## WEBVTT

00:00:00.000 --> 00:00:02.730 Funding for Yale Cancer Answers

NOTE Confidence: 0.846712297857143

 $00:00:02.730 \dashrightarrow 00:00:05.460$  is provided by Smilow Cancer

NOTE Confidence: 0.846712297857143

00:00:05.553 --> 00:00:07.917 Hospital and AstraZeneca.

NOTE Confidence: 0.846712297857143

 $00:00:07.920 \longrightarrow 00:00:09.184$  Welcome to Yale Cancer

NOTE Confidence: 0.846712297857143

 $00:00:09.184 \longrightarrow 00:00:10.448$  Answers with your host

NOTE Confidence: 0.846712297857143

00:00:10.450 --> 00:00:13.071 Doctor Anees Chagpar.

NOTE Confidence: 0.846712297857143

 $00{:}00{:}13.071 \dashrightarrow 00{:}00{:}14.475$  Yale Cancer Answers features the latest

NOTE Confidence: 0.846712297857143

00:00:14.475 - 00:00:16.230 information on cancer care by

NOTE Confidence: 0.846712297857143

 $00{:}00{:}16.293 \dashrightarrow 00{:}00{:}17.721$  welcoming on cologists and specialists

NOTE Confidence: 0.846712297857143

 $00{:}00{:}17.721 \dashrightarrow 00{:}00{:}20.206$  who are on the forefront of the

NOTE Confidence: 0.846712297857143

 $00:00:20.206 \longrightarrow 00:00:22.052$  battle to fight cancer.

NOTE Confidence: 0.846712297857143

 $00{:}00{:}22.052$  -->  $00{:}00{:}24.158$  This week, it's a conversation about colorectal cancer

NOTE Confidence: 0.846712297857143

 $00{:}00{:}24.160 \dashrightarrow 00{:}00{:}26.310$  with Doctor Ira Leeds.

NOTE Confidence: 0.846712297857143

00:00:26.310 --> 00:00:27.948 Dr. Leeds is an assistant professor of

NOTE Confidence: 0.846712297857143

00:00:27.948 --> 00:00:30.060 surgery at the Yale School of Medicine,

- NOTE Confidence: 0.846712297857143
- 00:00:30.060 --> 00:00:32.070 where Doctor Chapgar is a
- NOTE Confidence: 0.846712297857143
- $00:00:32.070 \dashrightarrow 00:00:33.410$  professor of surgical on cology.
- NOTE Confidence: 0.829765659166667
- $00:00:34.450 \longrightarrow 00:00:36.102$  Ira, maybe we can start
- NOTE Confidence: 0.829765659166667
- $00:00:36.102 \rightarrow 00:00:37.669$  off by laying the groundwork.
- NOTE Confidence: 0.829765659166667
- 00:00:37.670 --> 00:00:39.580 Tell us a little bit
- NOTE Confidence: 0.829765659166667
- $00{:}00{:}39{.}580 \dashrightarrow 00{:}00{:}40{.}726$  about colorectal cancer.
- NOTE Confidence: 0.829765659166667
- 00:00:40.730 --> 00:00:42.338 How common is it?
- NOTE Confidence: 0.829765659166667
- $00:00:42.338 \longrightarrow 00:00:43.946$  How lethal is it?
- NOTE Confidence: 0.829765659166667
- $00:00:43.950 \longrightarrow 00:00:45.520$  How many people get it?
- NOTE Confidence: 0.882577536
- $00:00:45.910 \longrightarrow 00:00:47.070$  I'd be happy to.
- NOTE Confidence: 0.882577536
- $00{:}00{:}47.070 \dashrightarrow 00{:}00{:}49.331$  Colorectal cancer is one of the most
- NOTE Confidence: 0.882577536
- 00:00:49.331 --> 00:00:51.310 common cancers worldwide.
- NOTE Confidence: 0.882577536
- $00{:}00{:}51{.}310$  -->  $00{:}00{:}53{.}758$  It's the third most common cancer and
- $00:00:57.549 \rightarrow 00:00:58.618$  concerningly,
- NOTE Confidence: 0.882577536
- $00:00:58.618 \rightarrow 00:01:00.886$  it's also the second most lethal cancer
- NOTE Confidence: 0.882577536
- $00:01:00.886 \rightarrow 00:01:02.920$  by number of total cancer deaths.

- NOTE Confidence: 0.882577536
- $00:01:02.920 \longrightarrow 00:01:04.045$  The good news
- NOTE Confidence: 0.882577536
- 00:01:04.045 --> 00:01:06.340 on the colon cancer side of
- NOTE Confidence: 0.882577536
- $00{:}01{:}06{.}340 \dashrightarrow 00{:}01{:}08{.}290$  things is that early detection
- NOTE Confidence: 0.882577536
- $00:01:08.290 \dashrightarrow 00:01:11.820$  has survival rates of over 90% whereas
- NOTE Confidence: 0.882577536
- $00:01:11.820 \longrightarrow 00:01:15.370$  late detection has rates of 15%,
- NOTE Confidence: 0.882577536
- $00{:}01{:}15{.}370 \dashrightarrow 00{:}01{:}17{.}370$  so it really gives us
- NOTE Confidence: 0.882577536
- $00:01:17.370 \longrightarrow 00:01:19.160$  an important urgency in the
- NOTE Confidence: 0.882577536
- 00:01:19.160 --> 00:01:20.950 cancer care community to identify
- NOTE Confidence: 0.882577536
- $00:01:21.013 \longrightarrow 00:01:23.098$  individuals with
- NOTE Confidence: 0.882577536
- $00:01:23.098 \rightarrow 00:01:25.183$  precancerous lesions early because the
- NOTE Confidence: 0.882577536
- $00:01:25.243 \rightarrow 00:01:27.299$  survival difference is significant.
- NOTE Confidence: 0.882577536
- 00:01:27.300 --> 00:01:29.235 To put it in kind of very real terms,
- $00:01:33.808 \longrightarrow 00:01:35.953$  1 in 20 individuals in their lifetimes
- NOTE Confidence: 0.882577536
- $00:01:35.953 \longrightarrow 00:01:37.760$  will have colorectal cancer,
- NOTE Confidence: 0.882577536
- $00:01:37.760 \longrightarrow 00:01:40.147$  and so it's something where all of
- NOTE Confidence: 0.882577536
- $00:01:40.147 \rightarrow 00:01:42.467$  us probably know someone or will

- NOTE Confidence: 0.882577536
- $00:01:42.467 \longrightarrow 00:01:44.915$  know someone or been affected.
- 00:01:51.630 --> 00:01:55.560 And speaking of early detection,
- NOTE Confidence: 0.84202631
- $00:01:55.560 \longrightarrow 00:01:57.416$  tell us a little bit more
- NOTE Confidence: 0.84202631
- $00:01:57.416 \rightarrow 00:01:59.218$  about the screening guidelines.
- NOTE Confidence: 0.84202631
- 00:01:59.220 --> 00:02:01.390 I understand that those have
- NOTE Confidence: 0.84202631
- $00{:}02{:}01{.}390 \dashrightarrow 00{:}02{:}03{.}560$  changed recently so that younger
- NOTE Confidence: 0.84202631
- $00:02:03.636 \rightarrow 00:02:06.046$  people now are being recommended
- NOTE Confidence: 0.84202631
- $00:02:06.046 \rightarrow 00:02:07.974$  to get colorectal screening.
- NOTE Confidence: 0.84202631
- $00{:}02{:}07{.}980 \dashrightarrow 00{:}02{:}09{.}910$  Is that right?
- NOTE Confidence: 0.872606231818182
- $00:02:09.920 \longrightarrow 00:02:10.824$  That's absolutely correct.
- NOTE Confidence: 0.872606231818182
- $00:02:10.824 \rightarrow 00:02:12.632$  The screening guidelines continue
- NOTE Confidence: 0.872606231818182
- $00:02:12.632 \rightarrow 00:02:15.462$  to evolve and have for many years.
- NOTE Confidence: 0.872606231818182
- $00:02:15.462 \longrightarrow 00:02:17.674$  The age of 50 was the magical
- NOTE Confidence: 0.872606231818182
- $00:02:17.674 \rightarrow 00:02:19.590$  number where everyone should be
- NOTE Confidence: 0.872606231818182
- 00:02:19.590 --> 00:02:21.882 lining up to get colonoscopies or
- NOTE Confidence: 0.872606231818182
- $00:02:21.954 \rightarrow 00:02:24.194$  alternatives to colonoscopies for

- NOTE Confidence: 0.872606231818182
- $00:02:24.194 \rightarrow 00:02:26.434$  their colorectal cancer screening.
- NOTE Confidence: 0.872606231818182
- 00:02:26.440 --> 00:02:28.990 Many, if not almost all
- NOTE Confidence: 0.872606231818182
- $00:02:28.990 \rightarrow 00:02:31.026$  societies that provide guidelines
- NOTE Confidence: 0.872606231818182
- $00:02:31.026 \longrightarrow 00:02:34.748$  on this topic have moved to 45 as
- NOTE Confidence: 0.872606231818182
- $00:02:34.750 \longrightarrow 00:02:36.864$  the new age when people should start
- NOTE Confidence: 0.872606231818182
- $00:02:36.864 \rightarrow 00:02:38.170$  screening for colorectal cancer,
- NOTE Confidence: 0.872606231818182
- $00:02:38.170 \rightarrow 00:02:39.840$  that's for average risk individuals.
- NOTE Confidence: 0.872606231818182
- 00:02:39.840 --> 00:02:41.136 So there's a number of individuals,
- NOTE Confidence: 0.872606231818182
- $00:02:41.140 \dashrightarrow 00:02:43.642$  both with more rare diseases that
- NOTE Confidence: 0.872606231818182
- 00:02:43.642 --> 00:02:45.800 predispose themselves to colorectal cancer,
- NOTE Confidence: 0.872606231818182
- 00:02:45.800 --> 00:02:48.440 but also a particularly high risk
- NOTE Confidence: 0.872606231818182
- $00:02:48.440 \rightarrow 00:02:50.424$  sociodemographic groups, for example,
- NOTE Confidence: 0.872606231818182
- $00{:}02{:}50{.}424 \dashrightarrow 00{:}02{:}52{.}866$  African Americans who have earlier
- NOTE Confidence: 0.872606231818182
- $00{:}02{:}52{.}866 \dashrightarrow 00{:}02{:}54{.}794$  screening guidelines as well.
- NOTE Confidence: 0.872606231818182
- $00:02:54.800 \rightarrow 00:02:55.130$  Interestingly,
- NOTE Confidence: 0.872606231818182

 $00:02:55.130 \longrightarrow 00:02:56.450$  one of the other

NOTE Confidence: 0.872606231818182

 $00:02:56.450 \longrightarrow 00:02:58.600$  parts of the guidelines that's

NOTE Confidence: 0.872606231818182

 $00:02:58.600 \longrightarrow 00:03:00.008$  always a discussion point

NOTE Confidence: 0.872606231818182

00:03:00.008 - 00:03:02.120 when guidelines come up is

NOTE Confidence: 0.872606231818182

 $00:03:02.186 \longrightarrow 00:03:03.278$  how do you screen?

NOTE Confidence: 0.872606231818182

 $00{:}03{:}03{.}280 \dashrightarrow 00{:}03{:}04{.}984$  Colonoscopy has been the

NOTE Confidence: 0.872606231818182

 $00:03:04.984 \longrightarrow 00:03:06.688$  gold standard for decades.

NOTE Confidence: 0.872606231818182

 $00:03:06.690 \rightarrow 00:03:08.340$  Colonoscopies require you to typically

NOTE Confidence: 0.872606231818182

 $00:03:08.340 \longrightarrow 00:03:10.570$  get a little bit of sedation,

NOTE Confidence: 0.872606231818182

 $00:03:10.570 \rightarrow 00:03:12.194$  and it's a procedure where you have

NOTE Confidence: 0.872606231818182

 $00{:}03{:}12.194 \dashrightarrow 00{:}03{:}14.390$  to take a bowel prep the night before,

NOTE Confidence: 0.872606231818182

 $00{:}03{:}14.390 \dashrightarrow 00{:}03{:}16.694$  so it's certainly a bit of a burden

NOTE Confidence: 0.872606231818182

 $00:03:16.694 \longrightarrow 00:03:18.987$  on the average person to do so.

NOTE Confidence: 0.872606231818182

 $00:03:18.990 \longrightarrow 00:03:21.400$  There are alternatives to colonoscopies.

NOTE Confidence: 0.872606231818182

 $00{:}03{:}21{.}400 \dashrightarrow 00{:}03{:}23{.}224$  There are a number of reasons

NOTE Confidence: 0.872606231818182

 $00:03:23.224 \rightarrow 00:03:24.899$  why a colonoscopy is arguably

- NOTE Confidence: 0.872606231818182
- $00{:}03{:}24.899 \dashrightarrow 00{:}03{:}26.459$  better for people that
- NOTE Confidence: 0.872606231818182
- $00:03:26.460 \rightarrow 00:03:27.804$  are able to adhere to the schedule,
- NOTE Confidence: 0.872606231818182
- $00:03:27.810 \longrightarrow 00:03:29.472$  but the guidelines do really try
- NOTE Confidence: 0.872606231818182
- $00:03:29.472 \rightarrow 00:03:31.262$  to balance the burden of screening
- NOTE Confidence: 0.872606231818182
- $00:03:31.262 \dashrightarrow 00:03:33.146$  along with the benefits of screening.
- NOTE Confidence: 0.877976135
- 00:03:34.150 --> 00:03:35.886 Let's talk a little bit
- NOTE Confidence: 0.877976135
- $00:03:35.886 \longrightarrow 00:03:38.117$  about a few things that you
- NOTE Confidence: 0.877976135
- $00:03:38.117 \longrightarrow 00:03:39.537$  touched on.
- NOTE Confidence: 0.877976135
- $00:03:39.540 \longrightarrow 00:03:42.969$  So the first point is that screening is now
- NOTE Confidence: 0.877976135
- $00:03:42.969 \rightarrow 00:03:46.000$  being recommended at 45 rather than 50.
- NOTE Confidence: 0.877976135
- $00{:}03{:}46{.}000 \dashrightarrow 00{:}03{:}48{.}395$  Is that because the demographics
- NOTE Confidence: 0.877976135
- $00{:}03{:}48.395 \dashrightarrow 00{:}03{:}50.790$  of colon cancer are trending
- NOTE Confidence: 0.877976135
- $00:03:50.870 \rightarrow 00:03:53.069$  towards younger populations?
- NOTE Confidence: 0.877976135
- $00{:}03{:}56{.}910 \dashrightarrow 00{:}03{:}59{.}076$  And who gets colon cancer in terms
- NOTE Confidence: 0.877976135
- $00:03:59.076 \rightarrow 00:04:00.520$  of the age demographic?
- NOTE Confidence: 0.696660801428571

 $00:04:02.120 \longrightarrow 00:04:05.928$  So the trends in colorectal cancer are,

NOTE Confidence: 0.696660801428571

 $00:04:05.930 \longrightarrow 00:04:08.546$  at the very least, interesting, and

NOTE Confidence: 0.696660801428571

 $00:04:08.546 \rightarrow 00:04:10.700$  potentially concerning in many ways.

NOTE Confidence: 0.696660801428571

 $00:04:10.700 \longrightarrow 00:04:14.498$  New onset of colon

NOTE Confidence: 0.696660801428571

 $00:04:14.498 \rightarrow 00:04:18.050$  cancer is actually declining nationwide.

NOTE Confidence: 0.696660801428571

00:04:18.050 --> 00:04:20.018 The overall rate of colorectal cancer

NOTE Confidence: 0.696660801428571

 $00{:}04{:}20{.}018 \dashrightarrow 00{:}04{:}22{.}395$  in the United States is declining and

NOTE Confidence: 0.696660801428571

 $00{:}04{:}22.395 \dashrightarrow 00{:}04{:}24.399$  and also favorably the mortality rate

NOTE Confidence: 0.696660801428571

 $00{:}04{:}24{.}399 \dashrightarrow 00{:}04{:}26{.}549$  from colorectal cancer is declining,

NOTE Confidence: 0.696660801428571

 $00{:}04{:}26.550 \dashrightarrow 00{:}04{:}29.285$  and we attribute those overall

NOTE Confidence: 0.696660801428571

 $00:04:29.285 \dashrightarrow 00:04:32.468$  trends to fairly good adherence to

NOTE Confidence: 0.696660801428571

00:04:32.468 --> 00:04:34.556 colonoscopy and colonoscopy

NOTE Confidence: 0.696660801428571

 $00:04:34.556 \rightarrow 00:04:36.644$  alternative screening schedules

NOTE Confidence: 0.696660801428571

 $00:04:36.650 \longrightarrow 00:04:38.315$  in older individuals that are

NOTE Confidence: 0.696660801428571

 $00:04:38.315 \rightarrow 00:04:39.647$  getting good colonoscopies and

NOTE Confidence: 0.696660801428571

 $00:04:39.647 \rightarrow 00:04:41.371$  the adherence to that currently is

- NOTE Confidence: 0.696660801428571
- $00:04:41.371 \longrightarrow 00:04:43.388$  about 60 to 70% of people that are
- NOTE Confidence: 0.696660801428571
- $00{:}04{:}43.388 \dashrightarrow 00{:}04{:}45.316$  supposed to be getting them on time.
- NOTE Confidence: 0.696660801428571
- $00{:}04{:}45{.}316 \dashrightarrow 00{:}04{:}47{.}524$  The risk of colorectal cancer
- NOTE Confidence: 0.696660801428571
- $00{:}04{:}47{.}524 \dashrightarrow 00{:}04{:}49{.}503$  occurring in those patients seems
- NOTE Confidence: 0.696660801428571
- $00{:}04{:}49{.}503 \dashrightarrow 00{:}04{:}51{.}837$  to be declining and we attribute
- NOTE Confidence: 0.696660801428571
- $00:04:51.837 \longrightarrow 00:04:53.969$  that to better screening.
- NOTE Confidence: 0.696660801428571
- $00:04:53.970 \rightarrow 00:04:56.426$  The concerning part is that in young people,
- NOTE Confidence: 0.696660801428571
- $00:04:56.430 \longrightarrow 00:04:58.386$  which is defined as
- NOTE Confidence: 0.696660801428571
- $00:04:58.386 \longrightarrow 00:05:00.080$  20 to 49 years old,
- NOTE Confidence: 0.696660801428571
- $00{:}05{:}00{.}080 \dashrightarrow 00{:}05{:}02{.}804$  the rate of colorectal cancer is
- NOTE Confidence: 0.696660801428571
- $00:05:02.804 \rightarrow 00:05:04.456$  increasing and that is concerning
- NOTE Confidence: 0.696660801428571
- $00{:}05{:}04{.}456 \dashrightarrow 00{:}05{:}06{.}250$  not just because that's a patient
- NOTE Confidence: 0.696660801428571
- $00:05:06.310 \longrightarrow 00:05:07.940$  population that historically has not
- NOTE Confidence: 0.696660801428571
- $00:05:07.940 \longrightarrow 00:05:10.509$  been screened and one of the major reasons
- NOTE Confidence: 0.696660801428571
- $00:05:10.509 \dashrightarrow 00:05:12.567$  why the guidelines were changed to 45.
- NOTE Confidence: 0.696660801428571

 $00:05:12.570 \longrightarrow 00:05:15.594$  But we also don't know why the rate of

NOTE Confidence: 0.696660801428571

00:05:15.594 --> 00:05:17.950 colorectal cancer incidence is occurring

NOTE Confidence: 0.696660801428571

 $00:05:17.950 \rightarrow 00:05:21.010$  more frequently in that younger population.

NOTE Confidence: 0.696660801428571

 $00{:}05{:}21.010 \dashrightarrow 00{:}05{:}22.570$  So for those of us that

NOTE Confidence: 0.696660801428571

 $00:05:22.570 \longrightarrow 00:05:23.610$  think about this every day,

NOTE Confidence: 0.696660801428571

 $00:05:23.610 \longrightarrow 00:05:25.950$  it's relatively easy to agree that

NOTE Confidence: 0.696660801428571

 $00:05:25.950 \longrightarrow 00:05:27.957$  the screening guidelines

NOTE Confidence: 0.696660801428571

 $00:05:27.957 \rightarrow 00:05:30.177$  should be lowered to younger ages

NOTE Confidence: 0.696660801428571

 $00:05:30.177 \longrightarrow 00:05:32.729$  and 45 is where it is now and

NOTE Confidence: 0.696660801428571

 $00:05:32.730 \longrightarrow 00:05:36.058$  in a completely unofficial

NOTE Confidence: 0.696660801428571

 $00{:}05{:}36{.}060 \dashrightarrow 00{:}05{:}38{.}818$ role I would not be surprised if

NOTE Confidence: 0.696660801428571

 $00{:}05{:}38{.}818 \dashrightarrow 00{:}05{:}40{.}403$  those guidelines potentially got

NOTE Confidence: 0.696660801428571

00:05:40.403 -> 00:05:42.395 even earlier in future years,

NOTE Confidence: 0.696660801428571

 $00:05:42.400 \longrightarrow 00:05:44.488$  but we don't know at all why there

NOTE Confidence: 0.696660801428571

 $00{:}05{:}44.488 \dashrightarrow 00{:}05{:}46.818$  is a higher rate of

NOTE Confidence: 0.696660801428571

 $00:05:46.818 \longrightarrow 00:05:48.558$  cancer in that population.

 $00{:}05{:}50{.}210 \dashrightarrow 00{:}05{:}52{.}506$  The other thing that you mentioned was

NOTE Confidence: 0.9137956596666667

 $00:05:52.506 \rightarrow 00:05:54.333$  that these guidelines are for average

NOTE Confidence: 0.9137956596666667

 $00{:}05{:}54{.}333 \dashrightarrow 00{:}05{:}56{.}556$  risk people and that there are a number

NOTE Confidence: 0.9137956596666667

 $00:05:56.556 \rightarrow 00:05:58.524$  of things that increase a person's

NOTE Confidence: 0.9137956596666667

 $00:05:58.524 \rightarrow 00:06:00.358$  risk of developing colorectal cancer.

NOTE Confidence: 0.9137956596666667

00:06:00.358 --> 00:06:02.478 So you mentioned certain demographic

NOTE Confidence: 0.9137956596666667

 $00:06:02.478 \dashrightarrow 00:06:04.910$  groups such as African Americans.

NOTE Confidence: 0.913795659666667

 $00:06:04.910 \rightarrow 00:06:07.745$  I was wondering if you could talk a little

NOTE Confidence: 0.9137956596666667

 $00:06:07.745 \longrightarrow 00:06:10.470$  bit more about some of the conditions,

NOTE Confidence: 0.9137956596666667

 $00:06:10.470 \longrightarrow 00:06:12.154$  genetic conditions,

NOTE Confidence: 0.9137956596666667

 $00:06:12.154 \rightarrow 00:06:15.183$  other predisposing factors that

NOTE Confidence: 0.9137956596666667

 $00{:}06{:}15.183 \dashrightarrow 00{:}06{:}17.698$  increase a persons risk and whether

NOTE Confidence: 0.9137956596666667

 $00{:}06{:}17.698 \dashrightarrow 00{:}06{:}20.530$  those people should be screened

NOTE Confidence: 0.9137956596666667

 $00:06:20.530 \longrightarrow 00:06:23.477$  earlier than the 45 year old guideline?

NOTE Confidence: 0.916850138571429

 $00{:}06{:}24.710 \dashrightarrow 00{:}06{:}26.306$  When we think about a risk factor,

NOTE Confidence: 0.916850138571429

 $00:06:26.310 \rightarrow 00:06:28.166$  as I always try to break them down

NOTE Confidence: 0.916850138571429

00:06:28.166 --> 00:06:30.089 into what I call non modifiable

NOTE Confidence: 0.916850138571429

 $00:06:30.089 \dashrightarrow 00:06:31.489$  versus modifiable risk factors.

NOTE Confidence: 0.916850138571429

 $00{:}06{:}31.490 \dashrightarrow 00{:}06{:}33.578$  So non modifiable risk factors or

NOTE Confidence: 0.916850138571429

 $00{:}06{:}33.578 \dashrightarrow 00{:}06{:}35.859$  the risk factors that an individual

NOTE Confidence: 0.916850138571429

 $00{:}06{:}35{.}860 \dashrightarrow 00{:}06{:}37{.}522$  has an increased risk based on

NOTE Confidence: 0.916850138571429

 $00:06:37.522 \rightarrow 00:06:39.250$  compared to the average population.

NOTE Confidence: 0.916850138571429

 $00:06:39.250 \rightarrow 00:06:41.230$  But at the same time there isn't a lot

NOTE Confidence: 0.916850138571429

 $00{:}06{:}41{.}230 \dashrightarrow 00{:}06{:}43{.}219$  that could be done about that other

NOTE Confidence: 0.916850138571429

 $00{:}06{:}43.219 \dashrightarrow 00{:}06{:}44.717$  than changing a screening schedule

NOTE Confidence: 0.916850138571429

00:06:44.717 $\operatorname{-->}$ 00:06:46.789 to suit that increased risk which is

NOTE Confidence: 0.916850138571429

 $00:06:46.789 \rightarrow 00:06:48.450$  modifiable or things that we really

NOTE Confidence: 0.916850138571429

 $00{:}06{:}48{.}450 \dashrightarrow 00{:}06{:}50{.}704$  spend a lot of time talking to patients

NOTE Confidence: 0.916850138571429

 $00{:}06{:}50{.}704 \dashrightarrow 00{:}06{:}52{.}522$  about because those are risk factors

NOTE Confidence: 0.916850138571429

 $00:06:52.522 \rightarrow 00:06:54.809$  that if certain behaviors are changed,

NOTE Confidence: 0.916850138571429

00:06:54.810 --> 00:06:57.880 may actually reduce their risk.

- NOTE Confidence: 0.916850138571429
- $00{:}06{:}57.880 \dashrightarrow 00{:}06{:}59.565$  Increasing age is probably the
- NOTE Confidence: 0.916850138571429
- $00:06:59.565 \longrightarrow 00:07:01.250$  one that's most frequently cited
- NOTE Confidence: 0.916850138571429
- $00:07:01.310 \longrightarrow 00:07:02.650$  as a nominal risk factor.
- $00:07:03.415 \rightarrow 00:07:05.200$  We cannot get younger overtime and we
- NOTE Confidence: 0.916850138571429
- $00:07:05.256 \rightarrow 00:07:07.208$  need to recognize that as we get older,
- NOTE Confidence: 0.916850138571429
- $00{:}07{:}07{.}210 \dashrightarrow 00{:}07{:}08{.}585$  we do have an increased
- NOTE Confidence: 0.916850138571429
- 00:07:08.585 --> 00:07:09.685 risk of colorectal cancer,
- NOTE Confidence: 0.916850138571429
- $00:07:09.690 \rightarrow 00:07:12.300$  which is why screening continues after
- NOTE Confidence: 0.916850138571429
- $00:07:12.300 \rightarrow 00:07:14.831$  that first episode of colonoscopy at
- NOTE Confidence: 0.916850138571429
- $00:07:14.831 \rightarrow 00:07:17.671$  the original age of 50 and now 45.
- NOTE Confidence: 0.916850138571429
- $00:07:17.680 \rightarrow 00:07:19.945$  Family history and personal history
- NOTE Confidence: 0.916850138571429
- $00:07:19.945 \longrightarrow 00:07:21.757$  are both incredibly important.
- $00:07:22.891 \longrightarrow 00:07:25.153$  Almost all the screening guidelines have
- NOTE Confidence: 0.916850138571429
- $00:07:25.153 \longrightarrow 00:07:27.534$  a carve out for patients who have
- NOTE Confidence: 0.916850138571429
- $00:07:27.534 \rightarrow 00:07:29.749$  early onset colon cancer in a family
- NOTE Confidence: 0.916850138571429
- $00:07:29.749 \rightarrow 00:07:31.453$  member and most of the guidelines
- NOTE Confidence: 0.916850138571429

 $00:07:31.453 \rightarrow 00:07:33.930$  say that an individual should start

NOTE Confidence: 0.916850138571429

 $00{:}07{:}33{.}930 \dashrightarrow 00{:}07{:}36{.}530$  their own personal screening 10 years

NOTE Confidence: 0.916850138571429

 $00:07:36.530 \longrightarrow 00:07:39.250$  before the age of onset

NOTE Confidence: 0.916850138571429

 $00:07:39.250 \longrightarrow 00:07:42.096$  in a first degree relative.

NOTE Confidence: 0.916850138571429

 $00:07:42.100 \longrightarrow 00:07:44.158$  The thinking there being that

NOTE Confidence: 0.916850138571429

 $00:07:44.160 \longrightarrow 00:07:47.272$  there is this idea that is widely

NOTE Confidence: 0.916850138571429

 $00{:}07{:}47.272 \dashrightarrow 00{:}07{:}50.252$  accepted that most colorectal cancer

NOTE Confidence: 0.916850138571429

 $00:07:50.252 \rightarrow 00:07:52.980$  comes from polyps that form in the colon,

NOTE Confidence: 0.916850138571429

 $00{:}07{:}52{.}980 \dashrightarrow 00{:}07{:}55{.}476$  which is from the natural turnover

NOTE Confidence: 0.916850138571429

 $00:07:55.476 \longrightarrow 00:07:58.660$  of the surface of the colon,

NOTE Confidence: 0.916850138571429

 $00:07:58.660 \rightarrow 00:08:00.260$  and so those polyps,

NOTE Confidence: 0.916850138571429

 $00{:}08{:}00{.}260 \dashrightarrow 00{:}08{:}01{.}965$  then overtime have more and

NOTE Confidence: 0.916850138571429

00:08:01.965 - 00:08:03.329 more turnover of cells,

NOTE Confidence: 0.916850138571429

 $00:08:03.330 \rightarrow 00:08:05.600$  and those cells get increasingly

NOTE Confidence: 0.916850138571429

 $00{:}08{:}05{.}600 \dashrightarrow 00{:}08{:}07{.}670$  cancer like and as that occurs

NOTE Confidence: 0.916850138571429

 $00:08:07.670 \longrightarrow 00:08:09.769$  in anywhere between a five

00:08:09.769 --> 00:08:11.399 and 10 year progression cycle,

NOTE Confidence: 0.916850138571429

 $00:08:11.400 \longrightarrow 00:08:13.848$  you can have what was a non cancerous

NOTE Confidence: 0.916850138571429

 $00:08:13.848 \rightarrow 00:08:15.378$  polyp turn into a cancer.

NOTE Confidence: 0.916850138571429

 $00:08:15.380 \longrightarrow 00:08:17.200$  So that's where this thought that if

NOTE Confidence: 0.916850138571429

 $00:08:17.200 \longrightarrow 00:08:19.055$  you start 10 years before a primary

NOTE Confidence: 0.916850138571429

 $00:08:19.055 \rightarrow 00:08:20.750$  relative who had colon cancer,

NOTE Confidence: 0.916850138571429

 $00:08:20.750 \longrightarrow 00:08:23.270$  you should be able to identify that

NOTE Confidence: 0.916850138571429

 $00:08:23.270 \rightarrow 00:08:25.628$  at the precancerous stage and address

NOTE Confidence: 0.916850138571429

 $00:08:25.628 \rightarrow 00:08:27.633$  it by removal with colonoscopy.

NOTE Confidence: 0.916850138571429

 $00:08:27.640 \longrightarrow 00:08:30.153$  There is also a personal history if

NOTE Confidence: 0.916850138571429

 $00:08:30.153 \rightarrow 00:08:32.167$  certain patients have been exposed

NOTE Confidence: 0.916850138571429

 $00{:}08{:}32{.}167 \dashrightarrow 00{:}08{:}33{.}903$  to various environmental factors or

00:08:38.288 --> 00:08:40.619 cancer causing agents,

NOTE Confidence: 0.916850138571429

 $00:08:40.620 \longrightarrow 00:08:42.456$  that would be another reason to

NOTE Confidence: 0.916850138571429

 $00{:}08{:}42.456 \dashrightarrow 00{:}08{:}44.562$  screen them earlier and then there

NOTE Confidence: 0.916850138571429

 $00:08:44.562 \rightarrow 00:08:46.138$  are relatively rare diseases,

 $00:08:46.140 \rightarrow 00:08:47.538$  particularly inherited syndromes

NOTE Confidence: 0.916850138571429

00:08:47.538 --> 00:08:49.868 like Lynch syndrome or

NOTE Confidence: 0.916850138571429

 $00{:}08{:}49{.}868 \dashrightarrow 00{:}08{:}51{.}958$  Familial adenomatous polyposis.

NOTE Confidence: 0.916850138571429

 $00:08:51.960 \longrightarrow 00:08:54.480$  These are conditions where

00:08:56.160 --> 00:08:58.590 numerous family members

NOTE Confidence: 0.916850138571429

 $00{:}08{:}58{.}590 \dashrightarrow 00{:}09{:}00{.}820$  who have already had colon

NOTE Confidence: 0.916850138571429

 $00:09:00.820 \longrightarrow 00:09:02.604$  cancer or related cancers,

NOTE Confidence: 0.916850138571429

 $00:09:02.610 \longrightarrow 00:09:05.106$  and because of that increased risk,

NOTE Confidence: 0.916850138571429

 $00:09:05.110 \longrightarrow 00:09:07.310$  there are very well early

NOTE Confidence: 0.916850138571429

 $00:09:07.310 \longrightarrow 00:09:09.070$  screening guidelines for those

NOTE Confidence: 0.916850138571429

 $00:09:09.070 \longrightarrow 00:09:10.569$  particular patient groups.

NOTE Confidence: 0.916850138571429

 $00{:}09{:}10.570 \dashrightarrow 00{:}09{:}12.582$  Those diseases and inherited

NOTE Confidence: 0.916850138571429

 $00:09:12.582 \rightarrow 00:09:14.594$  symptoms are relatively rare,

NOTE Confidence: 0.916850138571429

 $00:09:14.600 \rightarrow 00:09:16.315$  and typically patients are getting

NOTE Confidence: 0.916850138571429

 $00:09:16.315 \rightarrow 00:09:18.030$  passed on from family members saying,

 $00:09:19.530 \rightarrow 00:09:21.060$  I started screening earlier than average

NOTE Confidence: 0.916850138571429

 $00:09:21.060 \rightarrow 00:09:22.938$  because of this and you should too.

NOTE Confidence: 0.7997459625

 $00:09:29.940 \dashrightarrow 00:09:32.229$  Tell us about the modifiable risk factors.

NOTE Confidence: 0.927403475

 $00{:}09{:}32.720 \dashrightarrow 00{:}09{:}34.982$  So modifiable risk factors are incredibly

NOTE Confidence: 0.927403475

 $00:09:34.982 \rightarrow 00:09:37.167$  important because this is where our

NOTE Confidence: 0.927403475

 $00:09:37.167 \longrightarrow 00:09:39.330$  patients own agency has something they can

NOTE Confidence: 0.927403475

 $00:09:39.330 \longrightarrow 00:09:41.725$  do to reduce their risk moving forward.

NOTE Confidence: 0.927403475

 $00{:}09{:}41.730 \dashrightarrow 00{:}09{:}43.110$  There are things that we often times

NOTE Confidence: 0.927403475

 $00:09:43.110 \longrightarrow 00:09:44.605$  don't like to hear about when

NOTE Confidence: 0.927403475

 $00{:}09{:}44.605 \dashrightarrow 00{:}09{:}45.657$  we are patients ourselves,

NOTE Confidence: 0.927403475

00:09:45.660 - 00:09:47.595 because it does typically

NOTE Confidence: 0.927403475

00:09:47.595 --> 00:09:48.756 involve behavior change.

NOTE Confidence: 0.927403475

00:09:48.760 --> 00:09:51.336 But you know, I really tried to have

NOTE Confidence: 0.927403475

 $00:09:51.336 \longrightarrow 00:09:53.599$  patients wrap their heads around that.

NOTE Confidence: 0.927403475

 $00:09:53.600 \rightarrow 00:09:55.136$  You can essentially

NOTE Confidence: 0.927403475

 $00{:}09{:}55{.}136 \dashrightarrow 00{:}09{:}58{.}208$ eliminate your increased risk if you

NOTE Confidence: 0.927403475

 $00:09:58.208 \rightarrow 00:10:00.616$  do these changes in behavior early

 $00:10:00.616 \rightarrow 00:10:02.930$  enough on in the exposure cycle and

NOTE Confidence: 0.927403475

 $00{:}10{:}02{.}930 \dashrightarrow 00{:}10{:}05{.}102$  the modifiable risk factors that

NOTE Confidence: 0.927403475

 $00:10:05.102 \longrightarrow 00:10:07.658$  we think about most are alcohol use,

NOTE Confidence: 0.927403475

00:10:07.660 --> 00:10:09.232 tobacco smoking,

NOTE Confidence: 0.927403475

00:10:09.232 --> 00:10:12.376 being overweight or obese.

NOTE Confidence: 0.927403475

 $00{:}10{:}12{.}380 \dashrightarrow 00{:}10{:}15{.}880$  And then the more controversial area

NOTE Confidence: 0.927403475

 $00:10:15.880 \rightarrow 00:10:18.568$  are the dietary changes that one

NOTE Confidence: 0.927403475

00:10:18.568 --> 00:10:21.180 can do in addition to simple weight

NOTE Confidence: 0.927403475

 $00:10:21.180 \longrightarrow 00:10:22.580$  loss that's related to obesity.

NOTE Confidence: 0.927403475

00:10:22.580 --> 00:10:23.654 So, for example,

NOTE Confidence: 0.927403475

 $00:10:23.654 \rightarrow 00:10:25.444$  this evidence is still evolving.

NOTE Confidence: 0.927403475

00:10:25.450 --> 00:10:26.420 We don't know for sure,

NOTE Confidence: 0.927403475

 $00:10:26.420 \longrightarrow 00:10:29.084$  but things like high fiber diets,

NOTE Confidence: 0.927403475

 $00:10:29.084 \rightarrow 00:10:31.306$  reducing complex artificial sugars,

NOTE Confidence: 0.927403475

 $00{:}10{:}31{.}306 \dashrightarrow 00{:}10{:}33{.}910$  and so forth may have an improvement

NOTE Confidence: 0.927403475

- $00{:}10{:}33{.}910 \dashrightarrow 00{:}10{:}36{.}876$  on one's risk factors for colon cancer.
- $00{:}10{:}39{.}120 \dashrightarrow 00{:}10{:}40{.}620$  The other one that
- NOTE Confidence: 0.927403475
- $00{:}10{:}40.620 \dashrightarrow 00{:}10{:}42.020$  I would controversially put in
- NOTE Confidence: 0.927403475
- $00{:}10{:}42.020 \dashrightarrow 00{:}10{:}43.140$  the modifiable risk factor
- NOTE Confidence: 0.927403475
- $00:10:43.140 \longrightarrow 00:10:45.560$  group is race.
- NOTE Confidence: 0.927403475
- 00:10:45.560 --> 00:10:47.534 Obviously a patient can't change their race,
- NOTE Confidence: 0.927403475
- $00:10:47.540 \longrightarrow 00:10:49.192$  but I think at the society level
- NOTE Confidence: 0.927403475
- $00:10:49.192 \longrightarrow 00:10:51.414$  we have to ask if whether or not
- NOTE Confidence: 0.927403475
- $00{:}10{:}51.414 \dashrightarrow 00{:}10{:}52.869$  the fact that African Americans
- NOTE Confidence: 0.927403475
- $00:10:52.927 \rightarrow 00:10:54.712$  in particular have an incredibly
- NOTE Confidence: 0.927403475
- 00:10:54.712 --> 00:10:56.497 higher rate of colorectal cancer
- NOTE Confidence: 0.927403475
- 00:10:56.500 --> 00:10:57.648 than the average population,
- NOTE Confidence: 0.927403475
- $00{:}10{:}57.648 \dashrightarrow 00{:}10{:}59.083$  is that because of something
- NOTE Confidence: 0.927403475
- $00{:}10{:}59{.}083 \dashrightarrow 00{:}11{:}00{.}656$  genetic and the data suggests that
- NOTE Confidence: 0.927403475
- $00{:}11{:}00{.}656 \dashrightarrow 00{:}11{:}01{.}891$  that's probably not the case.
- NOTE Confidence: 0.927403475
- $00{:}11{:}01{.}900 \dashrightarrow 00{:}11{:}04{.}630$  The data suggests that the risk of
- NOTE Confidence: 0.927403475

 $00{:}11{:}04.630 \dashrightarrow 00{:}11{:}06.690$  increased colon cancer in certain

NOTE Confidence: 0.927403475

00:11:06.690 --> 00:11:09.150 races is likely due to socioeconomic

NOTE Confidence: 0.927403475

00:11:09.150 --> 00:11:11.548 factors and access issues to care,

NOTE Confidence: 0.927403475

 $00:11:11.550 \longrightarrow 00:11:13.989$  so I think as a society and

NOTE Confidence: 0.927403475

 $00:11:13.989 \longrightarrow 00:11:16.537$  also as a group of physicians,

NOTE Confidence: 0.927403475

 $00:11:16.540 \longrightarrow 00:11:17.491$  Health care providers,

NOTE Confidence: 0.927403475

 $00{:}11{:}17{.}491 \dashrightarrow 00{:}11{:}19{.}710$  we need to think seriously how we're

NOTE Confidence: 0.927403475

 $00{:}11{:}19.765 \dashrightarrow 00{:}11{:}21.535$  making sure that race is acknowledged

NOTE Confidence: 0.927403475

00:11:21.535 --> 00:11:23.498 in our care of patients because

NOTE Confidence: 0.927403475

 $00{:}11{:}23.498 \dashrightarrow 00{:}11{:}25.550$  there are increased risks that we

NOTE Confidence: 0.927403475

 $00:11:25.610 \longrightarrow 00:11:27.340$  likely could modify with improved

NOTE Confidence: 0.927403475

 $00{:}11{:}27{.}340 \dashrightarrow 00{:}11{:}29{.}362$  access to care and addressing both

NOTE Confidence: 0.927403475

 $00{:}11{:}29.362 \dashrightarrow 00{:}11{:}31.258$  social terms of health as well

NOTE Confidence: 0.927403475

 $00:11:31.258 \longrightarrow 00:11:32.629$  as biomedical risk factors.

NOTE Confidence: 0.823524788

 $00:11:34.360 \longrightarrow 00:11:36.120$  A couple of pointed questions.

NOTE Confidence: 0.823524788

00:11:36.120 --> 00:11:39.000 I guess the first is in terms of gender.

- NOTE Confidence: 0.823524788
- $00{:}11{:}39{.}000 \dashrightarrow 00{:}11{:}40{.}640$  Is there a difference
- NOTE Confidence: 0.823524788
- $00:11:40.640 \longrightarrow 00:11:41.870$  in colorectal incidence?
- NOTE Confidence: 0.853850674210526
- $00:11:43.840 \longrightarrow 00:11:45.730$  The relationship to gender and
- NOTE Confidence: 0.853850674210526
- $00{:}11{:}45{.}730 \dashrightarrow 00{:}11{:}48{.}320$  colorectal cancer has more to do with
- NOTE Confidence: 0.853850674210526
- $00{:}11{:}48{.}320 \dashrightarrow 00{:}11{:}50{.}525$  where the cancers occur in the colon,
- NOTE Confidence: 0.853850674210526
- $00{:}11{:}50{.}530 \dashrightarrow 00{:}11{:}52{.}663$  and this is a complex issue that we can
- NOTE Confidence: 0.853850674210526
- $00:11:52.663 \rightarrow 00:11:54.390$  probably come back to if we have time.
- NOTE Confidence: 0.853850674210526
- $00{:}11{:}54{.}390 \dashrightarrow 00{:}11{:}56{.}334$  But colorectal cancer occurs
- NOTE Confidence: 0.853850674210526
- $00:11:56.334 \rightarrow 00:11:58.580$  in three general places.
- NOTE Confidence: 0.853850674210526
- $00:11:58.580 \rightarrow 00:12:00.380$  The right side of the colon,
- NOTE Confidence: 0.853850674210526
- $00:12:00.380 \longrightarrow 00:12:01.268$  the left side of the colon,
- NOTE Confidence: 0.853850674210526
- $00{:}12{:}01{.}270 \dashrightarrow 00{:}12{:}03{.}049$  and the rectum.
- NOTE Confidence: 0.853850674210526
- $00{:}12{:}03.050 \dashrightarrow 00{:}12{:}04.525$  These are very different areas
- NOTE Confidence: 0.853850674210526
- $00:12:04.525 \longrightarrow 00:12:06.800$  in terms of how they are handled
- NOTE Confidence: 0.853850674210526
- 00:12:06.800 --> 00:12:08.268 from a suregons standpoint,
- NOTE Confidence: 0.853850674210526

 $00:12:08.270 \rightarrow 00:12:10.839$  which is why it's really relevant and

NOTE Confidence: 0.853850674210526

 $00:12:10.839 \longrightarrow 00:12:14.048$  to go to your direct question,

NOTE Confidence: 0.853850674210526

 $00:12:14.050 \rightarrow 00:12:16.430$  the gender differences between the

NOTE Confidence: 0.853850674210526

 $00:12:16.430 \rightarrow 00:12:19.240$  various anatomic sites varies as well.

NOTE Confidence: 0.853850674210526

 $00:12:19.240 \longrightarrow 00:12:20.740$  We don't really understand why and

NOTE Confidence: 0.853850674210526

00:12:20.740 --> 00:12:22.749 it's an area of open investigation,

NOTE Confidence: 0.853850674210526

 $00{:}12{:}22.750 \dashrightarrow 00{:}12{:}25.382$  but it does seem to color

NOTE Confidence: 0.853850674210526

 $00:12:25.382 \rightarrow 00:12:27.050$  where these cancers occur,

NOTE Confidence: 0.853850674210526

 $00{:}12{:}27.050 \dashrightarrow 00{:}12{:}29.126$  and therefore genders seem to have

NOTE Confidence: 0.853850674210526

 $00:12:29.126 \rightarrow 00:12:30.907$  differences in treatment strategies

NOTE Confidence: 0.853850674210526

 $00{:}12{:}30{.}907 \dashrightarrow 00{:}12{:}33{.}294$  because of where the sites of disease.

NOTE Confidence: 0.8757460806666667

 $00:12:34.830 \rightarrow 00:12:37.154$  So women have more colon cancers

NOTE Confidence: 0.8757460806666667

 $00:12:37.154 \rightarrow 00:12:39.779$  on one side of the colon than men?

NOTE Confidence: 0.8757460806666667

 $00:12:39.780 \longrightarrow 00:12:41.538$  Correct, the right side.

NOTE Confidence: 0.8757460806666667

 $00{:}12{:}41.540 \dashrightarrow 00{:}12{:}43.580$  Interesting, and my second question,

NOTE Confidence: 0.8757460806666667

 $00:12:43.580 \rightarrow 00:12:46.980$  what about inflammatory bowel disease?

- NOTE Confidence: 0.8757460806666667
- $00{:}12{:}46{.}980 \dashrightarrow 00{:}12{:}48{.}708$  Does that increase your
- NOTE Confidence: 0.8757460806666667
- 00:12:48.708 --> 00:12:50.436 risk of colorectal cancer?
- NOTE Confidence: 0.8757460806666667
- $00:12:50.440 \rightarrow 00:12:53.702$  And if so, are we seeing more
- NOTE Confidence: 0.8757460806666667
- $00{:}12{:}53.702 \dashrightarrow 00{:}12{:}55.583$  inflammatory bowel disease in
- NOTE Confidence: 0.8757460806666667
- $00{:}12{:}55{.}583 \dashrightarrow 00{:}12{:}57{.}538$  younger people which might give
- NOTE Confidence: 0.8757460806666667
- $00{:}12{:}57{.}538 \dashrightarrow 00{:}13{:}00{.}820$  us a clue as to one potential
- NOTE Confidence: 0.8757460806666667
- $00:13:00.820 \rightarrow 00:13:03.530$  etiologic factor for younger onset?
- NOTE Confidence: 0.8750956775
- 00:13:04.930 --> 00:13:06.610 So, inflammatory bowel disease
- NOTE Confidence: 0.8750956775
- 00:13:06.610 --> 00:13:08.290 absolutely increases your risk.
- $00{:}13{:}09{.}784 \dashrightarrow 00{:}13{:}12{.}274$  The screening guidelines for both
- NOTE Confidence: 0.8750956775
- 00:13:12.274 --> 00:13:15.194 patients with Crohn's disease and
- NOTE Confidence: 0.8750956775
- $00:13:15.194 \rightarrow 00:13:17.966$  colitis specifically target those
- NOTE Confidence: 0.8750956775
- 00:13:18.045 --> 00:13:20.680 groups for early onset colonoscopies,
- NOTE Confidence: 0.8750956775
- $00:13:20.680 \longrightarrow 00:13:22.568$  partially to evaluate their
- NOTE Confidence: 0.8750956775
- $00:13:22.568 \rightarrow 00:13:23.984$  inflammatory bowel disease,
- NOTE Confidence: 0.8750956775
- $00:13:23.990 \longrightarrow 00:13:27.446$  but also to evaluate for the early

- NOTE Confidence: 0.8750956775
- $00:13:27.446 \longrightarrow 00:13:29.870$  development of colorectal cancer.
- NOTE Confidence: 0.8750956775
- $00{:}13{:}29{.}870 \dashrightarrow 00{:}13{:}31{.}886$  We talk a lot in that
- NOTE Confidence: 0.8750956775
- 00:13:31.886 --> 00:13:32.750 population about dysplasia.
- NOTE Confidence: 0.8750956775
- $00:13:32.750 \longrightarrow 00:13:34.118$  Dysplasia is what cells
- NOTE Confidence: 0.8750956775
- $00:13:34.118 \rightarrow 00:13:36.658$  look like under a microscope when they're
- NOTE Confidence: 0.8750956775
- $00:13:36.658 \rightarrow 00:13:39.190$  headed towards potentially being a cancer,
- NOTE Confidence: 0.8750956775
- $00:13:39.190 \rightarrow 00:13:42.515$  and so those patients get routine regular
- NOTE Confidence: 0.8750956775
- $00:13:42.515 \rightarrow 00:13:45.078$  biopsies to evaluate for dysplasia as
- NOTE Confidence: 0.8750956775
- $00{:}13{:}45.078 \dashrightarrow 00{:}13{:}48.010$  a sign that that would be the case,
- NOTE Confidence: 0.8750956775
- $00{:}13{:}48.010 \dashrightarrow 00{:}13{:}50.074$  and in that patient population the
- NOTE Confidence: 0.8750956775
- $00:13:50.074 \rightarrow 00:13:51.792$  recommendations in terms of what
- NOTE Confidence: 0.8750956775
- $00:13:51.792 \rightarrow 00:13:53.460$  you do with that are changing,
- NOTE Confidence: 0.8750956775
- $00{:}13{:}53{.}460 \dashrightarrow 00{:}13{:}55{.}032$  but the historical recommendations
- NOTE Confidence: 0.8750956775
- $00:13:55.032 \rightarrow 00:13:57.390$  have been to move towards early
- NOTE Confidence: 0.8750956775
- $00:13:57.454 \rightarrow 00:13:59.094$  surgical intervention to remove
- NOTE Confidence: 0.8750956775

 $00:13:59.094 \rightarrow 00:14:01.683$  diseased portions of the colon because

NOTE Confidence: 0.8750956775

 $00:14:01.683 \longrightarrow 00:14:04.348$  of their increased cancer risk.

NOTE Confidence: 0.8750956775

00:14:04.350 --> 00:14:06.498 You bring up an interesting point

NOTE Confidence: 0.8750956775

 $00:14:06.498 \rightarrow 00:14:08.343$  about inflammatory bowel disease

NOTE Confidence: 0.8750956775

 $00:14:08.343 \rightarrow 00:14:10.835$  incidence and early onset of colon cancers,

NOTE Confidence: 0.8750956775

 $00{:}14{:}10.840 \dashrightarrow 00{:}14{:}13.224$  and I think I would capture that

NOTE Confidence: 0.8750956775

 $00:14:13.224 \rightarrow 00:14:13.988$  more broadly,

NOTE Confidence: 0.8750956775

 $00:14:13.988 \rightarrow 00:14:16.280$  what one of the leading theories

NOTE Confidence: 0.8750956775

 $00{:}14{:}16{.}345 \dashrightarrow 00{:}14{:}18{.}979$  around why we have increased colorectal

NOTE Confidence: 0.8750956775

 $00:14:18.979 \longrightarrow 00:14:21.094$  cancer in younger populations is

NOTE Confidence: 0.8750956775

 $00:14:21.094 \longrightarrow 00:14:22.864$  the inflammatory burden that the

NOTE Confidence: 0.8750956775

 $00{:}14{:}22{.}864 \dashrightarrow 00{:}14{:}24{.}820$  colon is seeing younger in life.

NOTE Confidence: 0.8750956775

 $00{:}14{:}24{.}820 \dashrightarrow 00{:}14{:}26{.}080$  And there's a lot of reasons

NOTE Confidence: 0.8750956775

 $00:14:26.080 \rightarrow 00:14:27.400$  why that may be the case.

NOTE Confidence: 0.8750956775

 $00:14:27.400 \longrightarrow 00:14:28.930$  The question has been raised,

NOTE Confidence: 0.8750956775

 $00:14:28.930 \rightarrow 00:14:31.192$  is it a matter of psychosocial

- NOTE Confidence: 0.8750956775
- $00:14:31.192 \rightarrow 00:14:32.700$  stress and modern society?
- NOTE Confidence: 0.8750956775
- $00{:}14{:}32{.}700 \dashrightarrow 00{:}14{:}34{.}190$  Is it a matter of
- NOTE Confidence: 0.8750956775
- $00{:}14{:}34{.}190 \dashrightarrow 00{:}14{:}36{.}703$  the artificial sugar
- NOTE Confidence: 0.8750956775
- $00:14:36.703 \longrightarrow 00:14:38.359$  ingredients that are in food.
- NOTE Confidence: 0.8750956775
- $00{:}14{:}38{.}360 \dashrightarrow 00{:}14{:}41{.}412$  Do they have
- NOTE Confidence: 0.8750956775
- $00:14:41.412 \longrightarrow 00:14:43.217$  an established higher
- NOTE Confidence: 0.8750956775
- $00:14:43.217 \rightarrow 00:14:45.140$  inflammatory load that's seen by the
- NOTE Confidence: 0.8750956775
- $00:14:45.140 \rightarrow 00:14:46.974$  body and is that somehow creating
- NOTE Confidence: 0.8750956775
- $00:14:47.034 \rightarrow 00:14:48.729$  more inflammation in the colon?
- NOTE Confidence: 0.8750956775
- $00{:}14{:}48.730 \dashrightarrow 00{:}14{:}50.082$  More inflammation begets this
- NOTE Confidence: 0.8750956775
- $00:14:50.082 \longrightarrow 00:14:51.772$  dysplasia that we talked about
- NOTE Confidence: 0.8750956775
- $00{:}14{:}51{.}772 \dashrightarrow 00{:}14{:}53{.}488$  and does that lead to cancer?
- NOTE Confidence: 0.8750956775
- $00:14:53.490 \longrightarrow 00:14:55.210$  These theories are out there,
- $00:14:56.290 \rightarrow 00:14:58.090$  they're often discussed and they
- NOTE Confidence: 0.8750956775
- $00:14:58.090 \rightarrow 00:15:00.549$  have good biology that supports them.
- NOTE Confidence: 0.8750956775
- $00:15:00.550 \rightarrow 00:15:02.601$  We just haven't made the missing

- NOTE Confidence: 0.8750956775
- $00{:}15{:}02.601 \dashrightarrow 00{:}15{:}04.689$  link connection to the clinical evidence.
- NOTE Confidence: 0.8750956775
- 00:15:08.250 --> 00:15:10.252 Well, we're going to pick up the
- NOTE Confidence: 0.91839082368421
- 00:15:10.252 --> 00:15:11.878 conversation right after we take a
- NOTE Confidence: 0.91839082368421
- $00{:}15{:}11.878 \dashrightarrow 00{:}15{:}13.312$  short break for a medical minute.
- NOTE Confidence: 0.91839082368421
- $00{:}15{:}13.320 \dashrightarrow 00{:}15{:}15.294$  Please stay tuned to learn more
- NOTE Confidence: 0.91839082368421
- $00{:}15{:}15{.}294 \dashrightarrow 00{:}15{:}17{.}392$  about the surgical care of colorectal
- NOTE Confidence: 0.91839082368421
- $00:15:17.392 \longrightarrow 00:15:19.187$  cancer with my guest doctor
- NOTE Confidence: 0.91839082368421
- $00{:}15{:}19{.}190 \dashrightarrow 00{:}15{:}21{.}170$  Ira Leeds.
- NOTE Confidence: 0.851226645555556
- 00:15:21.180 --> 00:15:23.010 Funding for Yale Cancer Answers comes
- NOTE Confidence: 0.851226645555556
- 00:15:23.010 --> 00:15:24.474 from Smilow Cancer Hospital,
- NOTE Confidence: 0.851226645555556
- $00:15:24.480 \rightarrow 00:15:26.392$  where integrative medicine services
- NOTE Confidence: 0.851226645555556
- 00:15:26.392 --> 00:15:28.304 help patients navigate physical,
- NOTE Confidence: 0.851226645555556
- $00:15:28.310 \dashrightarrow 00:15:30.162$  mental, and spiritual Wellness
- NOTE Confidence: 0.851226645555556
- $00{:}15{:}30{.}162 \dashrightarrow 00{:}15{:}32{.}477$  during and after cancer the rapy.
- NOTE Confidence: 0.851226645555556
- 00:15:32.480 --> 00:15:33.540 To learn more, visit
- NOTE Confidence: 0.94603026

 $00:15:36.070 \rightarrow 00:15:38.330$  yalecancercenter.org/integrative.

NOTE Confidence: 0.94603026

00:15:38.330 --> 00:15:40.170 The American Cancer Society

NOTE Confidence: 0.94603026

00:15:40.170 --> 00:15:42.383 estimates that more than 65,000

NOTE Confidence: 0.94603026

 $00{:}15{:}42{.}383 \dashrightarrow 00{:}15{:}44{.}248$  Americans will be diagnosed with

NOTE Confidence: 0.94603026

 $00:15:44.248 \longrightarrow 00:15:46.429$  head and neck cancer this year,

NOTE Confidence: 0.94603026

 $00{:}15{:}46{.}430 \dashrightarrow 00{:}15{:}49{.}580$  making up about 4% of all cancers NOTE Confidence: 0.94603026

 $00:15:49.580 \longrightarrow 00:15:51.490$  diagnosed when detected early.

NOTE Confidence: 0.94603026

 $00:15:51.490 \rightarrow 00:15:53.794$  However, head and neck cancers are

NOTE Confidence: 0.94603026

 $00{:}15{:}53{.}794 \dashrightarrow 00{:}15{:}55{.}910$  easily treated and highly curable.

NOTE Confidence: 0.94603026

 $00{:}15{:}55{.}910 \dashrightarrow 00{:}15{:}57{.}902$  Clinical trials are currently

NOTE Confidence: 0.94603026

 $00:15:57.902 \rightarrow 00:15:59.894$  underway at federally designated

NOTE Confidence: 0.94603026

 $00{:}15{:}59{.}894 \dashrightarrow 00{:}16{:}01{.}618$  Comprehensive cancer centers such

NOTE Confidence: 0.94603026

00:16:01.618 --> 00:16:03.928 as Yale Cancer Center and at Smilow

NOTE Confidence: 0.94603026

00:16:03.928 --> 00:16:06.124 Cancer Hospital to test innovative new

NOTE Confidence: 0.94603026

 $00{:}16{:}06{.}124 \dashrightarrow 00{:}16{:}08{.}376$  treatments for head and neck cancers.

NOTE Confidence: 0.94603026

00:16:08.376 --> 00:16:11.052 Yale Cancer Center was recently awarded

 $00:16:11.052 \rightarrow 00:16:13.232$  grants from the National Institutes

NOTE Confidence: 0.94603026

 $00:16:13.232 \longrightarrow 00:16:15.913$  of Health to fund the Yale Head

NOTE Confidence: 0.94603026

00:16:15.913 --> 00:16:18.214 and neck Cancer Specialized program NOTE Confidence: 0.94603026

00:16:18.214 --> 00:16:20.974 of Research Excellence or SPORE to

NOTE Confidence: 0.94603026

00:16:20.980 --> 00:16:23.050 address critical barriers to treatment

NOTE Confidence: 0.94603026

00:16:23.050 -> 00:16:25.568 of head and neck squamous cell

NOTE Confidence: 0.94603026

 $00{:}16{:}25{.}568 \dashrightarrow 00{:}16{:}27{.}854$  carcinoma due to resistance to immune

NOTE Confidence: 0.94603026

 $00{:}16{:}27.854 \dashrightarrow 00{:}16{:}30.170$  DNA damaging and targeted the rapy.

NOTE Confidence: 0.94603026

 $00{:}16{:}30{.}170 \dashrightarrow 00{:}16{:}33{.}200$  More information is available at

NOTE Confidence: 0.94603026

00:16:33.200 --> 00:16:34.541 yalecancercenter.org you're listening

NOTE Confidence: 0.94603026

 $00{:}16{:}34{.}541 \dashrightarrow 00{:}16{:}36{.}329$  to Connecticut Public Radio.

NOTE Confidence: 0.862771145

 $00{:}16{:}37{.}700 \dashrightarrow 00{:}16{:}39{.}818$  Welcome back to Yale Cancer answers.

NOTE Confidence: 0.862771145

00:16:39.820 --> 00:16:42.025 This is doctor Anis Jaguar and I'm

NOTE Confidence: 0.862771145

 $00{:}16{:}42.025 \dashrightarrow 00{:}16{:}44.463$  joined to night by my guest Doctor Ira NOTE Confidence: 0.862771145

 $00:16:44.463 \rightarrow 00:16:46.605$  leads we're learning about the surgical NOTE Confidence: 0.862771145

 $00:16:46.674 \rightarrow 00:16:49.098$  care of patients with colorectal cancer.

NOTE Confidence: 0.862771145

 $00{:}16{:}49{.}100 \dashrightarrow 00{:}16{:}51{.}585$  And before the break IRA we spent

NOTE Confidence: 0.862771145

 $00{:}16{:}51{.}585 \dashrightarrow 00{:}16{:}54{.}687$  a lot of time talking about kind

NOTE Confidence: 0.862771145

 $00:16:54.687 \longrightarrow 00:16:57.127$  of what causes colon cancer,

NOTE Confidence: 0.862771145

 $00{:}16{:}57{.}130 \dashrightarrow 00{:}16{:}59{.}658$  or at least what are some of the

NOTE Confidence: 0.862771145

 $00{:}16{:}59{.}658 \dashrightarrow 00{:}17{:}01{.}805$ risk factors and what are the

NOTE Confidence: 0.862771145

00:17:01.805 - 00:17:03.959 factors that lead to colon cancer,

NOTE Confidence: 0.862771145

00:17:03.960 --> 00:17:05.493 particularly occurring at

NOTE Confidence: 0.862771145

 $00{:}17{:}05{.}493 \dashrightarrow 00{:}17{:}08{.}048$  a younger age so that.

NOTE Confidence: 0.862771145

 $00:17:08.050 \longrightarrow 00:17:10.370$  Guidelines have now changed

NOTE Confidence: 0.862771145

 $00{:}17{:}10.370 \dashrightarrow 00{:}17{:}12.690$  to get colonoscopies earlier.

NOTE Confidence: 0.862771145

 $00{:}17{:}12.690 \dashrightarrow 00{:}17{:}14.970$  One thing I want to talk about just

NOTE Confidence: 0.862771145

 $00:17:14.970 \longrightarrow 00:17:17.195$  before we get into the management

NOTE Confidence: 0.862771145

00:17:17.195 --> 00:17:19.431 of colorectal cancer is the type

NOTE Confidence: 0.862771145

 $00{:}17{:}19{.}431 \dashrightarrow 00{:}17{:}20{.}819$  of screening you mentioned.

NOTE Confidence: 0.862771145

 $00:17:20.820 \rightarrow 00:17:24.460$  This briefly before the break in terms

- NOTE Confidence: 0.862771145
- $00:17:24.460 \rightarrow 00:17:27.240$  of colonoscopy versus alternatives.
- NOTE Confidence: 0.862771145
- 00:17:27.240 --> 00:17:29.632 It can you flesh that out a little
- NOTE Confidence: 0.862771145
- 00:17:29.632 --> 00:17:32.052 bit for us so clearly nobody is,
- NOTE Confidence: 0.862771145
- $00:17:32.052 \rightarrow 00:17:34.420$  you know, chomping at the bit saying oh,
- NOTE Confidence: 0.862771145
- 00:17:34.420 --> 00:17:37.230 sign me up I'd love to get a prep and
- NOTE Confidence: 0.862771145
- $00{:}17{:}37{.}313$  -->  $00{:}17{:}40{.}130$  have a tube put up my rear bottom end
- NOTE Confidence: 0.862771145
- $00:17:40.130 \longrightarrow 00:17:42.234$  so that you can look at my colon,
- NOTE Confidence: 0.862771145
- $00:17:42.240 \longrightarrow 00:17:44.893$  but we know that colonoscopy is a
- NOTE Confidence: 0.862771145
- $00{:}17{:}44.893 \dashrightarrow 00{:}17{:}47.623$  great test to find colorectal cancer
- NOTE Confidence: 0.862771145
- $00:17:47.623 \rightarrow 00:17:50.629$  early and allows one to actually
- NOTE Confidence: 0.862771145
- $00{:}17{:}50{.}629 \dashrightarrow 00{:}17{:}53{.}799$  remove potentially precance rous polyps.
- NOTE Confidence: 0.862771145
- 00:17:53.800 --> 00:17:56.716 But if you're not terribly enthused
- NOTE Confidence: 0.862771145
- 00:17:56.716 --> 00:17:58.660 about having a colonoscopy,
- NOTE Confidence: 0.862771145
- $00{:}17{:}58.660 \dashrightarrow 00{:}18{:}01.132$  how good are the alternatives and
- NOTE Confidence: 0.862771145
- $00:18:01.132 \longrightarrow 00:18:02.368$  D recommend them?
- NOTE Confidence: 0.89307524

 $00:18:03.460 \longrightarrow 00:18:04.356$  That's a loaded question

NOTE Confidence: 0.89307524

 $00{:}18{:}04.356 \dashrightarrow 00{:}18{:}05.700$  when it's all said and done,

NOTE Confidence: 0.89307524

 $00:18:05.700 \longrightarrow 00:18:07.758$  but we'll try to break it up

NOTE Confidence: 0.89307524

 $00:18:07.758 \longrightarrow 00:18:09.599$  here into bite sized pieces.

NOTE Confidence: 0.89307524

 $00:18:09.600 \rightarrow 00:18:12.602$  So I think to go to colonoscopy first, the.

NOTE Confidence: 0.89307524

 $00{:}18{:}12.602 \dashrightarrow 00{:}18{:}15.854$  The two biggest values to colonoscopy

NOTE Confidence: 0.89307524

 $00:18:15.854 \longrightarrow 00:18:19.019$  for me are the following.

NOTE Confidence: 0.89307524

 $00:18:19.020 \rightarrow 00:18:20.958$  The first is that colonoscopy has

NOTE Confidence: 0.89307524

00:18:20.958 --> 00:18:23.061 been shown to be able identify

NOTE Confidence: 0.89307524

 $00{:}18{:}23.061 \dashrightarrow 00{:}18{:}24.906$  lesions typically earlier than a

NOTE Confidence: 0.89307524

 $00:18:24.906 \rightarrow 00:18:27.568$  lot of the alternatives out there,

NOTE Confidence: 0.89307524

 $00{:}18{:}27{.}570 \dashrightarrow 00{:}18{:}29{.}946$  and the reason being is that

NOTE Confidence: 0.89307524

00:18:29.946 --> 00:18:32.008 colonoscopy can dentify both truly

NOTE Confidence: 0.89307524

 $00{:}18{:}32.008 \dashrightarrow 00{:}18{:}34.426$  benign what so non cancerous lesions

NOTE Confidence: 0.89307524

 $00:18:34.426 \rightarrow 00:18:37.169$  it can identify precancerous lesions,

NOTE Confidence: 0.89307524

 $00:18:37.170 \longrightarrow 00:18:39.386$  and it can identify cancer and

- NOTE Confidence: 0.89307524
- $00:18:39.386 \longrightarrow 00:18:41.366$  why that's valuable is that.
- NOTE Confidence: 0.89307524
- 00:18:41.370 --> 00:18:43.590 It by getting your regular screening,
- NOTE Confidence: 0.89307524
- $00:18:43.590 \longrightarrow 00:18:43.940$  colonoscopy.
- NOTE Confidence: 0.89307524
- $00{:}18{:}43{.}940 \dashrightarrow 00{:}18{:}46{.}740$  It kind of gives a time lapse image
- NOTE Confidence: 0.89307524
- $00:18:46.740 \longrightarrow 00:18:49.297$  of what's happening in your colon,
- NOTE Confidence: 0.89307524
- $00:18:49.300 \longrightarrow 00:18:50.890$  which I think is valuable.
- NOTE Confidence: 0.89307524
- $00:18:50.890 \rightarrow 00:18:52.228$  If something were to ever develop,
- NOTE Confidence: 0.89307524
- $00:18:52.230 \rightarrow 00:18:54.666$  kind of what somebody saw before.
- NOTE Confidence: 0.89307524
- $00{:}18{:}54.670 \dashrightarrow 00{:}18{:}56.326$  The second reason why colonoscopy is
- NOTE Confidence: 0.89307524
- $00:18:56.326 \rightarrow 00:18:58.270$  so valuable is that you're in there.
- NOTE Confidence: 0.89307524
- $00{:}18{:}58{.}270 \dashrightarrow 00{:}19{:}00{.}646$  You can already do what you need to do,
- NOTE Confidence: 0.89307524
- $00{:}19{:}00{.}650 \dashrightarrow 00{:}19{:}03{.}580$  often times for these precancerous lesions,
- NOTE Confidence: 0.89307524
- $00{:}19{:}03.580 \dashrightarrow 00{:}19{:}06.226$  with almost every other screening test,
- NOTE Confidence: 0.89307524
- $00{:}19{:}06{.}230 \dashrightarrow 00{:}19{:}07{.}775$  it's going to basically stratify
- NOTE Confidence: 0.89307524
- $00:19:07.775 \longrightarrow 00:19:09.690$  a patient to a low risk,
- NOTE Confidence: 0.89307524

 $00:19:09.690 \longrightarrow 00:19:10.905$  meaning there was nothing detected

NOTE Confidence: 0.89307524

00:19:10.905 --> 00:19:12.650 on the tests or high risk group,

NOTE Confidence: 0.89307524

 $00:19:12.650 \rightarrow 00:19:15.359$  which means that the test was abnormal,

NOTE Confidence: 0.89307524

 $00{:}19{:}15{.}360 \dashrightarrow 00{:}19{:}17{.}130$  and therefore the patient needs

NOTE Confidence: 0.89307524

00:19:17.130 --> 00:19:17.838 a colonoscopy.

NOTE Confidence: 0.89307524

 $00{:}19{:}17{.}840 \dashrightarrow 00{:}19{:}19{.}060$  So a lot of these,

NOTE Confidence: 0.89307524

 $00:19:19.060 \longrightarrow 00:19:22.535$  even the best non colonoscopy

NOTE Confidence: 0.89307524

 $00:19:22.535 \rightarrow 00:19:25.046$  screening modalities are still routing.

NOTE Confidence: 0.89307524

00:19:25.046 --> 00:19:25.418 Folks,

NOTE Confidence: 0.89307524

 $00:19:25.418 \longrightarrow 00:19:27.278$  two colonoscopy when they have

NOTE Confidence: 0.89307524

 $00{:}19{:}27{.}278 \dashrightarrow 00{:}19{:}28{.}600$  an abnormal test.

NOTE Confidence: 0.89307524

 $00:19:28.600 \longrightarrow 00:19:30.168$  So there is a little bit of this

NOTE Confidence: 0.89307524

 $00:19:30.168 \longrightarrow 00:19:31.443$  question of you know if there's

NOTE Confidence: 0.89307524

 $00:19:31.443 \longrightarrow 00:19:32.993$  so much that can be gleaned from

NOTE Confidence: 0.89307524

 $00:19:32.993 \longrightarrow 00:19:34.218$  a colonoscopy to begin with,

NOTE Confidence: 0.89307524

 $00:19:34.220 \rightarrow 00:19:35.550$  should we putting everyone through

- NOTE Confidence: 0.89307524
- $00:19:35.550 \rightarrow 00:19:36.880$  the colonoscopy round and then,

00:19:36.880 --> 00:19:38.056 as I mentioned before,

NOTE Confidence: 0.89307524

 $00:19:38.056 \rightarrow 00:19:39.820$  the the biggest argument against that,

NOTE Confidence: 0.89307524

 $00:19:39.820 \longrightarrow 00:19:41.455$  is that colonoscopy for some

NOTE Confidence: 0.89307524

00:19:41.455 --> 00:19:43.620 folks is has an undue burden,

NOTE Confidence: 0.89307524

 $00{:}19{:}43.620 \dashrightarrow 00{:}19{:}45.734$  both in terms of pleasantness but also

NOTE Confidence: 0.89307524

 $00{:}19{:}45{.}734 \dashrightarrow 00{:}19{:}48{.}086$  in terms of work loss and so forth.

NOTE Confidence: 0.89307524

00:19:48.090 --> 00:19:49.080 So if you can do,

NOTE Confidence: 0.89307524

 $00:19:49.080 \longrightarrow 00:19:50.988$  for example a stool test that

NOTE Confidence: 0.89307524

 $00:19:50.988 \longrightarrow 00:19:53.662$  you can do in your home at 1

NOTE Confidence: 0.89307524

 $00{:}19{:}53.662 \dashrightarrow 00{:}19{:}55.094$  evening when you've got the time.

NOTE Confidence: 0.89307524

 $00{:}19{:}55{.}094 \dashrightarrow 00{:}19{:}57{.}080$  To do it and send it off for analysis,

NOTE Confidence: 0.89307524

 $00:19:57.080 \rightarrow 00:19:59.056$  and that if it's negative then you're done.

NOTE Confidence: 0.89307524

00:19:59.060 --> 00:20:00.452 You have no further burden on

NOTE Confidence: 0.89307524

00:20:00.452 --> 00:20:02.346 your day to day life to get your

NOTE Confidence: 0.89307524

 $00:20:02.346 \longrightarrow 00:20:04.089$  results you need to go back to

NOTE Confidence: 0.89307524

00:20:04.089 --> 00:20:05.714 being an average risk individual

NOTE Confidence: 0.89307524

 $00:20:05.714 \rightarrow 00:20:07.645$  with no further colonoscopy needs.

NOTE Confidence: 0.89307524

 $00{:}20{:}07{.}645 \dashrightarrow 00{:}20{:}12{.}645$  So I think we're the both the the.

NOTE Confidence: 0.89307524

 $00:20:12.650 \longrightarrow 00:20:14.580$  The clearance for these tests.

NOTE Confidence: 0.89307524

 $00:20:14.580 \longrightarrow 00:20:15.360$  In other words,

NOTE Confidence: 0.89307524

 $00:20:15.360 \rightarrow 00:20:17.180$  what they're allowed to proclaim to be,

NOTE Confidence: 0.89307524

 $00:20:17.180 \longrightarrow 00:20:18.476$  and also where they really do,

NOTE Confidence: 0.89307524

00:20:18.480 --> 00:20:20.650 have a sweet spot as the average

NOTE Confidence: 0.89307524

 $00{:}20{:}20{.}650 \dashrightarrow 00{:}20{:}22{.}290$ risk individual who's never had

NOTE Confidence: 0.89307524

 $00{:}20{:}22{.}290 \dashrightarrow 00{:}20{:}24{.}330$  any abnormal findings on a prior

NOTE Confidence: 0.89307524

 $00{:}20{:}24{.}330 \dashrightarrow 00{:}20{:}25{.}913$  colonoscopy and does not have

NOTE Confidence: 0.89307524

00:20:25.913 --> 00:20:27.388 the high risk family features

NOTE Confidence: 0.89307524

 $00{:}20{:}27{.}388 \dashrightarrow 00{:}20{:}29{.}547$  that we talked about before those

NOTE Confidence: 0.89307524

 $00{:}20{:}29{.}547 \dashrightarrow 00{:}20{:}31{.}775$  individuals if interested in

NOTE Confidence: 0.89307524

 $00:20:31.775 \rightarrow 00:20:35.179$  pursuing a non invasive test like

 $00:20:35.179 \rightarrow 00:20:37.608$  a colonoscopy have been shown to

NOTE Confidence: 0.89307524

00:20:37.608 --> 00:20:40.130 have equal benefit from one of the

NOTE Confidence: 0.89307524

 $00{:}20{:}40{.}130 \dashrightarrow 00{:}20{:}42{.}110$  more advanced tests out there.

NOTE Confidence: 0.89307524

 $00:20:42.110 \longrightarrow 00:20:44.132$  It's basically a test that you

NOTE Confidence: 0.89307524

 $00{:}20{:}44.132 \dashrightarrow 00{:}20{:}46.931$  give a stool sample and it uses a

NOTE Confidence: 0.89307524

00:20:46.931 --> 00:20:48.651 variety of assays or laboratory

NOTE Confidence: 0.89307524

 $00{:}20{:}48.651 \dashrightarrow 00{:}20{:}51.336$  tests on that sample to look for both

NOTE Confidence: 0.89307524

 $00:20:51.336 \longrightarrow 00:20:54.360$  cancerous DNA in the stool as well as

NOTE Confidence: 0.870083047692307

 $00{:}20{:}54{.}360 \dashrightarrow 00{:}20{:}55{.}932$  a signature of what a bleeding

NOTE Confidence: 0.870083047692307

00:20:55.932 --> 00:20:57.748 lesion in your colon might be like,

NOTE Confidence: 0.870083047692307

 $00:20:57.750 \longrightarrow 00:20:59.801$  which is one of the micro bleed

NOTE Confidence: 0.870083047692307

 $00{:}20{:}59{.}801 \dashrightarrow 00{:}21{:}02{.}217$  is one of the hallmarks for pre

NOTE Confidence: 0.870083047692307

 $00{:}21{:}02{.}217 \dashrightarrow 00{:}21{:}04.910$  cancer or early cancer in the colon,

NOTE Confidence: 0.870083047692307

 $00{:}21{:}04{.}910 \dashrightarrow 00{:}21{:}07{.}413$  so that's what it's detecting and it's been

NOTE Confidence: 0.870083047692307

 $00{:}21{:}07{.}413 \dashrightarrow 00{:}21{:}09{.}570$  shown to have a very good detection rate.

00:21:09.570 --> 00:21:11.760 And so if that's normal,

NOTE Confidence: 0.870083047692307

 $00{:}21{:}11.760 \dashrightarrow 00{:}21{:}13.512$  then we can confidently say that

NOTE Confidence: 0.870083047692307

 $00{:}21{:}13.512 \dashrightarrow 00{:}21{:}15.634$  patient does not need a colonoscopy if

NOTE Confidence: 0.870083047692307

 $00:21:15.634 \rightarrow 00:21:17.720$  they have no other high risk features,

NOTE Confidence: 0.870083047692307

 $00{:}21{:}17.720 \dashrightarrow 00{:}21{:}19.337$  there are a number of different options

NOTE Confidence: 0.870083047692307

 $00{:}21{:}19{.}337 \dashrightarrow 00{:}21{:}20{.}840$  that are listed in the guidelines,

NOTE Confidence: 0.870083047692307

 $00:21:20.840 \longrightarrow 00:21:22.802$  but those two are probably the

NOTE Confidence: 0.870083047692307

 $00:21:22.802 \rightarrow 00:21:24.110 \text{ most common recommended today.}$ 

NOTE Confidence: 0.870083047692307

 $00:21:24.110 \longrightarrow 00:21:27.006$  The biggest drawback to the stool test that

NOTE Confidence: 0.870083047692307

 $00{:}21{:}27.006 \dashrightarrow 00{:}21{:}29.776$  I mentioned is that it is quite expensive.

NOTE Confidence: 0.870083047692307

 $00:21:29.780 \longrightarrow 00:21:31.280$  Depending on insurance

NOTE Confidence: 0.870083047692307

00:21:31.280 --> 00:21:33.280 reimbursements and so forth,

NOTE Confidence: 0.870083047692307

 $00:21:33.280 \longrightarrow 00:21:35.980$  so it's not the biggest.

NOTE Confidence: 0.870083047692307

 $00:21:35.980 \longrightarrow 00:21:37.468$  The biggest benefit to it is

NOTE Confidence: 0.870083047692307

 $00:21:37.468 \longrightarrow 00:21:39.297$  the is the burden of going to

NOTE Confidence: 0.870083047692307

 $00:21:39.297 \longrightarrow 00:21:40.845$  get a colonoscopy more so than.

- NOTE Confidence: 0.870083047692307
- $00:21:40.850 \longrightarrow 00:21:42.310$  Anything else in regards to
- NOTE Confidence: 0.870083047692307
- $00:21:42.310 \longrightarrow 00:21:43.478$  resource use for it?
- NOTE Confidence: 0.826797348888889
- $00:21:44.610 \longrightarrow 00:21:47.270$  Cool, so let's suppose you
- NOTE Confidence: 0.826797348888889
- $00:21:47.270 \rightarrow 00:21:49.398$  went for your colonoscopy,
- NOTE Confidence: 0.826797348888889
- $00:21:49.400 \longrightarrow 00:21:51.890$  and a lesion was found.
- NOTE Confidence: 0.826797348888889
- $00{:}21{:}51{.}890 \dashrightarrow 00{:}21{:}54{.}298$  A polyp was found and biopsied and
- NOTE Confidence: 0.826797348888889
- $00:21:54.298 \longrightarrow 00:21:56.877$  it turns out that it is a cancer.
- NOTE Confidence: 0.826797348888889
- $00{:}21{:}56.880 \dashrightarrow 00{:}21{:}58.924$  Can you help us to understand a
- NOTE Confidence: 0.826797348888889
- 00:21:58.924 --> 00:22:00.958 little bit more about how you know
- NOTE Confidence: 0.826797348888889
- $00:22:00.958 \longrightarrow 00:22:03.014$  whether this is kind of a good
- NOTE Confidence: 0.826797348888889
- $00:22:03.014 \rightarrow 00:22:04.406$  cancer where your colonoscopy
- NOTE Confidence: 0.826797348888889
- $00:22:04.406 \longrightarrow 00:22:06.806$  has has gotten it and you don't
- NOTE Confidence: 0.826797348888889
- $00:22:06.806 \longrightarrow 00:22:08.446$  need anything further versus a
- NOTE Confidence: 0.826797348888889
- $00{:}22{:}08.446 \dashrightarrow 00{:}22{:}10.462$  not so good cancer where there
- NOTE Confidence: 0.826797348888889
- $00{:}22{:}10{.}462 \dashrightarrow 00{:}22{:}12{.}716$  might actually be a need for you
- NOTE Confidence: 0.826797348888889

 $00:22:12.780 \longrightarrow 00:22:14.796$  to see a colorectal surgeon and?

NOTE Confidence: 0.826797348888889

00:22:14.800 --> 00:22:16.288 Have more therapy done

NOTE Confidence: 0.876331486153846

 $00:22:16.500 \rightarrow 00:22:18.390$  so there's a couple key things that

NOTE Confidence: 0.876331486153846

 $00:22:18.390 \longrightarrow 00:22:20.762$  you need to know when you as a

NOTE Confidence: 0.876331486153846

 $00{:}22{:}20.762 \dashrightarrow 00{:}22{:}22.658$  surgeon when you're getting given a

NOTE Confidence: 0.876331486153846

 $00{:}22{:}22{.}658 \dashrightarrow 00{:}22{:}24{.}338$  biopsy report from a colonoscopy.

NOTE Confidence: 0.876331486153846

 $00{:}22{:}24{.}340 \dashrightarrow 00{:}22{:}26{.}440$  The things that we think about

NOTE Confidence: 0.876331486153846

 $00:22:26.440 \longrightarrow 00:22:29.523$  the most are for a true cancer is

NOTE Confidence: 0.876331486153846

 $00{:}22{:}29{.}523 \dashrightarrow 00{:}22{:}31{.}533$  something called TNM staging or

NOTE Confidence: 0.876331486153846

 $00:22:31.533 \rightarrow 00:22:34.170$  tumor nodes and metastasis staging.

NOTE Confidence: 0.876331486153846

 $00:22:34.170 \longrightarrow 00:22:35.976$  The tea or the tumor is what

NOTE Confidence: 0.876331486153846

 $00{:}22{:}35{.}976 \dashrightarrow 00{:}22{:}37{.}537$  is happening at the microscopic

NOTE Confidence: 0.876331486153846

 $00{:}22{:}37{.}537 \dashrightarrow 00{:}22{:}39{.}697$  level in terms of local invasion.

NOTE Confidence: 0.876331486153846

 $00:22:39.700 \rightarrow 00:22:41.639$  Where is the thing that was biopsied?

NOTE Confidence: 0.876331486153846

 $00:22:41.640 \longrightarrow 00:22:42.824$  Where is it going?

NOTE Confidence: 0.876331486153846

 $00:22:42.824 \rightarrow 00:22:45.819$  Is it in just the very first flute fuels

- NOTE Confidence: 0.876331486153846
- $00:22:45.819 \longrightarrow 00:22:48.493$  level layers of cells of the colon?
- NOTE Confidence: 0.876331486153846
- 00:22:48.500 --> 00:22:50.096 Is it invading through the colon?
- NOTE Confidence: 0.876331486153846
- $00{:}22{:}50{.}100 \dashrightarrow 00{:}22{:}52{.}983$  Is invading into other structures in
- NOTE Confidence: 0.876331486153846
- $00:22:52.983 \rightarrow 00:22:55.174$  as nodes or there are nodes lymph
- NOTE Confidence: 0.876331486153846
- $00{:}22{:}55{.}174 \dashrightarrow 00{:}22{:}57{.}256$  nodes that are basically the first
- NOTE Confidence: 0.876331486153846
- $00{:}22{:}57{.}256 \dashrightarrow 00{:}22{:}59{.}808$  sign that a colon cancer has been
- NOTE Confidence: 0.876331486153846
- $00:22:59.808 \rightarrow 00:23:02.208$  getting to spread beyond the original
- NOTE Confidence: 0.876331486153846
- $00:23:02.208 \rightarrow 00:23:04.986$  tumor and then finally, is Amar metastases?
- NOTE Confidence: 0.876331486153846
- $00{:}23{:}04{.}990 \dashrightarrow 00{:}23{:}06{.}982$  That means they're spread of the
- NOTE Confidence: 0.876331486153846
- $00:23:06.982 \longrightarrow 00:23:08.310$  cancer beyond the colon,
- NOTE Confidence: 0.876331486153846
- $00:23:08.310 \longrightarrow 00:23:09.670$  intestine into other organs.
- NOTE Confidence: 0.876331486153846
- $00{:}23{:}09.670 \dashrightarrow 00{:}23{:}10.350$  The body,
- NOTE Confidence: 0.876331486153846
- $00{:}23{:}10{.}350 \dashrightarrow 00{:}23{:}12{.}905$  most commonly the liver or the lungs.
- NOTE Confidence: 0.876331486153846
- $00{:}23{:}12{.}910 \dashrightarrow 00{:}23{:}15{.}178$  So four colon cancer that's been diagnosis.
- NOTE Confidence: 0.876331486153846
- $00:23:15.180 \longrightarrow 00:23:15.906$  Colon cancer.
- NOTE Confidence: 0.876331486153846

 $00:23:15.906 \rightarrow 00:23:18.084$  On colonoscopy it is important to

NOTE Confidence: 0.876331486153846

 $00:23:18.084 \rightarrow 00:23:21.104$  get a complete scan of the body of

NOTE Confidence: 0.876331486153846

 $00:23:21.104 \longrightarrow 00:23:23.315$  particularly of the chest and the

NOTE Confidence: 0.876331486153846

 $00:23:23.315 \rightarrow 00:23:25.618$  abdomen to make sure that you don't

NOTE Confidence: 0.876331486153846

 $00:23:25.618 \rightarrow 00:23:27.998$  have any far ranging metastases

NOTE Confidence: 0.876331486153846

 $00{:}23{:}27{.}998 \dashrightarrow 00{:}23{:}30{.}046$  or or tumor spread.

NOTE Confidence: 0.876331486153846

 $00:23:30.050 \longrightarrow 00:23:31.890$  The second issue that is

NOTE Confidence: 0.876331486153846

 $00:23:31.890 \rightarrow 00:23:33.730$  where does it look locally?

NOTE Confidence: 0.876331486153846

 $00{:}23{:}33{.}730 \dashrightarrow 00{:}23{:}35{.}098$  And that's where sometimes

NOTE Confidence: 0.876331486153846

 $00:23:35.098 \longrightarrow 00:23:37.150$  the biopsy alone can do that.

NOTE Confidence: 0.876331486153846

 $00{:}23{:}37{.}150 \dashrightarrow 00{:}23{:}39{.}726$  If the biopsy comes back as cancer

NOTE Confidence: 0.876331486153846

 $00:23:39.730 \longrightarrow 00:23:41.722$  and the entire polyp was not

NOTE Confidence: 0.876331486153846

 $00:23:41.722 \longrightarrow 00:23:43.050$  removed with that biopsy,

NOTE Confidence: 0.876331486153846

 $00{:}23{:}43.050 \dashrightarrow 00{:}23{:}44.905$  then that's kind of the first step

NOTE Confidence: 0.876331486153846

 $00:23:44.905 \rightarrow 00:23:46.775$  that someone needs to go back and see

NOTE Confidence: 0.876331486153846

 $00:23:46.775 \rightarrow 00:23:48.648$  if that can be removed into Scopic Lee.

- NOTE Confidence: 0.876331486153846
- $00:23:48.650 \rightarrow 00:23:50.870$  Sometimes it's very obvious from the
- NOTE Confidence: 0.876331486153846
- $00:23:50.870 \rightarrow 00:23:52.568$  original colonoscopic exam that it's
- NOTE Confidence: 0.876331486153846
- $00:23:52.568 \rightarrow 00:23:54.560$  not going to be removed locally,
- NOTE Confidence: 0.876331486153846
- $00:23:54.560 \rightarrow 00:23:55.688$  but if it's on a stock,
- NOTE Confidence: 0.876331486153846
- 00:23:55.690 00:23:57.850 if it's kind of dangling into the colon,
- NOTE Confidence: 0.876331486153846
- $00:23:57.850 \longrightarrow 00:23:59.842$  sometimes those are at a very
- NOTE Confidence: 0.876331486153846
- $00:23:59.842 \longrightarrow 00:24:01.652$  good candidates for local removal
- NOTE Confidence: 0.876331486153846
- $00{:}24{:}01{.}652 \dashrightarrow 00{:}24{:}02{.}918$  with Columbus scope.
- NOTE Confidence: 0.876331486153846
- $00:24:02.920 \longrightarrow 00:24:05.349$  If that's done and on the micro,
- NOTE Confidence: 0.876331486153846
- 00:24:05.350 --> 00:24:07.780 the microscopic evaluation of that specimen,
- NOTE Confidence: 0.876331486153846
- $00:24:07.780 \longrightarrow 00:24:09.568$  you can say clearly that here's
- NOTE Confidence: 0.876331486153846
- $00:24:09.568 \longrightarrow 00:24:12.032$  the cut edge of where we took this
- NOTE Confidence: 0.876331486153846
- $00:24:12.032 \rightarrow 00:24:14.264$  tumor off this polyp off and there
- NOTE Confidence: 0.876331486153846
- $00{:}24{:}14{.}264 \dashrightarrow 00{:}24{:}16{.}049$  is no cancer at that.
- NOTE Confidence: 0.876331486153846
- $00{:}24{:}16.050 \dashrightarrow 00{:}24{:}18.122$  And then we looked at the individual
- NOTE Confidence: 0.876331486153846

 $00:24:18.122 \longrightarrow 00:24:19.999$  cancer cells in the bulk of the

NOTE Confidence: 0.876331486153846

00:24:19.999 - > 00:24:22.190 polyp and we can see that they have

NOTE Confidence: 0.876331486153846

 $00{:}24{:}22{.}190 \dashrightarrow 00{:}24{:}24{.}020$  certain features that are favorable

NOTE Confidence: 0.876331486153846

 $00:24:24.020 \rightarrow 00:24:27.268$  then that may be all that patient needs.

NOTE Confidence: 0.876331486153846

 $00{:}24{:}27{.}270 \dashrightarrow 00{:}24{:}28{.}138$  On the flip side,

NOTE Confidence: 0.876331486153846

 $00:24:28.138 \longrightarrow 00:24:29.223$  if there is tumor invasion,

NOTE Confidence: 0.876331486153846

00:24:29.230 --> 00:24:30.515 if there's high concerning features

NOTE Confidence: 0.876331486153846

 $00:24:30.515 \longrightarrow 00:24:32.575$  of the polyp in terms of what it

NOTE Confidence: 0.876331486153846

00:24:32.575 --> 00:24:33.785 looks like under the microscope,

NOTE Confidence: 0.876331486153846

 $00:24:33.790 \rightarrow 00:24:36.086$  then that's something we're a segment of.

NOTE Confidence: 0.876331486153846

 $00:24:36.090 \rightarrow 00:24:38.478$  The colon needs to be removed,

NOTE Confidence: 0.876331486153846

 $00:24:38.480 \longrightarrow 00:24:40.766$  and that would require a typically,

NOTE Confidence: 0.876331486153846

 $00:24:40.770 \longrightarrow 00:24:42.804$  and in 2021 it would typically

NOTE Confidence: 0.876331486153846

00:24:42.804 --> 00:24:44.160 require mentally invasive surgery

NOTE Confidence: 0.876331486153846

 $00:24:44.218 \rightarrow 00:24:46.170$  to remove a segment of the colon and

NOTE Confidence: 0.876331486153846

 $00{:}24{:}46.170 \dashrightarrow 00{:}24{:}48.247$  the nodal bundle that's attached to it.

 $00:24:48.250 \rightarrow 00:24:50.847$  To get that end staging for very

NOTE Confidence: 0.876331486153846

 $00:24:50.847 \rightarrow 00:24:51.589$  early tumors,

NOTE Confidence: 0.876331486153846

 $00:24:51.590 \longrightarrow 00:24:53.860$  the risk of an end spread meaning

NOTE Confidence: 0.876331486153846

 $00:24:53.860 \longrightarrow 00:24:55.900$  a nodal spread is so low that for

NOTE Confidence: 0.876331486153846

 $00{:}24{:}55{.}960 \dashrightarrow 00{:}24{:}57{.}592$  those very early tumors that we

NOTE Confidence: 0.876331486153846

 $00:24:57.592 \rightarrow 00:24:59.268$  just took off. Instead, we're done.

NOTE Confidence: 0.876331486153846

 $00:24:59.268 \longrightarrow 00:25:00.984$  Those don't need that nodal bundle,

NOTE Confidence: 0.945040754285714

 $00:25:00.990 \rightarrow 00:25:02.894$  which is where that justification comes from.

NOTE Confidence: 0.890972297368421

00:25:03.180 --> 00:25:04.740 So Speaking of burden,

NOTE Confidence: 0.890972297368421

 $00:25:04.740 \longrightarrow 00:25:07.549$  if you had a very small cancer

NOTE Confidence: 0.890972297368421

 $00:25:07.549 \rightarrow 00:25:10.565$  such that it was just in a polyp,

NOTE Confidence: 0.890972297368421

 $00{:}25{:}10.570 \dashrightarrow 00{:}25{:}12.508$  do those patients still need the

NOTE Confidence: 0.890972297368421

 $00{:}25{:}12.508 \dashrightarrow 00{:}25{:}14.958$  scans of their chest in their abdomen

NOTE Confidence: 0.890972297368421

 $00:25:14.958 \longrightarrow 00:25:16.783$  to look for distant metastases?

NOTE Confidence: 0.890972297368421

 $00{:}25{:}16.790 \dashrightarrow 00{:}25{:}18.170$  One would think that if

 $00:25:18.170 \longrightarrow 00:25:19.550$  the nodal burden is low,

NOTE Confidence: 0.890972297368421

 $00{:}25{:}19{.}550 \dashrightarrow 00{:}25{:}20{.}930$  then the distant metastases

NOTE Confidence: 0.890972297368421

 $00:25:20.930 \longrightarrow 00:25:23.000$  burden should also be very low.

NOTE Confidence: 0.957109263

 $00:25:23.620 \rightarrow 00:25:25.195$  I think it's certainly consideration

NOTE Confidence: 0.957109263

 $00:25:25.195 \rightarrow 00:25:27.209$  this is one of those particularly

NOTE Confidence: 0.957109263

 $00:25:27.209 \rightarrow 00:25:28.965$  controversial points and staging

NOTE Confidence: 0.957109263

 $00:25:28.965 \rightarrow 00:25:32.159$  guidelines that has is up for discussion,

NOTE Confidence: 0.957109263

 $00{:}25{:}32.160 \dashrightarrow 00{:}25{:}33.265$  and I think shared decision

NOTE Confidence: 0.957109263

 $00{:}25{:}33{.}265 \dashrightarrow 00{:}25{:}34{.}370$  making does come into it.

NOTE Confidence: 0.957109263

 $00:25:34.370 \rightarrow 00:25:36.435$  This is something that either that a

NOTE Confidence: 0.957109263

00:25:36.435 --> 00:25:37.883 colorectal surgeon should probably involve

NOTE Confidence: 0.957109263

 $00:25:37.883 \rightarrow 00:25:40.319$  with to talk to the patient about one on one,

NOTE Confidence: 0.957109263

 $00{:}25{:}40{.}320 \dashrightarrow 00{:}25{:}43{.}911$  because there are very small risks up

NOTE Confidence: 0.957109263

 $00:25:43.911 \longrightarrow 00:25:47.677$  spread and that needs to be discussed.

NOTE Confidence: 0.957109263

 $00:25:47.680 \longrightarrow 00:25:49.008$  With the patient eventually,

NOTE Confidence: 0.957109263

 $00:25:49.008 \rightarrow 00:25:51.000$  because those guidelines are in flux,

 $00:25:51.000 \rightarrow 00:25:53.140$  and then if I can go back for one second,

NOTE Confidence: 0.957109263

 $00{:}25{:}53{.}140 \dashrightarrow 00{:}25{:}55{.}210$  I think you know we we talked a lot about

NOTE Confidence: 0.957109263

 $00:25:55.264 \rightarrow 00:25:57.199$  the kind of you see a polyp in the colon,

NOTE Confidence: 0.957109263

 $00:25:57.200 \longrightarrow 00:25:58.240$  just to kind of clarify,

NOTE Confidence: 0.957109263

 $00:25:58.240 \longrightarrow 00:26:00.305$  one of the tricky parts about the

NOTE Confidence: 0.957109263

 $00{:}26{:}00{.}305 \dashrightarrow 00{:}26{:}02{.}068$  an atomic specificity that we mentioned

NOTE Confidence: 0.957109263

 $00{:}26{:}02.068 \dashrightarrow 00{:}26{:}03.863$  earlier was that colon cancer can

NOTE Confidence: 0.957109263

00:26:03.863 --> 00:26:05.480 be dealt with and more with less

NOTE Confidence: 0.957109263

 $00{:}26{:}05{.}534 \dashrightarrow 00{:}26{:}06{.}998$  the way that we just discussed.

NOTE Confidence: 0.957109263

 $00:26:07.000 \rightarrow 00:26:09.415$  Whereas rectal cancer is a different bird,

NOTE Confidence: 0.957109263

00:26:09.420 --> 00:26:11.220 rectal cancer does make up about

NOTE Confidence: 0.957109263

 $00{:}26{:}11{.}220 \dashrightarrow 00{:}26{:}13{.}148$  30% of all colorectal cancer,

NOTE Confidence: 0.957109263

 $00:26:13.148 \longrightarrow 00:26:15.590$  and the decision making around how

NOTE Confidence: 0.957109263

 $00{:}26{:}15.658 \dashrightarrow 00{:}26{:}18.100$  to address those tumors does differ.

NOTE Confidence: 0.89753308

 $00{:}26{:}18.560 \dashrightarrow 00{:}26{:}20.330$  OK, tell us more about that.

 $00:26:20.330 \longrightarrow 00:26:21.218$  How does it differ?

 $00{:}26{:}22.050 \dashrightarrow 00{:}26{:}23.315$  So the interesting thing with

NOTE Confidence: 0.87419022222222

00:26:23.315 --> 00:26:24.327 rectal cancer is biologically,

NOTE Confidence: 0.87419022222222

 $00:26:24.330 \longrightarrow 00:26:25.758$  it's very similar to colon cancer.

NOTE Confidence: 0.874190222222222

 $00{:}26{:}25{.}760 \dashrightarrow 00{:}26{:}27{.}391$  It looks very the same under the

NOTE Confidence: 0.874190222222222

 $00{:}26{:}27{.}391 \dashrightarrow 00{:}26{:}28{.}627$  microscope and it's the same

 $00{:}26{:}28{.}627 \dashrightarrow 00{:}26{:}30{.}079$  kind of cell story that created

NOTE Confidence: 0.874190222222222

 $00:26:30.079 \rightarrow 00:26:31.468$  those cancers in the first place,

NOTE Confidence: 0.874190222222222

 $00{:}26{:}31{.}470 \dashrightarrow 00{:}26{:}33{.}270$  where rectal cancer does differ

 $00:26:33.270 \longrightarrow 00:26:35.070$  is that it's anatomically fixed,

NOTE Confidence: 0.874190222222222

00:26:35.070 --> 00:26:36.806 meaning the \*\*\*\*\*\* is fixed in the pelvis,

NOTE Confidence: 0.87419022222222

 $00{:}26{:}36{.}810 \dashrightarrow 00{:}26{:}39{.}000$  whereas the colon flops around.

NOTE Confidence: 0.87419022222222

00:26:39.000 --> 00:26:42.116 It's an incredibly powerful difference

NOTE Confidence: 0.87419022222222

 $00:26:42.116 \longrightarrow 00:26:44.174$  that becomes more so every day

NOTE Confidence: 0.874190222222222

 $00{:}26{:}44.174 \dashrightarrow 00{:}26{:}46.584$  because we realize that we have more

NOTE Confidence: 0.874190222222222

00:26:46.584 --> 00:26:48.244 modalities or options for therapy

 $00{:}26{:}48.305 \dashrightarrow 00{:}26{:}50.195$  that we can use for rectal cancer

NOTE Confidence: 0.874190222222222

 $00{:}26{:}50{.}195 \dashrightarrow 00{:}26{:}51{.}954$  because of its anatomically fixed.

NOTE Confidence: 0.874190222222222

 $00{:}26{:}51{.}954 \dashrightarrow 00{:}26{:}55{.}144$  Position what this means in 2021 is

NOTE Confidence: 0.87419022222222

 $00:26:55.144 \rightarrow 00:26:57.616$  that many many rectal cancers need

NOTE Confidence: 0.874190222222222

 $00{:}26{:}57.616 \dashrightarrow 00{:}26{:}59.770$  chemotherapy and radiation upfront,

NOTE Confidence: 0.87419022222222

 $00:26:59.770 \longrightarrow 00:27:01.230$  which is entirely different.

NOTE Confidence: 0.874190222222222

00:27:01.230 --> 00:27:03.121 Colon cancer, which if anything,

NOTE Confidence: 0.874190222222222

 $00:27:03.121 \rightarrow 00:27:05.443$  only gets those options for therapy

NOTE Confidence: 0.874190222222222

 $00:27:05.443 \rightarrow 00:27:07.837$  after the original tumor is removed.

NOTE Confidence: 0.87419022222222

00:27:07.840 --> 00:27:09.639 Rectal cancer has been shown that it

NOTE Confidence: 0.87419022222222

 $00:27:09.639 \longrightarrow 00:27:11.853$  seems to do better if we give those

NOTE Confidence: 0.874190222222222

 $00{:}27{:}11.853 \dashrightarrow 00{:}27{:}13.632$  modalities up front and then follow

NOTE Confidence: 0.87419022222222

 $00:27:13.632 \rightarrow 00:27:14.956$  with surgery after considerable

NOTE Confidence: 0.87419022222222

 $00{:}27{:}14.956 \dashrightarrow 00{:}27{:}16.961$  lead in period of often times,

NOTE Confidence: 0.87419022222222

 $00:27:16.961 \longrightarrow 00:27:19.007$  three to six months of chemo

 $00:27:19.007 \rightarrow 00:27:19.689$  radiation therapy.

NOTE Confidence: 0.887424365

 $00{:}27{:}21{.}160 \dashrightarrow 00{:}27{:}22{.}660$  This brings up an interesting point.

NOTE Confidence: 0.887424365

 $00{:}27{:}22.660 \dashrightarrow 00{:}27{:}25.859$  Oftentimes, here on the show we we

NOTE Confidence: 0.887424365

 $00{:}27{:}25.859 \dashrightarrow 00{:}27{:}28.218$  talk about multidisciplinary care and

NOTE Confidence: 0.887424365

 $00{:}27{:}28{.}218 \dashrightarrow 00{:}27{:}30{.}498$  we talk about personalized the rapy.

NOTE Confidence: 0.887424365

 $00:27:30.500 \longrightarrow 00:27:33.296$  So how do you decide which

NOTE Confidence: 0.887424365

00:27:33.296 --> 00:27:34.694 patients need chemotherapy?

NOTE Confidence: 0.887424365

 $00:27:34.700 \longrightarrow 00:27:36.280$  Which patients need radiation?

NOTE Confidence: 0.887424365

 $00:27:36.280 \rightarrow 00:27:39.070$  Which patients do well with surgery alone?

NOTE Confidence: 0.911012823333333

 $00{:}27{:}39{.}830 \dashrightarrow 00{:}27{:}41{.}510$  It the multidisciplinary point

NOTE Confidence: 0.911012823333333

 $00{:}27{:}41.510 \dashrightarrow 00{:}27{:}43.610$  that you mentioned is critical.

NOTE Confidence: 0.911012823333333

 $00:27:43.610 \rightarrow 00:27:45.782$  It's getting increasingly complicated,

NOTE Confidence: 0.911012823333333

 $00:27:45.782 \longrightarrow 00:27:47.954$  particularly with advanced disease.

NOTE Confidence: 0.911012823333333

 $00:27:47.960 \longrightarrow 00:27:50.207$  It's very hard to make these decisions

NOTE Confidence: 0.911012823333333

 $00{:}27{:}50{.}207 \dashrightarrow 00{:}27{:}51{.}670$  without a colorectal surgeon,

NOTE Confidence: 0.911012823333333

 $00{:}27{:}51.670 \dashrightarrow 00{:}27{:}54.115$  medical on cologists and a number

- NOTE Confidence: 0.911012823333333
- $00:27:54.115 \longrightarrow 00:27:56.071$  of others supporting positions
- NOTE Confidence: 0.911012823333333
- 00:27:56.071 --> 00:27:58.070 from radiology pathology.
- NOTE Confidence: 0.911012823333333
- $00{:}27{:}58.070 \dashrightarrow 00{:}27{:}59.408$  Interventional radiology all
- NOTE Confidence: 0.911012823333333
- $00:27:59.408 \longrightarrow 00:28:01.638$  getting together to talk about
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}01{.}638 \dashrightarrow 00{:}28{:}03{.}997$  what's the best course of action?
- NOTE Confidence: 0.911012823333333
- $00:28:04.000 \longrightarrow 00:28:05.644$  There are a couple sort of
- NOTE Confidence: 0.911012823333333
- $00:28:05.644 \rightarrow 00:28:07.090$  easier points to make here.
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}07{.}090 \dashrightarrow 00{:}28{:}09{.}820$  I think that for colon cancer that's
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}09{.}820 \dashrightarrow 00{:}28{:}12{.}853$  early stage in the colon and not the
- NOTE Confidence: 0.911012823333333
- $00:28:12.853 \rightarrow 00:28:14.986 ******$  that's typically a surgery
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}14.986 \dashrightarrow 00{:}28{:}17.900$  first approach in most cases for things
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}17{.}900 \dashrightarrow 00{:}28{:}20{.}315$  that are in that for rectal cancer
- NOTE Confidence: 0.911012823333333
- 00:28:20.315 --> 00:28:22.888 as well as advanced colon cancer,
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}22{.}890 \dashrightarrow 00{:}28{:}25{.}362$  it really does require every one in the room
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}25{.}362 \dashrightarrow 00{:}28{:}28{.}100$  to have that conversation about a patient.
- NOTE Confidence: 0.911012823333333

- 00:28:28.100 --> 00:28:28.446 Ultimately,
- NOTE Confidence: 0.911012823333333
- $00{:}28{:}28{.}446 \dashrightarrow 00{:}28{:}30{.}522$  with the patient to see what's
- NOTE Confidence: 0.911012823333333
- $00:28:30.522 \longrightarrow 00:28:32.470$  the best first line approach.
- NOTE Confidence: 0.868071322
- 00:28:33.100 --> 00:28:35.361 Doctor Ira leads is an assistant professor
- NOTE Confidence: 0.868071322
- $00:28:35.361 \rightarrow 00:28:38.008$  of surgery at the Yale School of Medicine.
- NOTE Confidence: 0.868071322
- $00:28:38.010 \longrightarrow 00:28:39.174$  If you have questions,
- NOTE Confidence: 0.868071322
- $00:28:39.174 \longrightarrow 00:28:40.338$  the address is cancer.
- NOTE Confidence: 0.868071322
- $00{:}28{:}40{.}340 \dashrightarrow 00{:}28{:}43{.}357$  Answers at yale.edu and past editions of
- NOTE Confidence: 0.868071322
- 00:28:43.357 --> 00:28:46.404 the program are available in audio and
- NOTE Confidence: 0.868071322
- $00:28:46.404 \rightarrow 00:28:47.975$  written form at yalecancercenter.org.
- NOTE Confidence: 0.868071322
- 00:28:47.975 --> 00:28:50.495 We hope you'll join us next week to NOTE Confidence: 0.868071322
- 00:28:50.495 --> 00:28:52.410 learn more about the fight against
- NOTE Confidence: 0.868071322
- 00:28:52.410 --> 00:28:53.960 cancer here on Connecticut Public
- NOTE Confidence: 0.868071322
- 00:28:54.010 --> 00:28:55.485 radio funding for Yale Cancer
- NOTE Confidence: 0.868071322
- 00:28:55.485 --> 00:28:56.960 Answers is provided by Smilow
- NOTE Confidence: 0.868071322
- 00:28:56.960 --> 00:29:00.000 Cancer Hospital and Astra Zeneca.