 0.88586426

00:03:16.924 --> 00:03:19.084 No, that's for average risk.

00:03:19.942 --> 00:03:22.072 People with a higher risk

NOTE Confidence: 0.88586426

00:03:22.072 --> 00:03:23.860 actually would start sooner.

NOTE Confidence: 0.88586426

00:03:23.860 --> 00:03:26.485 Typical recommendation for someone with

NOTE Confidence: 0.88586426

00:03:26.485 --> 00:03:29.881 a first degree relative who has had

NOTE Confidence: 0.88586426

00:03:29.881 --> 00:03:33.190 colon cancer is to start at least 10 years

NOTE Confidence: 0.88586426

00:03:33.190 --> 00:03:36.025 younger than when that cancer was diagnosed.

NOTE Confidence: 0.88586426

00:03:36.030 --> 00:03:39.360 So if the person has a parent who

NOTE Confidence: 0.88586426

00:03:39.360 --> 00:03:42.507 had colon cancer at about age 50,

NOTE Confidence: 0.88586426

00:03:42.510 --> 00:03:44.940 they should start at age 40.

NOTE Confidence: 0.88586426

00:03:44.940 --> 00:03:46.850 Other high risk situations might

NOTE Confidence: 0.88586426

00:03:46.850 --> 00:03:48.760 be someone with Crohn's disease

NOTE Confidence: 0.88586426

00:03:48.819 --> 00:03:50.607 or inflammatory bowel disease,

NOTE Confidence: 0.88586426

00:03:50.610 --> 00:03:53.082 or someone with a history of

NOTE Confidence: 0.88586426

00:03:53.082 --> 00:03:54.730 Polyposis syndrome that would

NOTE Confidence: 0.88586426

00:03:54.804 --> 00:03:57.209 increase their risk of developing

NOTE Confidence: 0.88586426

00:03:57.209 --> 00:03:59.133 polyps and possibly cancer.

00:03:59.530 --> 00:04:02.288 So when should those people be screened?

NOTE Confidence: 0.8373385

00:04:02.290 --> 00:04:04.245 I mean, presumably people with

NOTE Confidence: 0.8373385

00:04:04.245 --> 00:04:06.644 Crohn's disease or other forms of

NOTE Confidence: 0.8373385

00:04:06.644 --> 00:04:08.504 IBD or Polyposis syndrome likely

NOTE Confidence: 0.8373385

00:04:08.504 --> 00:04:10.959 would have already had a colonoscopy,

NOTE Confidence: 0.8373385

00:04:10.960 --> 00:04:13.186 but when would be the bare minimum

NOTE Confidence: 0.8373385

00:04:13.186 --> 00:04:15.649 time that they should actually start

NOTE Confidence: 0.8373385

00:04:15.649 --> 00:04:18.044 getting regular screening for cancer?

NOTE Confidence: 0.8578926

00:04:19.340 --> 00:04:21.482 Well, typically when they first are seen

NOTE Confidence: 0.8578926

00:04:21.482 --> 00:04:23.820 and diagnosed with the problem

NOTE Confidence: 0.8578926

00:04:23.820 --> 00:04:25.680 whatever their condition might be,

NOTE Confidence: 0.8578926

00:04:25.680 --> 00:04:27.834 they're likely going to have an

NOTE Confidence: 0.8578926

00:04:27.834 --> 00:04:29.733 initial colonoscopy to evaluate the

NOTE Confidence: 0.8578926

00:04:29.733 --> 00:04:31.753 situation and then future surveillance

NOTE Confidence: 0.8578926

00:04:31.753 --> 00:04:33.890 colonoscopies would be based on that.

NOTE Confidence: 0.8578926

00:04:33.890 --> 00:04:35.780 So typically if someone were

NOTE Confidence: 0.8578926

00:04:35.780 --> 00:04:37.990 diagnosed with Crohn's and is in their 20s,

NOTE Confidence: 0.8578926

00:04:37.990 --> 00:04:40.524 it's likely they would have a colonoscopy

NOTE Confidence: 0.8578926

00:04:40.524 --> 00:04:43.190 at that time and then basically go

NOTE Confidence: 0.8578926

00:04:43.190 --> 00:04:45.446 from there on an individual basis,

NOTE Confidence: 0.8578926

00:04:45.450 --> 00:04:48.054 but typically every five to 10 years.

NOTE Confidence: 0.8578926

00:04:48.060 --> 00:04:49.736 If there were no

NOTE Confidence: 0.8578926

00:04:49.736 --> 00:04:52.250 significant clinical symptoms at

NOTE Confidence: 0.87420493

00:04:52.250 --> 00:04:55.127 the time of colonoscopy.

NOTE Confidence: 0.87420493

00:04:55.127 --> 00:04:57.639 You mentioend that colonoscopy can be both diagnostic and

NOTE Confidence: 0.87420493

00:04:57.639 --> 00:05:00.467 therapeutic, talk a little bit more about

NOTE Confidence: 0.87420493

00:05:00.537 --> 00:05:03.365 the therapeutic options when you are doing

NOTE Confidence: 0.87420493

00:05:03.365 --> 00:05:06.630 a colonoscopy and you you find a lesion.

NOTE Confidence: 0.87420493

00:05:06.630 --> 00:05:09.072 First of all, what kind of

NOTE Confidence: 0.87420493

00:05:09.072 --> 00:05:11.969 lesions do we find in the colon?

NOTE Confidence: 0.87420493

00:05:11.970 --> 00:05:14.025 And secondly, how can colonoscopy

NOTE Confidence: 0.87420493

00:05:14.025 --> 00:05:16.080 be therapeutic in that regard?

NOTE Confidence: 0.8484611

00:05:17.240 --> 00:05:19.916 So the whole purpose of screening

NOTE Confidence: 0.8484611

00:05:19.916 --> 00:05:22.515 colonoscopy is to evaluate the person

NOTE Confidence: 0.8484611

00:05:22.515 --> 00:05:25.084 to see if they have developed any

NOTE Confidence: 0.8484611

00:05:25.084 --> 00:05:27.293 polyps which we know are precursors

NOTE Confidence: 0.8484611

00:05:27.293 --> 00:05:29.442 to most of the colon cancers,

NOTE Confidence: 0.8484611

00:05:29.442 --> 00:05:32.498 and most of those polyps can be removed

NOTE Confidence: 0.8484611

00:05:32.498 --> 00:05:35.304 at the time of colonoscopy and therefore

NOTE Confidence: 0.8484611

00:05:35.304 --> 00:05:38.519 never go on to progress to a cancer.

NOTE Confidence: 0.8484611

00:05:38.520 --> 00:05:41.397 We have seen that the incidence of

NOTE Confidence: 0.8484611

00:05:41.397 --> 00:05:44.453 colon cancer has dropped over the last

NOTE Confidence: 0.8484611

00:05:44.453 --> 00:05:47.470 few decades and we attributed that to

NOTE Confidence: 0.8484611

00:05:47.470 --> 00:05:48.778 screening colonoscopies and

NOTE Confidence: 0.8484611

00:05:48.778 --> 00:05:50.958 polypectomy's that have removed those

NOTE Confidence: 0.8484611

00:05:50.958 --> 00:05:52.740 potential future cases of cancer.

NOTE Confidence: 0.8484611

00:05:52.740 --> 00:05:55.206 So there are several types of

NOTE Confidence: 0.8484611

00:05:55.206 --> 00:05:57.599 polyps and they vary in size.

NOTE Confidence: 0.8484611

00:05:57.600 --> 00:06:00.030 Most of them can be removed

NOTE Confidence: 0.8484611

00:06:00.030 --> 00:06:02.390 endoscopically, some when they

NOTE Confidence: 0.8484611

00:06:02.390 --> 00:06:05.747 get larger when they are about 2

NOTE Confidence: 0.8484611

00:06:05.747 --> 00:06:08.471 centimeters or an inch get more

NOTE Confidence: 0.8484611

00:06:08.471 --> 00:06:11.659 difficult to be removed and should be

NOTE Confidence: 0.8484611

00:06:11.660 --> 00:06:15.128 removed by someone who has

NOTE Confidence: 0.8484611

00:06:15.128 --> 00:06:16.862 advanced endoscopic skills,

NOTE Confidence: 0.8484611

00:06:16.870 --> 00:06:21.688 these have the potential to have

NOTE Confidence: 0.8484611

00:06:21.690 --> 00:06:23.568 malignant transformation what

NOTE Confidence: 0.8484611

00:06:23.568 --> 00:06:26.698 we called dysplasia or possible

NOTE Confidence: 0.8484611

00:06:26.698 --> 00:06:30.098 early invasion and might need more

NOTE Confidence: 0.8484611

00:06:30.098 --> 00:06:32.158 advanced techniques to remove.

00:06:32.590 --> 00:06:34.972 And presumably some of these lesions

NOTE Confidence: 0.8240043

00:06:34.972 --> 00:06:38.219 may be flat and colonoscopy,

NOTE Confidence: 0.8240043

00:06:38.220 --> 00:06:41.244 even if you can't remove a polyp,

NOTE Confidence: 0.8240043

00:06:41.250 --> 00:06:42.978 can certainly biopsy potential

NOTE Confidence: 0.8240043

00:06:42.978 --> 00:06:45.150 cancers?

NOTE Confidence: 0.8240043

00:06:45.150 --> 00:06:48.606 Yes, if it is too large to remove safely,

NOTE Confidence: 0.8240043

00:06:48.610 --> 00:06:51.938 then it is generally

NOTE Confidence: 0.8240043

00:06:51.938 --> 00:06:55.062 biopsied and marked with ink as a

NOTE Confidence: 0.8240043

00:06:55.062 --> 00:06:57.267 tattoo and referred for surgery.

NOTE Confidence: 0.8240043

00:06:57.270 --> 00:07:00.497 We think that these polyps should be

NOTE Confidence: 0.8240043

00:07:00.497 --> 00:07:02.882 completely removed again because of

NOTE Confidence: 0.8240043

00:07:02.882 --> 00:07:05.660 their potential to progress to cancer.

NOTE Confidence: 0.8240043

00:07:05.660 --> 00:07:08.160 These lesions being flat are

NOTE Confidence: 0.8240043

00:07:08.160 --> 00:07:10.660 much more difficult to remove,

NOTE Confidence: 0.8240043

00:07:10.660 --> 00:07:13.660 and if they do develop invasion,

NOTE Confidence: 0.8240043

00:07:13.660 --> 00:07:14.660 malignant invasion,

NOTE Confidence: 0.8240043

00:07:14.660 --> 00:07:18.748 they are much more likely to spread

NOTE Confidence: 0.8240043

00:07:18.750 --> 00:07:23.450 faster than a more polypoid lesion.

NOTE Confidence: 0.8515277

00:07:23.450 --> 00:07:25.660 So let's suppose

NOTE Confidence: 0.8515277

00:07:25.660 --> 00:07:27.428 you've done a colonoscopy.

NOTE Confidence: 0.8515277

00:07:27.430 --> 00:07:30.082 You've either found a polyp that

NOTE Confidence: 0.8515277

00:07:30.082 --> 00:07:31.850 you couldn't remove completely,

NOTE Confidence: 0.8515277

00:07:31.850 --> 00:07:35.298 or you found a lesion that you've

NOTE Confidence: 0.8515277

00:07:35.298 --> 00:07:38.040 biopsied, in either of those cases,

NOTE Confidence: 0.8515277

00:07:38.040 --> 00:07:39.764 if cancer was found,

NOTE Confidence: 0.8515277

00:07:39.764 --> 00:07:41.919 that would mean that the

NOTE Confidence: 0.8515277

00:07:41.919 --> 00:07:44.230 patient moves next to surgery.

NOTE Confidence: 0.8515277

00:07:44.230 --> 00:07:45.550 Is that right?

NOTE Confidence: 0.7787742

00:07:46.860 --> 00:07:50.656 Typically yes. Again, depending on

NOTE Confidence: 0.7787742

00:07:50.656 --> 00:07:53.470 the skill and what you're feeling of

NOTE Confidence: 0.7787742

00:07:53.470 --> 00:07:57.088 the whole lesion is

NOTE Confidence: 0.7787742

00:07:57.090 --> 00:07:59.040 there are very advanced techniques

NOTE Confidence: 0.7787742

00:07:59.040 --> 00:08:00.990 where endoscopies will take the

NOTE Confidence: 0.7787742

00:08:01.058 --> 00:08:03.098 first layer off inside called

NOTE Confidence: 0.7787742

00:08:03.098 --> 00:08:04.730 endoscopic mucosal resection,

NOTE Confidence: 0.7787742

00:08:04.730 --> 00:08:07.136 which is adequate for very early

NOTE Confidence: 0.7787742

00:08:07.136 --> 00:08:09.065 stage cancers, but in general,

NOTE Confidence: 0.7787742

00:08:09.065 --> 00:08:12.170 most of those would be referred to a

NOTE Confidence: 0.7787742

00:08:12.170 --> 00:08:15.410 surgeon for removal of the whole area and

NOTE Confidence: 0.7787742

00:08:15.410 --> 00:08:17.990 evaluation of the regional lymph nodes.

NOTE Confidence: 0.8257442

00:08:17.990 --> 00:08:20.120 Now, before you do that,

NOTE Confidence: 0.8257442

00:08:20.120 --> 00:08:22.232 are there any kinds of advanced

NOTE Confidence: 0.8257442

00:08:22.232 --> 00:08:24.014 imaging tests that are required

NOTE Confidence: 0.8257442

00:08:24.014 --> 00:08:26.462 or blood tests to help you get an

NOTE Confidence: 0.8257442

00:08:26.462 --> 00:08:28.469 idea of the extent of disease?

NOTE Confidence: 0.83717674

00:08:29.810 --> 00:08:32.330 Well, certainly if you have a diagnosis

NOTE Confidence: 0.83717674

00:08:32.330 --> 00:08:34.798 of invasive cancer rather than something

NOTE Confidence: 0.83717674

00:08:34.798 --> 00:08:37.008 that's questionable or early stage,

NOTE Confidence: 0.83717674

00:08:37.010 --> 00:08:38.900 you're going to image them with

NOTE Confidence: 0.83717674

00:08:38.900 --> 00:08:41.765 a CAT scan to evaluate the liver

NOTE Confidence: 0.83717674

00:08:41.765 --> 00:08:43.805 for possible metastatic disease.

NOTE Confidence: 0.83717674

00:08:43.810 --> 00:08:46.138 It's been fairly commonplace to also

NOTE Confidence: 0.83717674

00:08:46.138 --> 00:08:49.717 do a CAT scan of the chest to looking

NOTE Confidence: 0.83717674

00:08:49.717 --> 00:08:52.210 for possible spread to the lungs,

NOTE Confidence: 0.83717674

00:08:52.210 --> 00:08:55.378 although that's much more common in

NOTE Confidence: 0.83717674

00:08:55.378 --> 00:08:58.666 rectal cancer than colon cancer.

NOTE Confidence: 0.83717674

00:08:58.666 --> 00:09:01.462 Blood tests the CEA or carcinogenic

NOTE Confidence: 0.83717674

00:09:01.462 --> 00:09:03.770 embryonic antigen is not produced

NOTE Confidence: 0.83717674

00:09:03.770 --> 00:09:05.009 by all tumors,

NOTE Confidence: 0.83717674

00:09:05.010 --> 00:09:07.922 but generally if you have a diagnosis

NOTE Confidence: 0.83717674

00:09:07.922 --> 00:09:11.167 of cancer you will check that if it's

NOTE Confidence: 0.83717674

00:09:11.167 --> 00:09:14.293 elevated it can be used as a marker

NOTE Confidence: 0.83717674

00:09:14.293 --> 00:09:16.918 later to follow the patient to see

NOTE Confidence: 0.8426958

00:09:16.920 --> 00:09:18.604 if there is recurrence,

NOTE Confidence: 0.8426958

00:09:18.604 --> 00:09:20.709 and so presumably if you've

NOTE Confidence: 0.8426958

00:09:20.709 --> 00:09:23.121 caught this cancer early because

NOTE Confidence: 0.8426958

00:09:23.121 --> 00:09:25.516 you started screening per the

NOTE Confidence: 0.8426958

00:09:25.516 --> 00:09:27.726 guidelines and now you you go and

NOTE Confidence: 0.8426958

00:09:27.726 --> 00:09:29.943 you have all of these tests and

NOTE Confidence: 0.8426958

00:09:29.943 --> 00:09:31.427 it doesn't look like there's

NOTE Confidence: 0.8426958

00:09:31.427 --> 00:09:32.540 cancer anywhere else,

NOTE Confidence: 0.8426958

00:09:32.540 --> 00:09:34.710 the next step is to remove that

NOTE Confidence: 0.8426958

00:09:34.710 --> 00:09:36.853 part of the colon that's got

NOTE Confidence: 0.8426958

00:09:36.853 --> 00:09:39.115 the cancer in it and evaluate,

NOTE Confidence: 0.8426958

00:09:39.120 --> 00:09:41.535 as you say, the regional lymph nodes.

NOTE Confidence: 0.8426958

00:09:41.540 --> 00:09:43.475 Now I understand that surgical

NOTE Confidence: 0.8426958

00:09:43.475 --> 00:09:45.768 techniques have improved over the last

NOTE Confidence: 0.8426958

00:09:45.768 --> 00:09:47.840 several decades and this can now

NOTE Confidence: 0.8426958

00:09:47.840 --> 00:09:50.186 be done in a minimally invasive way.

NOTE Confidence: 0.8426958

00:09:50.190 --> 00:09:52.958 Can you talk a little bit about that?

NOTE Confidence: 0.8335854

00:09:53.680 --> 00:09:56.130 Absolutely, so minimally invasive surgery

NOTE Confidence: 0.8335854

00:09:56.130 --> 00:09:57.621 the revolution started

NOTE Confidence: 0.8335854

00:09:57.621 --> 00:10:00.106 probably in the late 80s.

NOTE Confidence: 0.8335854

00:10:00.110 --> 00:10:02.861 Around 1990 we all started

NOTE Confidence: 0.8335854

00:10:02.861 --> 00:10:04.860 doing gallbladders that way and

NOTE Confidence: 0.8335854

00:10:04.860 --> 00:10:06.715 it reduced the incision size.

NOTE Confidence: 0.8335854

00:10:06.720 --> 00:10:10.168 Made recovery a lot faster, less pain and

NOTE Confidence: 0.8335854

00:10:10.168 --> 00:10:13.426 the patients were much more satisfied and that

NOTE Confidence: 0.8335854

00:10:13.430 --> 00:10:16.538 translated to colon surgery in the

NOTE Confidence: 0.8335854

00:10:16.538 --> 00:10:19.904 early 90s and there were several

NOTE Confidence: 0.8335854

00:10:19.904 --> 00:10:24.069 trials to determine whether or not that

NOTE Confidence: 0.8335854

00:10:24.069 --> 00:10:27.648 minimally invasive surgery was equal to

NOTE Confidence: 0.8335854

00:10:27.650 --> 00:10:30.115 conventional open surgery and a

NOTE Confidence: 0.8335854

00:10:30.115 --> 00:10:33.971 trial in 2004 and follow up of

NOTE Confidence: 0.8335854

00:10:33.971 --> 00:10:36.563 those patients over a long period

NOTE Confidence: 0.8335854

00:10:36.563 --> 00:10:39.548 of time proved that the cancer

NOTE Confidence: 0.8335854

00:10:39.548 --> 00:10:42.976 surgery was the same whether it was

NOTE Confidence: 0.8335854

00:10:42.976 --> 00:10:45.366 done minimally invasive or open,

NOTE Confidence: 0.8335854

00:10:45.370 --> 00:10:48.569 so the oncologic results were the

NOTE Confidence: 0.8335854

00:10:48.569 --> 00:10:50.640 same minimally invasive surgery,

NOTE Confidence: 0.8335854

00:10:50.640 --> 00:10:53.520 whether it be laparoscopic or robotic.

NOTE Confidence: 0.8335854

00:10:58.510 --> 00:11:01.360 It hurts a lot less.

NOTE Confidence: 0.8335854

00:11:01.360 --> 00:11:03.700 The recovery is faster,

NOTE Confidence: 0.8335854

00:11:03.700 --> 00:11:07.610 the patients are more satisfied with it.

NOTE Confidence: 0.8335854

00:11:07.610 --> 00:11:11.030 Bowel function tends to return faster,

NOTE Confidence: 0.8335854

00:11:11.030 --> 00:11:14.901 and as several studies over the years

NOTE Confidence: 0.8335854

00:11:14.901 --> 00:11:18.394 have shown it is oncologically

NOTE Confidence: 0.8335854

00:11:18.394 --> 00:11:21.791 the same as open surgery.

NOTE Confidence: 0.8335854

00:11:21.791 --> 00:11:24.396 One of the benefits though,

NOTE Confidence: 0.8335854

00:11:24.400 --> 00:11:26.920 is for people with more advanced surgery,

NOTE Confidence: 0.8335854

00:11:26.920 --> 00:11:27.964 more advanced cancer

NOTE Confidence: 0.8335854

00:11:27.964 --> 00:11:30.880 is that since they recover faster,

NOTE Confidence: 0.8335854

00:11:30.880 --> 00:11:31.918 they feel better.

NOTE Confidence: 0.8335854

00:11:31.918 --> 00:11:34.785 They're much more likely to go on and

NOTE Confidence: 0.8335854

00:11:34.785 --> 00:11:36.999 have chemotherapy if they need it

NOTE Confidence: 0.8335854

00:11:37.000 --> 00:11:39.160 after recovering from big open surgery,

NOTE Confidence: 0.8335854

00:11:39.160 --> 00:11:41.614 sometimes the people have had trouble

NOTE Confidence: 0.8335854

00:11:41.614 --> 00:11:44.897 and they just never get healthy enough to

NOTE Confidence: 0.8335854

00:11:44.900 --> 00:11:46.476 receive chemotherapy.

NOTE Confidence: 0.8335854

00:11:46.476 --> 00:11:47.658 So it sounds

NOTE Confidence: 0.86698854

00:11:47.660 --> 00:11:49.502 like we've moved into

NOTE Confidence: 0.86698854

00:11:49.502 --> 00:11:51.860 an era of of minimally invasive

NOTE Confidence: 0.86698854

00:11:51.860 --> 00:11:53.960 surgery for colon cancer,

NOTE Confidence: 0.86698854

00:11:53.960 --> 00:11:56.718 much like we have for Gallbladder surgery.

NOTE Confidence: 0.86698854

00:11:56.720 --> 00:11:58.690 But you mentioned two terms.

NOTE Confidence: 0.86698854

00:11:58.690 --> 00:12:00.262 One is laparoscopic and

NOTE Confidence: 0.86698854

00:12:00.262 --> 00:12:01.834 one is robotic assisted.

NOTE Confidence: 0.86698854

00:12:01.840 --> 00:12:04.619 Can you help our audience kind of

NOTE Confidence: 0.86698854

00:12:04.619 --> 00:12:06.959 understand the difference between the two.

NOTE Confidence: 0.8550343

00:12:08.280 --> 00:12:09.812 Sure, laparoscopy is something

NOTE Confidence: 0.8550343

00:12:09.812 --> 00:12:12.500 that's been around for a long time,

NOTE Confidence: 0.8550343

00:12:12.500 --> 00:12:14.100 and as I mentioned,

NOTE Confidence: 0.8550343

00:12:14.100 --> 00:12:16.100 the translation to more broad

NOTE Confidence: 0.8550343

00:12:16.100 --> 00:12:18.371 applications began in the early 90s

NOTE Confidence: 0.8550343

00:12:18.371 --> 00:12:20.176 and then into colorectal surgery.

NOTE Confidence: 0.8550343

00:12:20.180 --> 00:12:22.688 But basically what that is, is

NOTE Confidence: 0.8550343

00:12:22.688 --> 00:12:25.040 surgery inside the abdomen,

NOTE Confidence: 0.8550343

00:12:25.040 --> 00:12:27.705 done through several small incisions

NOTE Confidence: 0.8550343

00:12:27.705 --> 00:12:30.370 where you have instruments inserted.

NOTE Confidence: 0.8550343

00:12:30.370 --> 00:12:32.458 It's very good when you don't have to make

NOTE Confidence: 0.8550343

00:12:32.458 --> 00:12:34.807 a bigger incision to take a specimen out.

NOTE Confidence: 0.8550343

00:12:34.810 --> 00:12:35.686 In colon surgery,

NOTE Confidence: 0.8550343

00:12:35.686 --> 00:12:37.730 you have to make an incision that's

NOTE Confidence: 0.8550343

00:12:37.788 --> 00:12:39.596 probably 2 to 3 inches in size to

NOTE Confidence: 0.8550343

00:12:39.596 --> 00:12:41.622 get the piece of colon out with the

NOTE Confidence: 0.8550343

00:12:41.622 --> 00:12:43.993 lymph nodes in the tumor so that

NOTE Confidence: 0.8550343

00:12:43.993 --> 00:12:47.150 does have some pain associated with it

NOTE Confidence: 0.8550343

00:12:47.238 --> 00:12:49.944 when you do laparoscopic hernia's and

NOTE Confidence: 0.8550343

00:12:49.944 --> 00:12:53.709 you only have 3 or 4 little incisions,

NOTE Confidence: 0.8550343

00:12:53.710 --> 00:12:55.602 there's much less pain.

NOTE Confidence: 0.8550343

00:12:55.602 --> 00:12:57.967 Robotic assisted is attaching the

NOTE Confidence: 0.8550343

00:12:57.967 --> 00:13:00.549 robotic system to those instruments an

NOTE Confidence: 0.8550343

00:13:00.549 --> 00:13:03.390 that allows you much more dexterity,

NOTE Confidence: 0.8550343

00:13:03.390 --> 00:13:05.190 especially in smaller confined

NOTE Confidence: 0.8550343

00:13:05.190 --> 00:13:07.440 location like the pelvis when

NOTE Confidence: 0.8550343

00:13:07.440 --> 00:13:09.850 you're operating for rectal cancer,

NOTE Confidence: 0.8550343

00:13:09.850 --> 00:13:12.066 your visualization both laparoscopic

NOTE Confidence: 0.8550343

00:13:12.066 --> 00:13:14.836 and robotic assisted is

NOTE Confidence: 0.8550343

00:13:14.840 --> 00:13:16.372 a lot of times,

NOTE Confidence: 0.8550343

00:13:16.372 --> 00:13:18.287 much better than open because

NOTE Confidence: 0.8550343

00:13:18.287 --> 00:13:20.239 you have magnification.

NOTE Confidence: 0.8550343

00:13:20.240 --> 00:13:23.334 You have a light source that's

NOTE Confidence: 0.8550343

00:13:23.334 --> 00:13:26.673 right down there in his deep dark hole

NOTE Confidence: 0.8550343

00:13:26.673 --> 00:13:29.224 and you have your really dexterous

NOTE Confidence: 0.8550343

00:13:29.224 --> 00:13:31.939 instruments in a small space.

NOTE Confidence: 0.87771654

00:13:33.220 --> 00:13:35.482 And so certainly both laparoscopic and

NOTE Confidence: 0.87771654

00:13:35.482 --> 00:13:38.003 robotic seemed to be an advance over

NOTE Confidence: 0.87771654

00:13:38.003 --> 00:13:40.650 open surgery and allow you to get into

NOTE Confidence: 0.87771654

00:13:40.650 --> 00:13:42.570 small spaces with good visualization

NOTE Confidence: 0.87771654

00:13:42.570 --> 00:13:45.562 that you might not have had before and

NOTE Confidence: 0.87771654

00:13:45.562 --> 00:13:47.740 allow patients to get home sooner.

NOTE Confidence: 0.87771654

00:13:47.740 --> 00:13:49.918 We're going to talk more about

NOTE Confidence: 0.87771654

00:13:49.918 --> 00:13:51.821 robotic surgery and compare that

NOTE Confidence: 0.87771654

00:13:51.821 --> 00:13:53.761 to laparoscopic surgery and talk

NOTE Confidence: 0.87771654

00:13:53.761 --> 00:13:56.026 about what happens after the colon

NOTE Confidence: 0.87771654

00:13:56.026 --> 00:13:57.976 cancer surgery right after we take

NOTE Confidence: 0.87771654

00:13:57.976 --> 00:14:00.450 a short break for a medical minute.

NOTE Confidence: 0.87771654

00:14:00.450 --> 00:14:02.949 Please stay tuned to learn more about

NOTE Confidence: 0.87771654

00:14:02.949 --> 00:14:05.194 robotic surgery for colon and rectal

NOTE Confidence: 0.87771654

00:14:05.194 --> 00:14:07.408 cancers with my guest Doctor George

NOTE Confidence: 0.87771654

00:14:07.410 --> 00:14:08.480 Yavorek.

NOTE Confidence: 0.81232965

00:14:08.480 --> 00:14:12.274 Support for Yale Cancer answers comes from

NOTE Confidence: 0.81232965

00:14:12.274 --> 00:14:15.009 Astrazeneca, providing important treatment options

NOTE Confidence: 0.81232965

00:14:15.009 --> 00:14:18.593 for various types and stages of cancer.

NOTE Confidence: 0.81232965

00:14:18.600 --> 00:14:22.420 More information at astrazeneca-u.com.

NOTE Confidence: 0.81232965

00:14:22.420 --> 00:14:25.668 This is a medical minute about lung cancer.

NOTE Confidence: 0.81232965

00:14:25.670 --> 00:14:28.218 More than 85% of lung cancer diagnosis

NOTE Confidence: 0.81232965

00:14:28.218 --> 00:14:31.146 are related to smoking and quitting even

NOTE Confidence: 0.81232965

00:14:31.146 --> 00:14:33.786 after decades of use can significantly

NOTE Confidence: 0.81232965

00:14:33.859 --> 00:14:36.253 reduce your risk of developing lung

NOTE Confidence: 0.81232965

00:14:36.253 --> 00:14:38.231 cancer for lung cancer patients.

NOTE Confidence: 0.81232965

00:14:38.231 --> 00:14:40.136 Clinical trials are currently underway

NOTE Confidence: 0.81232965

00:14:40.136 --> 00:14:42.310 to test innovative new treatments.

NOTE Confidence: 0.81232965

00:14:42.310 --> 00:14:45.316 Advances are being made by utilizing

NOTE Confidence: 0.81232965

00:14:45.316 --> 00:14:47.320 targeted therapies and immunotherapies.

NOTE Confidence: 0.81232965

00:14:47.396 --> 00:14:49.454 The BATTLE-2 trial aims to learn

NOTE Confidence: 0.81232965

00:14:49.454 --> 00:14:52.040 if a drug or combination of drugs

NOTE Confidence: 0.81232965

00:14:52.040 --> 00:14:54.488 based on personal biomarkers can help

NOTE Confidence: 0.81232965

00:14:54.490 --> 00:14:57.486 to control non small cell lung cancer.

NOTE Confidence: 0.81232965

00:14:57.490 --> 00:15:00.265 More information is available

NOTE Confidence: 0.81232965

00:15:00.265 --> 00:15:01.375 at yalecancercenter.org.

NOTE Confidence: 0.81232965

00:15:01.380 --> 00:15:05.670 You're listening to Connecticut Public Radio.

NOTE Confidence: 0.81232965

00:15:05.670 --> 00:15:06.090 Welcome

NOTE Confidence: 0.8571036

00:15:06.090 --> 00:15:08.200 back to Yale Cancer Answers.

NOTE Confidence: 0.8571036

00:15:08.200 --> 00:15:10.726 This is doctor Anees Chagpar

NOTE Confidence: 0.8571036

00:15:10.730 --> 00:15:12.950 and I'm joined tonight by my

NOTE Confidence: 0.8571036

00:15:12.950 --> 00:15:15.374 guest Doctor George Yavorek.

NOTE Confidence: 0.8571036

00:15:15.374 --> 00:15:17.559 We are talking about treating patients with

NOTE Confidence: 0.8571036

00:15:17.559 --> 00:15:20.019 colon cancer with robotic surgery.

NOTE Confidence: 0.8571036

00:15:20.020 --> 00:15:22.498 Now right before the break we were

NOTE Confidence: 0.8571036

00:15:22.498 --> 00:15:25.075 talking about this whole evolution in

NOTE Confidence: 0.8571036

00:15:25.075 --> 00:15:27.480 minimally invasive surgery that really

NOTE Confidence: 0.8571036

00:15:27.480 --> 00:15:29.719 helps patients with colon cancer

NOTE Confidence: 0.8571036

00:15:29.720 --> 00:15:32.252 get that colon resected with minimal

NOTE Confidence: 0.8571036

00:15:32.252 --> 00:15:34.081 intervention, shorter hospital stays,

NOTE Confidence: 0.8571036

00:15:34.081 --> 00:15:36.416 less pain and so on.

NOTE Confidence: 0.8571036

00:15:36.420 --> 00:15:39.710 But George, the question that I often

NOTE Confidence: 0.8571036

00:15:39.710 --> 00:15:43.667 have is in terms of those metrics,

NOTE Confidence: 0.8571036

00:15:43.670 --> 00:15:45.113 getting home faster,

NOTE Confidence: 0.8571036

00:15:45.113 --> 00:15:47.524 amount of pain, blood loss,

NOTE Confidence: 0.8571036

00:15:47.524 --> 00:15:50.890 how long the operation is, and cost?

NOTE Confidence: 0.8571036

00:15:50.890 --> 00:15:53.740 How does robotic surgery stack up

NOTE Confidence: 0.8571036

00:15:53.740 --> 00:15:56.544 to laproscopic surgery which you

NOTE Confidence: 0.8571036

00:15:56.544 --> 00:16:00.843 know we all know has a number

NOTE Confidence: 0.8571036

00:16:00.843 --> 00:16:03.463 of advantages over open surgery.

NOTE Confidence: 0.86184627

00:16:03.470 --> 00:16:07.398 So the big thing I think would be

NOTE Confidence: 0.86184627

00:16:07.400 --> 00:16:09.276 patient satisfaction and patient

NOTE Confidence: 0.86184627

00:16:09.276 --> 00:16:11.152 satisfaction between both laparoscopic

NOTE Confidence: 0.86184627

00:16:11.152 --> 00:16:13.578 and robotic surgery is pretty equal

NOTE Confidence: 0.86184627

00:16:13.578 --> 00:16:15.714 because to them it's minimally invasive

NOTE Confidence: 0.86184627

00:16:15.776 --> 00:16:17.526 in terms of oncologic outcomes.

NOTE Confidence: 0.86184627

00:16:17.530 --> 00:16:19.900 Again, the same thing they've looked

NOTE Confidence: 0.86184627

00:16:19.900 --> 00:16:22.772 at that compared to open and obviously

NOTE Confidence: 0.86184627

00:16:22.772 --> 00:16:25.214 the standard is open surgery,

NOTE Confidence: 0.86184627

00:16:25.220 --> 00:16:28.444 but the oncologic outcomes are the same in

NOTE Confidence: 0.86184627

00:16:28.444 --> 00:16:32.110 terms of all the parameters that we look at.

NOTE Confidence: 0.86184627

00:16:32.110 --> 00:16:34.684 Some of the other things you

NOTE Confidence: 0.86184627

00:16:34.684 --> 00:16:36.900 mentioned though were the big

NOTE Confidence: 0.86184627

00:16:36.900 --> 00:16:39.420 knock on robotic surgery is cost.

NOTE Confidence: 0.86184627

00:16:39.420 --> 00:16:41.988 And the expense of the equipment.

NOTE Confidence: 0.86184627

00:16:41.990 --> 00:16:43.542 What happens with that?

NOTE Confidence: 0.86184627

00:16:43.542 --> 00:16:46.414 Is it can be actually cost effective

NOTE Confidence: 0.86184627

00:16:46.414 --> 00:16:48.704 because the patients tend to

NOTE Confidence: 0.86184627

00:16:48.704 --> 00:16:51.400 stay in the hospital less time.

NOTE Confidence: 0.86184627

00:16:51.400 --> 00:16:53.984 If you have them on what we call

NOTE Confidence: 0.86184627

00:16:53.984 --> 00:16:56.980 an ERAS, enhanced recovery

NOTE Confidence: 0.86184627

00:16:56.980 --> 00:16:58.678 after surgery protocol,

NOTE Confidence: 0.86184627

00:16:58.680 --> 00:17:01.020 which typically a lot of specialties

NOTE Confidence: 0.86184627

00:17:01.020 --> 00:17:03.390 are using for urology, gynecology,

NOTE Confidence: 0.86184627

00:17:03.390 --> 00:17:06.267 colorectal surgery and that goes from the

NOTE Confidence: 0.86184627

00:17:06.267 --> 00:17:08.948 pre op preparation through the surgery,

NOTE Confidence: 0.86184627

00:17:08.950 --> 00:17:11.956 anesthesia and into the postoperative period.

NOTE Confidence: 0.86184627

00:17:11.960 --> 00:17:13.496 These patients are spending

NOTE Confidence: 0.86184627

00:17:13.496 --> 00:17:15.416 less time in the hospital.

NOTE Confidence: 0.86184627

00:17:15.420 --> 00:17:17.718 They are back to normal faster.

NOTE Confidence: 0.86184627

00:17:17.720 --> 00:17:20.035 They are feeling better and

NOTE Confidence: 0.86184627

00:17:20.035 --> 00:17:21.887 there are actually less

NOTE Confidence: 0.86184627

00:17:21.890 --> 00:17:23.666 complications and problems which

NOTE Confidence: 0.86184627

00:17:23.666 --> 00:17:25.886 cut down on hospital costs.

NOTE Confidence: 0.86184627

00:17:25.890 --> 00:17:29.218 So those are things that can negate the

NOTE Confidence: 0.86184627

00:17:29.218 --> 00:17:31.986 extra expense of the robotic surgery

NOTE Confidence: 0.86184627

00:17:31.986 --> 00:17:34.764 and actually make it cost effective.

NOTE Confidence: 0.828144

00:17:35.420 --> 00:17:39.588 So let me push back a little.

NOTE Confidence: 0.828144

00:17:39.590 --> 00:17:41.146 Understandably, ERAS protocols

NOTE Confidence: 0.828144

00:17:41.146 --> 00:17:43.480 would improve all of those metrics,

NOTE Confidence: 0.828144

00:17:43.480 --> 00:17:45.430 whether the surgery was open,

NOTE Confidence: 0.828144

00:17:45.430 --> 00:17:48.146 patients who are on any rest protocol,

NOTE Confidence: 0.828144

00:17:48.150 --> 00:17:51.034 who have open surgery would do better

NOTE Confidence: 0.828144

00:17:51.034 --> 00:17:54.370 than people who are not.

NOTE Confidence: 0.828144

00:18:00.210 --> 00:18:02.821 So I can understand how that

NOTE Confidence: 0.828144

00:18:02.821 --> 00:18:05.883 protocol can reduce the length of stay for

NOTE Confidence: 0.828144

00:18:05.883 --> 00:18:08.380 patients who are having robotic surgery.

NOTE Confidence: 0.828144

00:18:08.380 --> 00:18:10.305 But given that robotic surgery

NOTE Confidence: 0.828144

00:18:10.305 --> 00:18:11.845 and laparoscopic surgery are

NOTE Confidence: 0.828144

00:18:11.845 --> 00:18:13.439 both minimally invasive,

NOTE Confidence: 0.828144

00:18:13.440 --> 00:18:16.002 and robotic surgery is much more expensive

NOTE Confidence: 0.828144

00:18:16.002 --> 00:18:18.741 if you have patients who have laparoscopic

NOTE Confidence: 0.828144

00:18:18.741 --> 00:18:21.780 surgery who are on an ERAS protocol

NOTE Confidence: 0.828144

00:18:21.780 --> 00:18:24.576 and patients who have robotic surgery

NOTE Confidence: 0.828144

00:18:24.576 --> 00:18:28.435 who are on an ERAS protocol,

NOTE Confidence: 0.828144

00:18:31.290 --> 00:18:33.535 are there really any differences

NOTE Confidence: 0.828144

00:18:33.535 --> 00:18:36.280 in terms of length of stay,

NOTE Confidence: 0.828144

00:18:36.280 --> 00:18:38.100 length of hospital time,

NOTE Confidence: 0.828144

00:18:38.100 --> 00:18:39.920 length of surgical procedure,

NOTE Confidence: 0.828144

00:18:39.920 --> 00:18:43.098 blood loss that are different between the

NOTE Confidence: 0.828144

00:18:43.098 --> 00:18:45.818 laparoscopic group and the robotic group?

NOTE Confidence: 0.828144

00:18:45.820 --> 00:18:49.897 That would tend to favor one over the other.

NOTE Confidence: 0.87058586

00:18:51.810 --> 00:18:54.670 So if you look at it across the board just

NOTE Confidence: 0.87058586

00:18:54.745 --> 00:18:57.680 comparing laparoscopic for robotic surgery,

NOTE Confidence: 0.87058586

00:18:57.680 --> 00:18:59.240 typically the outcomes are

NOTE Confidence: 0.87058586

00:18:59.240 --> 00:19:01.190 going to be very similar.

NOTE Confidence: 0.87058586

00:19:01.190 --> 00:19:03.927 They're going to be about the same.

NOTE Confidence: 0.87058586

00:19:03.930 --> 00:19:06.290 Robotic surgery would be more

NOTE Confidence: 0.87058586

00:19:06.290 --> 00:19:08.650 expensive because of the equipment

NOTE Confidence: 0.87058586

00:19:08.732 --> 00:19:10.946 part of the problem becomes the

NOTE Confidence: 0.87058586

00:19:10.946 --> 00:19:13.090 skill level of the surgeon.

NOTE Confidence: 0.87058586

00:19:13.090 --> 00:19:15.600 Where robotic surgery makes it

NOTE Confidence: 0.87058586

00:19:15.600 --> 00:19:18.460 easier for most surgeons to do

NOTE Confidence: 0.87058586

00:19:18.460 --> 00:19:21.910 more complex operations.

NOTE Confidence: 0.87058586

00:19:21.910 --> 00:19:23.954 The inexperienced laparoscopic surgeon

NOTE Confidence: 0.87058586

00:19:23.954 --> 00:19:27.518 could probably do about the same things

NOTE Confidence: 0.87058586

00:19:27.518 --> 00:19:30.560 that a robotic surgeon does, and

NOTE Confidence: 0.87058586

00:19:30.560 --> 00:19:33.850 most people are well versed in both,

NOTE Confidence: 0.87058586

00:19:33.850 --> 00:19:37.765 but I think you're correct in that

NOTE Confidence: 0.87058586

00:19:37.770 --> 00:19:39.855 across both procedures

NOTE Confidence: 0.87058586

00:19:39.855 --> 00:19:43.007 it's going to be less expensive for

NOTE Confidence: 0.87058586

00:19:43.007 --> 00:19:45.467 laparoscopic surgeon and the results

NOTE Confidence: 0.87058586

00:19:45.467 --> 00:19:48.588 are pretty much going to be the same.

NOTE Confidence: 0.87058586

00:19:48.590 --> 00:19:51.152 Part of the idea behind the robotic

NOTE Confidence: 0.87058586

00:19:51.152 --> 00:19:53.513 surgery is that it takes more

NOTE Confidence: 0.87058586

00:19:53.513 --> 00:19:55.883 open cases and makes them minimally

NOTE Confidence: 0.87058586

00:19:55.883 --> 00:19:57.719 invasive across the country.

NOTE Confidence: 0.87058586

00:19:57.720 --> 00:20:00.180 At least 50% of the colectomies

NOTE Confidence: 0.87058586

00:20:00.180 --> 00:20:02.200 are still done

NOTE Confidence: 0.87058586

00:20:02.200 --> 00:20:03.656 through a traditional incision,

NOTE Confidence: 0.87058586

00:20:03.656 --> 00:20:05.364 only about 50% are done

NOTE Confidence: 0.87058586

00:20:05.364 --> 00:20:07.820 minimally invasively and of those the vast

NOTE Confidence: 0.87058586

00:20:07.878 --> 00:20:10.208 majority are still done laparoscopically.

NOTE Confidence: 0.87058586

00:20:10.210 --> 00:20:12.758 It's somewhere between 5 and 10%,

NOTE Confidence: 0.87058586

00:20:12.760 --> 00:20:15.303 are done robotically the other 40% are

NOTE Confidence: 0.87058586

00:20:15.303 --> 00:20:17.844 done laparoscopic and the other 50%

NOTE Confidence: 0.87058586

00:20:17.850 --> 00:20:21.476 are still done through an open incision.

NOTE Confidence: 0.87058586

00:20:21.480 --> 00:20:23.308 So the penetration is

NOTE Confidence: 0.87058586

00:20:23.308 --> 00:20:25.136 increasing for robotic surgery,

NOTE Confidence: 0.87058586

00:20:25.140 --> 00:20:30.109 but back to the question, I think that

NOTE Confidence: 0.87058586

00:20:30.110 --> 00:20:32.426 all things given certainly

NOTE Confidence: 0.87058586

00:20:32.426 --> 00:20:34.837 laproscopic surgery is more

NOTE Confidence: 0.87058586

00:20:34.837 --> 00:20:36.827 cost effective than robotic surgery.

00:20:37.220 --> 00:20:39.684 So I guess what I'm getting from

NOTE Confidence: 0.859963799999999

00:20:39.684 --> 00:20:42.455 you is that robotic surgery may be

NOTE Confidence: 0.859963799999999

00:20:42.455 --> 00:20:45.395 a good option for some cases where

NOTE Confidence: 0.859963799999999

00:20:45.395 --> 00:20:48.251 you really don't think that you would

NOTE Confidence: 0.859963799999999

00:20:48.251 --> 00:20:51.050 be able to do this laparoscopic

NOTE Confidence: 0.859963799999999

00:20:51.050 --> 00:20:54.322 but given the dexterity that you can get

NOTE Confidence: 0.859963799999999

00:20:54.322 --> 00:20:56.579 particularly low down in the pelvis,

NOTE Confidence: 0.859963799999999

00:20:56.580 --> 00:20:58.944 which would otherwise mandate an open

NOTE Confidence: 0.859963799999999

00:20:58.944 --> 00:21:01.390 surgery, robotic surgery might have an

NOTE Confidence: 0.859963799999999

00:21:01.390 --> 00:21:03.718 advantage in that realm over

NOTE Confidence: 0.859963799999999

00:21:03.718 --> 00:21:05.660 laparoscopic is that right?

NOTE Confidence: 0.8508673

00:21:05.660 --> 00:21:07.600 Yes, I agree with that.

NOTE Confidence: 0.8508673

00:21:07.600 --> 00:21:09.540 And in complex surgery so

NOTE Confidence: 0.8508673

00:21:09.540 --> 00:21:11.480 not only for colon cancer,

NOTE Confidence: 0.8508673

00:21:11.480 --> 00:21:14.176 but if it's a complex cancer that may

NOTE Confidence: 0.8508673

00:21:14.176 --> 00:21:16.570 be attached to the bladder of the

NOTE Confidence: 0.8508673

00:21:16.570 --> 00:21:18.868 uterus and even non cancer surgery

NOTE Confidence: 0.8508673

00:21:18.868 --> 00:21:21.176 like complex diverticular disease,

NOTE Confidence: 0.8508673

00:21:21.180 --> 00:21:23.987 I think the robot is an advantage

NOTE Confidence: 0.8508673

00:21:23.987 --> 00:21:25.945 over laparoscopic surgery and the

NOTE Confidence: 0.8508673

00:21:25.945 --> 00:21:27.985 one thing is that conversion rate

NOTE Confidence: 0.8508673

00:21:27.985 --> 00:21:30.100 is lower for robotic surgery.

NOTE Confidence: 0.8508673

00:21:30.100 --> 00:21:33.364 So if you look at it in that

NOTE Confidence: 0.8508673

00:21:33.370 --> 00:21:35.670 light robotic surgery has an

NOTE Confidence: 0.8508673

00:21:35.670 --> 00:21:37.510 advantage over laparoscopic surgery

NOTE Confidence: 0.8508673

00:21:37.510 --> 00:21:39.358 because the conversion from

NOTE Confidence: 0.8508673

00:21:39.358 --> 00:21:41.553 minimally invasive to open surgery,

NOTE Confidence: 0.8508673

00:21:41.560 --> 00:21:44.290 which adds more to cost and

NOTE Confidence: 0.8508673

00:21:44.290 --> 00:21:46.110 actually increases hospital stay

NOTE Confidence: 0.8508673

00:21:46.110 --> 00:21:48.370 for someone who's gone through

NOTE Confidence: 0.8508673

00:21:48.370 --> 00:21:51.120 an open incision to begin with,

NOTE Confidence: 0.8508673

00:21:51.120 --> 00:21:53.850 the robot does decrease the chance

NOTE Confidence: 0.8508673

00:21:53.850 --> 00:21:56.635 of conversion and therefore is an

NOTE Confidence: 0.8508673

00:21:56.635 --> 00:21:58.399 advantage in those situations,

NOTE Confidence: 0.8508673

00:21:58.400 --> 00:21:59.310 so you

NOTE Confidence: 0.86242795

00:21:59.310 --> 00:22:02.432 know with people who have expertise in

NOTE Confidence: 0.86242795

00:22:02.432 --> 00:22:05.039 both laparoscopic and robotic surgery,

NOTE Confidence: 0.86242795

00:22:05.040 --> 00:22:07.290 how do you decide which procedure

NOTE Confidence: 0.86242795

00:22:07.290 --> 00:22:08.790 to offer your patients?

NOTE Confidence: 0.86242795

00:22:08.790 --> 00:22:11.862 Or are you offering all of them one

NOTE Confidence: 0.86242795

00:22:11.862 --> 00:22:14.037 particular route as a first choice?

NOTE Confidence: 0.8629614

00:22:15.610 --> 00:22:18.226 I think it depends on a few things.

NOTE Confidence: 0.8629614

00:22:18.230 --> 00:22:19.542 Depends on the complexity,

NOTE Confidence: 0.8629614

00:22:19.542 --> 00:22:20.854 location of the tumor.

NOTE Confidence: 0.8629614

00:22:20.860 --> 00:22:22.732 If I feel that, especially rectal

NOTE Confidence: 0.8629614

00:22:22.732 --> 00:22:24.470 cancers, down in the pelvis,

NOTE Confidence: 0.8629614

00:22:24.470 --> 00:22:27.246 I really like the robot down there

NOTE Confidence: 0.8629614

00:22:27.246 --> 00:22:29.489 again because of the confined

NOTE Confidence: 0.8629614

00:22:29.489 --> 00:22:32.273 space and the ability to get down

NOTE Confidence: 0.8629614

00:22:32.273 --> 00:22:34.257 there with good visualization.

NOTE Confidence: 0.8629614

00:22:34.260 --> 00:22:36.642 If the person may be someone

NOTE Confidence: 0.8629614

00:22:36.642 --> 00:22:39.985 who I'd like to get in and out

NOTE Confidence: 0.8629614

00:22:39.985 --> 00:22:42.475 of surgery a little bit faster,

NOTE Confidence: 0.8629614

00:22:42.480 --> 00:22:44.937 an older person with a lot of health issues,

NOTE Confidence: 0.8629614

00:22:44.940 --> 00:22:48.006 I may choose to do it laparoscopically,

NOTE Confidence: 0.8629614

00:22:48.010 --> 00:22:50.326 because generally the times

NOTE Confidence: 0.8629614

00:22:50.326 --> 00:22:52.460 for those surgeries are less, so

NOTE Confidence: 0.8629614

00:22:52.460 --> 00:22:53.932 it's an individual basis.

NOTE Confidence: 0.8629614

00:22:53.932 --> 00:22:56.140 I offer all my

NOTE Confidence: 0.8629614

00:22:56.213 --> 00:22:58.018 patients one or the other.

NOTE Confidence: 0.88557017

00:22:59.330 --> 00:23:00.750 And the other question that

NOTE Confidence: 0.88557017

00:23:00.750 --> 00:23:02.598 many of our listeners may have

NOTE Confidence: 0.88557017

00:23:02.598 --> 00:23:04.058 especially thinking about

NOTE Confidence: 0.88557017

00:23:04.060 --> 00:23:05.978 the cost of robotic surgery

NOTE Confidence: 0.88557017

00:23:05.978 --> 00:23:08.149 is, is it covered by insurance?

NOTE Confidence: 0.8714815

00:23:10.290 --> 00:23:12.792 Generally speaking, there's no cost to

NOTE Confidence: 0.8714815

00:23:12.792 --> 00:23:15.690 the patient that if there is a cost,

NOTE Confidence: 0.8714815

00:23:15.690 --> 00:23:18.372 the hospital ends up absorbing it

NOTE Confidence: 0.8714815

00:23:18.372 --> 00:23:21.563 because they can't pass that on to

NOTE Confidence: 0.8714815

00:23:21.563 --> 00:23:23.768 the patient. The insurance company

NOTE Confidence: 0.8714815

00:23:23.770 --> 00:23:25.462 doesn't always reimburse more

NOTE Confidence: 0.8714815

00:23:25.462 --> 00:23:27.154 for a specific procedure,

NOTE Confidence: 0.8714815

00:23:27.160 --> 00:23:29.610 but the hospital has figured out a

NOTE Confidence: 0.8714815

00:23:29.610 --> 00:23:32.965 way to in terms of making things more

NOTE Confidence: 0.8714815

00:23:32.965 --> 00:23:36.070 efficient to make these cost effective.

NOTE Confidence: 0.8235198

00:23:37.480 --> 00:23:40.750 And it sounds like if

NOTE Confidence: 0.8235198

00:23:40.848 --> 00:23:44.320 the patient costs are all equal and

NOTE Confidence: 0.8235198

00:23:44.320 --> 00:23:47.138 oncologic outcomes are all equal,

NOTE Confidence: 0.8235198

00:23:47.140 --> 00:23:49.744 then it sounds like the real cost

NOTE Confidence: 0.8235198

00:23:49.744 --> 00:23:52.600 is to the health care system.

NOTE Confidence: 0.8235198

00:23:52.600 --> 00:23:55.270 And that's something that health care

NOTE Confidence: 0.8235198

00:23:55.270 --> 00:23:58.199 systems will need to figure out

NOTE Confidence: 0.8235198

00:23:58.199 --> 00:24:00.691 now if during that staging work up

NOTE Confidence: 0.8235198

00:24:00.771 --> 00:24:03.519 needed before the the surgery itself,

NOTE Confidence: 0.8235198

00:24:03.520 --> 00:24:06.706 let's suppose you did find a

NOTE Confidence: 0.8235198

00:24:06.706 --> 00:24:09.540 little metastasis to the liver,

NOTE Confidence: 0.8235198

00:24:09.540 --> 00:24:12.530 can you take that out at the same time as

NOTE Confidence: 0.8235198

00:24:12.603 --> 00:24:15.515 you do the colon surgery with the robot?

NOTE Confidence: 0.7921776

00:24:17.100 --> 00:24:19.320 Yes you can. The paddle biliary

NOTE Confidence: 0.7921776

00:24:19.320 --> 00:24:21.600 surgeons are doing liver resections

NOTE Confidence: 0.7921776

00:24:21.600 --> 00:24:23.815 laproscopically and robotically

NOTE Confidence: 0.7921776

00:24:23.815 --> 00:24:27.214 so you can do that if it's the

NOTE Confidence: 0.7921776

00:24:27.214 --> 00:24:29.776 right thing to do at that time.

00:24:33.050 --> 00:24:34.686 Sometimes it's removed at

NOTE Confidence: 0.7921776

00:24:34.686 --> 00:24:37.140 the same time in the surgery.

NOTE Confidence: 0.7921776

00:24:37.140 --> 00:24:39.120 Sometimes they get chemotherapy first

NOTE Confidence: 0.7921776

00:24:39.120 --> 00:24:42.050 to see if it progresses or regresses,

NOTE Confidence: 0.7921776

00:24:42.050 --> 00:24:46.550 or new lesions pop up so, but it can be done

NOTE Confidence: 0.7921776

00:24:46.550 --> 00:24:48.178 minimally invasive, yes.

NOTE Confidence: 0.832233

00:24:48.930 --> 00:24:51.947 And so it sounds like you know,

NOTE Confidence: 0.832233

00:24:51.950 --> 00:24:55.310 there have been so many great advances on

NOTE Confidence: 0.832233

00:24:55.310 --> 00:24:58.406 the surgical front once patients go home.

NOTE Confidence: 0.832233

00:24:58.410 --> 00:25:01.168 You mentioned that one of the advantages

NOTE Confidence: 0.832233

00:25:01.168 --> 00:25:03.242 of minimally invasive surgeries that

NOTE Confidence: 0.832233

00:25:03.242 --> 00:25:06.133 they can actually get onto their adjutant

NOTE Confidence: 0.832233

00:25:06.133 --> 00:25:08.329 systemic therapy, their chemotherapy

NOTE Confidence: 0.832233

00:25:08.330 --> 00:25:10.480 a little bit quicker there.

NOTE Confidence: 0.832233

00:25:10.480 --> 00:25:12.535 After some older patients may

NOTE Confidence: 0.832233

00:25:12.535 --> 00:25:14.590 have difficulty in that post

NOTE Confidence: 0.832233

00:25:14.668 --> 00:25:16.684 operative period recovering and

NOTE Confidence: 0.832233

00:25:16.684 --> 00:25:19.204 so delay or potentially dismiss

NOTE Confidence: 0.832233

00:25:19.210 --> 00:25:20.296 their chemotherapy.

NOTE Confidence: 0.832233

00:25:20.296 --> 00:25:22.830 Can you talk a little bit about

NOTE Confidence: 0.832233

00:25:22.901 --> 00:25:25.721 whether all patients with colon cancer

NOTE Confidence: 0.832233

00:25:25.721 --> 00:25:27.601 require chemotherapy after surgery,

NOTE Confidence: 0.832233

00:25:27.610 --> 00:25:29.710 and whether there have been

NOTE Confidence: 0.832233

00:25:29.710 --> 00:25:31.810 any advances in that regard?

NOTE Confidence: 0.83094853

00:25:33.410 --> 00:25:36.386 So not all patients require chemotherapy.

NOTE Confidence: 0.83094853

00:25:36.390 --> 00:25:39.855 Cancer is staged one through 4.

NOTE Confidence: 0.83094853

00:25:39.860 --> 00:25:42.340 Obviously one being very early

NOTE Confidence: 0.83094853

00:25:42.340 --> 00:25:44.325 in those patients. Generally,

NOTE Confidence: 0.83094853

00:25:44.325 --> 00:25:47.295 surgery alone is curative between 90-95%

NOTE Confidence: 0.83094853

00:25:47.300 --> 00:25:51.268 of the time they do not require

NOTE Confidence: 0.83094853

00:25:51.270 --> 00:25:56.326 chemotherapy , it does not add to their cure rate.

NOTE Confidence: 0.83094853

00:25:56.330 --> 00:25:59.620 Stage two is the big gray zone.

NOTE Confidence: 0.83094853

00:25:59.620 --> 00:26:01.970 That's a very large stage,

NOTE Confidence: 0.83094853

00:26:01.970 --> 00:26:04.320 and some of those patients,

NOTE Confidence: 0.83094853

00:26:04.320 --> 00:26:06.670 depending on individual tumor characteristics

NOTE Confidence: 0.83094853

00:26:06.670 --> 00:26:08.550 may benefit from chemotherapy.

NOTE Confidence: 0.83094853

00:26:08.550 --> 00:26:11.370 They may be at a higher

NOTE Confidence: 0.83094853

00:26:11.370 --> 00:26:12.780 risk to develop recurrence,

NOTE Confidence: 0.83094853

00:26:12.780 --> 00:26:15.684 and that's something that has really

NOTE Confidence: 0.83094853

00:26:15.684 --> 00:26:18.419 progressed over the last 10 years.

NOTE Confidence: 0.83094853

00:26:18.420 --> 00:26:20.825 Our evaluation of individual tumors

NOTE Confidence: 0.83094853

00:26:20.825 --> 00:26:23.230 and what those individual tumor

NOTE Confidence: 0.83094853

00:26:23.309 --> 00:26:26.399 characteristics mean in terms of prognosis.

NOTE Confidence: 0.83094853

00:26:26.400 --> 00:26:27.274 Stage three,

NOTE Confidence: 0.83094853

00:26:27.274 --> 00:26:30.333 there are lymph nodes involved and those

NOTE Confidence: 0.83094853

00:26:30.333 --> 00:26:33.466 people are all candidates for chemotherapy,

NOTE Confidence: 0.83094853

00:26:33.470 --> 00:26:37.579 which has been shown to have a

NOTE Confidence: 0.83094853

00:26:37.579 --> 00:26:39.340 significant improved survival.

NOTE Confidence: 0.83094853

00:26:39.340 --> 00:26:42.208 And stage four is distant metastases

NOTE Confidence: 0.83094853

00:26:42.208 --> 00:26:43.642 and generally chemotherapies

NOTE Confidence: 0.83094853

00:26:43.642 --> 00:26:45.458 are used there too.

NOTE Confidence: 0.83094853

00:26:45.460 --> 00:26:48.519 Also in more of a palliative manner,

NOTE Confidence: 0.83094853

00:26:48.520 --> 00:26:50.700 and as you kind

NOTE Confidence: 0.83016926

00:26:50.700 --> 00:26:53.316 of mentioned and briefly talked about,

NOTE Confidence: 0.83016926

00:26:53.320 --> 00:26:56.141 in that stage two discussion have there

NOTE Confidence: 0.83016926

00:26:56.141 --> 00:26:59.009 been advances in terms of chemotherapy?

NOTE Confidence: 0.83016926

00:26:59.010 --> 00:27:01.190 I mean the robotic surgery,

NOTE Confidence: 0.83016926

00:27:01.190 --> 00:27:03.810 getting to minimally invasive surgery

NOTE Confidence: 0.83016926

00:27:03.810 --> 00:27:06.941 really seems to be advantageous in

NOTE Confidence: 0.83016926

00:27:06.941 --> 00:27:09.923 terms of fine tuning surgery to an

NOTE Confidence: 0.83016926

00:27:09.923 --> 00:27:11.898 individual patient and you talked

NOTE Confidence: 0.83016926

00:27:11.898 --> 00:27:14.341 a little bit about how you tailor

NOTE Confidence: 0.83016926

00:27:14.350 --> 00:27:16.150 the surgical management

NOTE Confidence: 0.83016926

00:27:16.150 --> 00:27:17.500 according to patients,

NOTE Confidence: 0.83016926

00:27:17.500 --> 00:27:20.804 has that filtered into the

NOTE Confidence: 0.83016926

00:27:20.804 --> 00:27:22.900 medical oncology management as well?

NOTE Confidence: 0.8652484

00:27:25.030 --> 00:27:28.110 Yes, most people will get

NOTE Confidence: 0.8652484

00:27:28.110 --> 00:27:30.588 a combination of chemotherapy drugs,

NOTE Confidence: 0.8652484

00:27:30.590 --> 00:27:32.954 usually two or three, and generally

NOTE Confidence: 0.8652484

00:27:32.954 --> 00:27:35.300 it's tapered to their situation,

NOTE Confidence: 0.8652484

00:27:35.300 --> 00:27:37.440 their age, their medical comorbidities,

NOTE Confidence: 0.8652484

00:27:37.440 --> 00:27:39.580 and also the tumor itself.

NOTE Confidence: 0.8652484

00:27:39.580 --> 00:27:40.864 As I mentioned,

NOTE Confidence: 0.8652484

00:27:40.864 --> 00:27:43.860 they do several analysis of the tumor,

NOTE Confidence: 0.8652484

00:27:43.860 --> 00:27:46.900 and there are some studies that can tell

NOTE Confidence: 0.8652484

00:27:46.900 --> 00:27:50.078 you whether or not they will respond

NOTE Confidence: 0.8652484

00:27:50.078 --> 00:27:52.418 to a particular chemotherapeutic agent.

NOTE Confidence: 0.8652484

00:27:52.420 --> 00:27:57.280 And as with a lot of medicine that's gotten,

NOTE Confidence: 0.8652484

00:27:57.280 --> 00:27:59.350 rather involved and complex over the

NOTE Confidence: 0.8652484

00:27:59.350 --> 00:28:01.887 last few years and most people will

NOTE Confidence: 0.8652484

00:28:01.887 --> 00:28:04.071 end up with an oncology consultation

NOTE Confidence: 0.8652484

00:28:04.071 --> 00:28:05.816 and the medical oncologist

NOTE Confidence: 0.8652484

00:28:05.816 --> 00:28:07.568 will tailor their therapy to that.

NOTE Confidence: 0.85433656

00:28:09.860 --> 00:28:12.242 Now the third arm of the

NOTE Confidence: 0.85433656

00:28:12.242 --> 00:28:13.830 stool is always radiation.

NOTE Confidence: 0.85433656

00:28:13.830 --> 00:28:15.815 Do colorectal patients require

NOTE Confidence: 0.85433656

00:28:15.815 --> 00:28:17.800 radiation after surgery as well?

NOTE Confidence: 0.84001184

00:28:18.990 --> 00:28:21.192 So radiation is generally used for

NOTE Confidence: 0.84001184

00:28:21.192 --> 00:28:23.028 rectal cancer, not colon cancer.

NOTE Confidence: 0.84001184

00:28:23.028 --> 00:28:25.224 When it's out of the pelvis,

NOTE Confidence: 0.84001184

00:28:25.230 --> 00:28:27.799 there's generally not a role for radiation.

NOTE Confidence: 0.84001184

00:28:27.800 --> 00:28:30.002 It's when it's in the fixed

NOTE Confidence: 0.84001184

00:28:30.002 --> 00:28:31.470 confines of the pelvis that

NOTE Confidence: 0.84001184

00:28:31.470 --> 00:28:32.568 radiation is used.

NOTE Confidence: 0.84001184

00:28:32.568 --> 00:28:34.764 It's not used all the time,

NOTE Confidence: 0.84001184

00:28:34.770 --> 00:28:37.394 and we do a lot of work up

NOTE Confidence: 0.84001184

00:28:37.394 --> 00:28:39.180 and staging before hand,

NOTE Confidence: 0.84001184

00:28:39.180 --> 00:28:42.022 and a lot of times radiation is

NOTE Confidence: 0.84001184

00:28:42.022 --> 00:28:43.713 given with chemotherapy before

NOTE Confidence: 0.84001184

00:28:43.713 --> 00:28:46.101 surgery for rectal cancer to shrink

NOTE Confidence: 0.84001184

00:28:46.101 --> 00:28:48.996 the tumor and allow

NOTE Confidence: 0.84001184

00:28:49.000 --> 00:28:50.496 for preservation of these sphincters

NOTE Confidence: 0.84001184

00:28:50.496 --> 00:28:52.740 so you don't have a permanent

NOTE Confidence: 0.84001184

00:28:52.802 --> 00:28:54.068 ostomy bag.

NOTE Confidence: 0.84001184

00:28:54.070 --> 00:28:54.460 Doctor

NOTE Confidence: 0.83861184

00:28:54.460 --> 00:28:56.872 Georgia Yavorek is a clinical instructor

NOTE Confidence: 0.83861184

00:28:56.872 --> 00:28:58.907 of surgery specializing in gastro

NOTE Confidence: 0.83861184

00:28:58.907 --> 00:29:01.476 bariatrics at the Yale School of Medicine.

NOTE Confidence: 0.83861184

00:29:01.480 --> 00:29:03.044 If you have questions,

NOTE Confidence: 0.83861184

00:29:03.044 --> 00:29:04.608 the address is canceranswers@yale.edu

NOTE Confidence: 0.83861184

00:29:04.608 --> 00:29:06.770 and past editions of the program

NOTE Confidence: 0.83861184

00:29:06.770 --> 00:29:08.744 are available in audio and written

NOTE Confidence: 0.83861184

00:29:08.804 --> 00:29:10.448 form at yalecancercenter.org.

NOTE Confidence: 0.83861184

00:29:10.450 --> 00:29:13.146 We hope you'll join us next week to

NOTE Confidence: 0.83861184

00:29:13.146 --> 00:29:15.777 learn more about the fight against

NOTE Confidence: 0.83861184

00:29:15.777 --> 00:29:18.591 cancer here on Connecticut Public Radio.