## WEBVTT

00:00:00.000 --> 00:00:03.198 Funding for Yale Cancer Answers is NOTE Confidence: 0.934368003636363 00:00:03.198 --> 00:00:06.240 provided by Smilow Cancer Hospital. NOTE Confidence: 0.934368003636363 00:00:06.240 --> 00:00:08.260 Welcome to Yale Cancer Answers NOTE Confidence: 0.934368003636363  $00:00:08.260 \rightarrow 00:00:10.280$  with Doctor Anees Chappar. NOTE Confidence: 0.934368003636363  $00:00:10.280 \rightarrow 00:00:12.150$  Yale Cancer Answers features the NOTE Confidence: 0.934368003636363  $00:00:12.150 \longrightarrow 00:00:13.646$  latest information on cancer NOTE Confidence: 0.934368003636363  $00:00:13.646 \rightarrow 00:00:15.550$  care by welcoming oncologists and NOTE Confidence: 0.934368003636363  $00:00:15.550 \rightarrow 00:00:17.758$  specialists who are on the forefront NOTE Confidence: 0.934368003636363  $00{:}00{:}17.819 \dashrightarrow 00{:}00{:}19.517$  of the battle to fight cancer. NOTE Confidence: 0.934368003636363 00:00:19.520 --> 00:00:21.776 This week it's a conversation about NOTE Confidence: 0.934368003636363 00:00:21.776 --> 00:00:24.240 cervical cancer with Doctor Mitchell Clark. NOTE Confidence: 0.934368003636363 00:00:24.240 --> 00:00:25.890 Doctor Clark is an assistant NOTE Confidence: 0.934368003636363 00:00:25.890 --> 00:00:27.292 professor of obstetrics, gynecology, NOTE Confidence: 0.934368003636363  $00{:}00{:}27.292 \dashrightarrow 00{:}00{:}28.940$  and Reproductive sciences at NOTE Confidence: 0.934368003636363 00:00:28.940 --> 00:00:31.000 the Yale School of Medicine, NOTE Confidence: 0.934368003636363

00:00:31.000 -> 00:00:32.775 where Doctor Chagpar is a

NOTE Confidence: 0.934368003636363

 $00{:}00{:}32.775 \dashrightarrow 00{:}00{:}34.195$  professor of surgical on cology.

NOTE Confidence: 0.962864102272727

 $00:00:36.280 \longrightarrow 00:00:38.114$  Mitchell, maybe we can start off by

NOTE Confidence: 0.962864102272727

 $00{:}00{:}38{.}114 \dashrightarrow 00{:}00{:}39{.}939$  you telling us a little bit more

NOTE Confidence: 0.962864102272727

 $00:00:39.939 \longrightarrow 00:00:41.839$  about yourself and what it is you do.

NOTE Confidence: 0.906610118823529

00:00:42.280 --> 00:00:43.600 Absolutely. I'm

NOTE Confidence: 0.906610118823529

 $00:00:43.600 \dashrightarrow 00:00:45.580$  originally from Canada and I've been

NOTE Confidence: 0.906610118823529

 $00:00:45.640 \longrightarrow 00:00:47.320$  here at Yale now for four years.

NOTE Confidence: 0.906610118823529

 $00:00:47.320 \rightarrow 00:00:50.360$  Prior to that at the University of Toronto,

NOTE Confidence: 0.906610118823529

 $00:00:50.360 \longrightarrow 00:00:52.383$  where a lot of my research in

NOTE Confidence: 0.906610118823529

 $00{:}00{:}52.383 \dashrightarrow 00{:}00{:}53.793$  clinical activity was around

NOTE Confidence: 0.906610118823529

00:00:53.793 --> 00:00:55.239 cervical cancer prevention,

NOTE Confidence: 0.906610118823529

 $00:00:55.240 \dashrightarrow 00:00:56.860$  awareness and obviously treatment of

NOTE Confidence: 0.906610118823529

 $00:00:56.860 \rightarrow 00:00:58.480$  those diagnosed with the disease.

NOTE Confidence: 0.906610118823529

00:00:58.480 --> 00:00:59.524 Here at Yale

NOTE Confidence: 0.906610118823529

00:00:59.524 --> 00:01:00.916 I'm a gynecologic oncologist

- NOTE Confidence: 0.906610118823529
- $00{:}01{:}00{.}916 \dashrightarrow 00{:}01{:}03.628$  and part of a really robust
- NOTE Confidence: 0.906610118823529
- $00:01:03.628 \longrightarrow 00:01:05.224$  multidisciplinary team caring for
- NOTE Confidence: 0.906610118823529
- $00:01:05.224 \rightarrow 00:01:07.359$  women with gynecologic cancers,
- NOTE Confidence: 0.906610118823529
- $00:01:07.360 \longrightarrow 00:01:08.839$  including cervical cancer.
- NOTE Confidence: 0.929857663
- 00:01:09.000 --> 00:01:10.920 So let's talk a little bit
- NOTE Confidence: 0.929857663
- $00:01:10.920 \longrightarrow 00:01:12.200$  more about cervical cancer.
- NOTE Confidence: 0.929857663
- 00:01:12.200 --> 00:01:15.467 Can you kind of paint us a broad
- NOTE Confidence: 0.929857663
- $00:01:15.467 \rightarrow 00:01:18.360$  overview of what exactly is the disease?
- NOTE Confidence: 0.929857663
- 00:01:18.360 --> 00:01:22.170 How common is it?
- NOTE Confidence: 0.929857663
- $00:01:22.170 \longrightarrow 00:01:24.320$  What's the mortality from it?
- NOTE Confidence: 0.929857663
- $00:01:24.320 \longrightarrow 00:01:25.902$  I feel like a lot of us
- NOTE Confidence: 0.929857663
- 00:01:25.902 --> 00:01:27.000 talk about cervical cancer,
- NOTE Confidence: 0.929857663
- $00:01:27.000 \rightarrow 00:01:29.040$  but we might not know the real details.
- NOTE Confidence: 0.944545186190476
- $00:01:29.520 \longrightarrow 00:01:30.468$  Absolutely.
- NOTE Confidence: 0.944545186190476
- $00{:}01{:}30{.}468 \dashrightarrow 00{:}01{:}32{.}364$  We're very fortunate in this country
- NOTE Confidence: 0.944545186190476

 $00{:}01{:}32{.}364 \dashrightarrow 00{:}01{:}34{.}140$  to have seen a dramatic decrease

NOTE Confidence: 0.944545186190476

00:01:34.140 --> 00:01:35.960 in the rates of cervical cancer,

NOTE Confidence: 0.944545186190476

00:01:35.960 --> 00:01:38.360 both in incidence and mortality.

NOTE Confidence: 0.944545186190476

 $00:01:38.360 \longrightarrow 00:01:40.151$  And a lot of that has to do with

NOTE Confidence: 0.944545186190476

 $00{:}01{:}40{.}151 \dashrightarrow 00{:}01{:}41{.}799$  our robust screening program.

NOTE Confidence: 0.944545186190476

00:01:41.800 --> 00:01:44.473 So many women are aware of the Pap smear,

NOTE Confidence: 0.944545186190476

 $00:01:44.480 \rightarrow 00:01:46.598$  something that they talk very often

NOTE Confidence: 0.944545186190476

 $00:01:46.598 \rightarrow 00:01:48.653$  with their gynecologists with and the

NOTE Confidence: 0.944545186190476

 $00{:}01{:}48.653 \dashrightarrow 00{:}01{:}50.704$  design around that is to prevent these

NOTE Confidence: 0.944545186190476

 $00{:}01{:}50.704 \dashrightarrow 00{:}01{:}52.387$  cancers and to detect them before

NOTE Confidence: 0.944545186190476

 $00:01:52.387 \rightarrow 00:01:54.400$  they even have a chance to develop.

NOTE Confidence: 0.944545186190476

 $00{:}01{:}54{.}400 \dashrightarrow 00{:}01{:}56{.}100$  And so women will meet

NOTE Confidence: 0.944545186190476

 $00:01:56.100 \longrightarrow 00:01:57.120$  with their gynecologist,

NOTE Confidence: 0.944545186190476

 $00:01:57.120 \rightarrow 00:01:59.272$  have a Pap smear performed in a certain

NOTE Confidence: 0.944545186190476

 $00:01:59.272 \rightarrow 00:02:01.556$  interval of time and we try to detect these,

NOTE Confidence: 0.944545186190476

 $00{:}02{:}01{.}560 \dashrightarrow 00{:}02{:}02{.}424$  like I said,

 $00:02:02.424 \rightarrow 00:02:04.440$  before we even develop into a cancer.

NOTE Confidence: 0.944545186190476

 $00:02:04.440 \longrightarrow 00:02:05.334$  Because of that,

NOTE Confidence: 0.944545186190476

 $00:02:05.334 \longrightarrow 00:02:07.122$  we've seen a real decrease in

NOTE Confidence: 0.944545186190476

 $00{:}02{:}07{.}122 \dashrightarrow 00{:}02{:}08{.}798$  the rates of this disease.

NOTE Confidence: 0.944545186190476

 $00:02:08.800 \longrightarrow 00:02:11.368$  However, we do still continue to

NOTE Confidence: 0.944545186190476

 $00:02:11.368 \rightarrow 00:02:13.600$  see patients present to the clinic,

NOTE Confidence: 0.944545186190476

 $00:02:13.600 \longrightarrow 00:02:15.105$  often those who are not up to

NOTE Confidence: 0.944545186190476

 $00:02:15.105 \longrightarrow 00:02:16.280$  date with their screening,

NOTE Confidence: 0.944545186190476

 $00:02:16.280 \longrightarrow 00:02:17.840$  not up to date with the Pap smear,

NOTE Confidence: 0.944545186190476

 $00:02:17.840 \longrightarrow 00:02:19.500$  who have unfortunately gone on

NOTE Confidence: 0.944545186190476

 $00:02:19.500 \longrightarrow 00:02:21.160$  to develop a cervical cancer.

NOTE Confidence: 0.944545186190476

 $00:02:21.160 \longrightarrow 00:02:22.189$  Often times though,

NOTE Confidence: 0.944545186190476

 $00{:}02{:}22.189 \dashrightarrow 00{:}02{:}23.904$  these are still diagnosed at

NOTE Confidence: 0.944545186190476

00:02:23.904 --> 00:02:25.963 early stage because unlike many

NOTE Confidence: 0.944545186190476

 $00:02:25.963 \rightarrow 00:02:27.277$  other gynecologic cancers,

 $00:02:27.280 \longrightarrow 00:02:29.191$  they often have a symptom and for

NOTE Confidence: 0.944545186190476

 $00{:}02{:}29{.}191 \dashrightarrow 00{:}02{:}30{.}907$  many women that can be bleeding

NOTE Confidence: 0.944545186190476

 $00{:}02{:}30{.}907 \dashrightarrow 00{:}02{:}32{.}581$  that is either irregular or out

NOTE Confidence: 0.944545186190476

 $00:02:32.581 \longrightarrow 00:02:34.200$  of sync with their menses,

NOTE Confidence: 0.944545186190476

 $00:02:34.200 \dashrightarrow 00:02:35.952$  or bleeding in the post menopausal

NOTE Confidence: 0.944545186190476

 $00:02:35.952 \rightarrow 00:02:37.559$  period when women have ceased

NOTE Confidence: 0.944545186190476

 $00:02:37.559 \rightarrow 00:02:39.079$  having their menstrual period.

NOTE Confidence: 0.944545186190476

00:02:39.080 --> 00:02:40.394 Because of this,

NOTE Confidence: 0.944545186190476

 $00:02:40.394 \rightarrow 00:02:42.584$  women present early where treatment

NOTE Confidence: 0.944545186190476

 $00:02:42.584 \rightarrow 00:02:44.480$  options continue to be very

NOTE Confidence: 0.944545186190476

 $00:02:44.480 \longrightarrow 00:02:46.160$  favorable and for most women,

NOTE Confidence: 0.944545186190476

 $00:02:46.160 \longrightarrow 00:02:47.913$  they will experience a good

NOTE Confidence: 0.944545186190476

 $00:02:47.913 \longrightarrow 00:02:49.878$  outcome from their cancer care,

NOTE Confidence: 0.944545186190476

 $00:02:49.880 \longrightarrow 00:02:52.057$  meaning that we're able to treat these

NOTE Confidence: 0.944545186190476

 $00:02:52.057 \rightarrow 00:02:53.396$  with curative, definitive intent.

NOTE Confidence: 0.944545186190476

 $00:02:53.396 \rightarrow 00:02:53.754$  However,

 $00:02:53.754 \longrightarrow 00:02:56.260$  of course we will see and care

NOTE Confidence: 0.944545186190476

 $00:02:56.324 \rightarrow 00:02:58.586$  for women who present with more

NOTE Confidence: 0.944545186190476

00:02:58.586 --> 00:02:59.717 advanced stage disease, and

 $00:03:02.240 \longrightarrow 00:03:03.524$  there have never been as many

NOTE Confidence: 0.944545186190476

 $00{:}03{:}03{.}524 \dashrightarrow 00{:}03{:}05{.}047$  options now as there have been

NOTE Confidence: 0.944545186190476

 $00:03:05.047 \longrightarrow 00:03:06.482$  in the past to care for those

NOTE Confidence: 0.944545186190476

 $00{:}03{:}06{.}534 \dashrightarrow 00{:}03{:}08{.}074$  women who unfortunately do come

NOTE Confidence: 0.944545186190476

 $00:03:08.074 \longrightarrow 00:03:08.998$  with advanced disease.

NOTE Confidence: 0.885203705

 $00{:}03{:}10{.}320 \dashrightarrow 00{:}03{:}13{.}720$  So let's talk a little bit more about

NOTE Confidence: 0.885203705

 $00{:}03{:}13.720 \dashrightarrow 00{:}03{:}16.252$  how we can detect

NOTE Confidence: 0.885203705

 $00:03:16.252 \longrightarrow 00:03:17.518$  cervical cancer early.

NOTE Confidence: 0.885203705

00:03:17.520 --> 00:03:19.200 Can you talk a little bit more

NOTE Confidence: 0.885203705

 $00:03:19.200 \longrightarrow 00:03:20.651$  about some of the guidelines

NOTE Confidence: 0.885203705

 $00:03:20.651 \rightarrow 00:03:21.995$  in terms of screening?

NOTE Confidence: 0.914042474761905

 $00:03:22.360 \longrightarrow 00:03:24.385$  Absolutely. We're very fortunate that

NOTE Confidence: 0.914042474761905

 $00:03:24.385 \longrightarrow 00:03:27.671$  this is one cancer where there is robust

 $00:03:27.671 \rightarrow 00:03:30.200$  data to support the use of screening.

NOTE Confidence: 0.914042474761905

 $00{:}03{:}30{.}200 \dashrightarrow 00{:}03{:}31{.}898$  Unlike other cancers like ovarian or

NOTE Confidence: 0.914042474761905

 $00{:}03{:}31.898 \dashrightarrow 00{:}03{:}33.800$  uterine where we don't have that data,

NOTE Confidence: 0.914042474761905

 $00:03:33.800 \rightarrow 00:03:36.124$  the Pap smear has really been effective

NOTE Confidence: 0.914042474761905

 $00:03:36.124 \rightarrow 00:03:38.152$  at detecting pre invasive disease or

NOTE Confidence: 0.914042474761905

 $00{:}03{:}38{.}152 \dashrightarrow 00{:}03{:}40{.}399$  changes in the cells of the cervix

NOTE Confidence: 0.914042474761905

 $00:03:40.459 \rightarrow 00:03:42.475$  before they develop into a cancer.

NOTE Confidence: 0.914042474761905

 $00:03:42.480 \rightarrow 00:03:45.189$  One of the most important discoveries has

NOTE Confidence: 0.914042474761905

 $00{:}03{:}45{.}189 \dashrightarrow 00{:}03{:}47{.}915$  been the association of the HPV virus in

NOTE Confidence: 0.914042474761905

 $00:03:47.915 \rightarrow 00:03:50.158$  its development and role in cervical cancer.

NOTE Confidence: 0.914042474761905

 $00:03:50.158 \rightarrow 00:03:53.060$  And so beginning all the way back in

NOTE Confidence: 0.914042474761905

 $00{:}03{:}53{.}060 \dashrightarrow 00{:}03{:}55{.}895$  adolescence now we know it's important to

NOTE Confidence: 0.914042474761905

 $00{:}03{:}55{.}895 \dashrightarrow 00{:}03{:}57{.}988$  offer vaccination to both boys and girls

NOTE Confidence: 0.914042474761905

 $00{:}03{:}57{.}988 \dashrightarrow 00{:}04{:}01{.}732$  ages 9 to 11 to help prevent HPV infection

NOTE Confidence: 0.914042474761905

 $00:04:01.732 \longrightarrow 00:04:03.840$  and eliminate or dramatically reduce

 $00:04:03.840 \longrightarrow 00:04:05.800$  that risk of developing down the road.

NOTE Confidence: 0.914042474761905

 $00{:}04{:}05{.}800 \dashrightarrow 00{:}04{:}07{.}752$  And so that data is very strong and

NOTE Confidence: 0.914042474761905

 $00:04:07.752 \rightarrow 00:04:09.360$  supported by a number of different

NOTE Confidence: 0.914042474761905

 $00:04:09.360 \rightarrow 00:04:11.528$  medical groups including Pediatrics.

NOTE Confidence: 0.914042474761905

 $00{:}04{:}11.528 \dashrightarrow 00{:}04{:}14.460$  For those women who then either

NOTE Confidence: 0.914042474761905

 $00:04:14.460 \longrightarrow 00:04:16.000$  do or do not receive the vaccine,

NOTE Confidence: 0.914042474761905

 $00{:}04{:}16{.}000 \dashrightarrow 00{:}04{:}18{.}254$  the guidelines for screening with the Pap

NOTE Confidence: 0.914042474761905

 $00{:}04{:}18.254 \dashrightarrow 00{:}04{:}20.517$  smear are still the same at this time.

NOTE Confidence: 0.914042474761905

 $00:04:20.520 \rightarrow 00:04:22.560$  That may change down the road,

NOTE Confidence: 0.914042474761905

 $00:04:22.560 \longrightarrow 00:04:25.032$  but for now we've come up with

NOTE Confidence: 0.914042474761905

 $00{:}04{:}25{.}032 \dashrightarrow 00{:}04{:}26{.}849$  a combination test where we screen

NOTE Confidence: 0.914042474761905

 $00:04:26.849 \rightarrow 00:04:29.359$  for both the HPV virus in the cells

NOTE Confidence: 0.914042474761905

 $00:04:29.360 \longrightarrow 00:04:31.328$  and the presence of any microscopic

NOTE Confidence: 0.914042474761905

 $00{:}04{:}31{.}328 \dashrightarrow 00{:}04{:}33{.}184$  changes when our cytopathologists

NOTE Confidence: 0.914042474761905

 $00:04:33.184 \rightarrow 00:04:35.696$  look under the microscope and if

NOTE Confidence: 0.914042474761905

 $00:04:35.696 \rightarrow 00:04:37.424$  women have negative results from both

 $00{:}04{:}37{.}424 \dashrightarrow 00{:}04{:}38{.}840$  the HPV and the cells,

NOTE Confidence: 0.914042474761905

 $00:04:38.840 \longrightarrow 00:04:40.848$  they're actually eligible to

NOTE Confidence: 0.914042474761905

 $00:04:40.848 \longrightarrow 00:04:43.358$  be screened every five years.

NOTE Confidence: 0.914042474761905

00:04:43.360 --> 00:04:45.844 And for a lot of patients and for

NOTE Confidence: 0.914042474761905

 $00{:}04{:}45{.}844 \dashrightarrow 00{:}04{:}48{.}245$  women that has been a big change from

NOTE Confidence: 0.914042474761905

 $00{:}04{:}48.245 \dashrightarrow 00{:}04{:}50.520$  what used to be an annual screening.

NOTE Confidence: 0.914042474761905

 $00{:}04{:}50{.}520 \dashrightarrow 00{:}04{:}53{.}248$  But we know that the association of a

NOTE Confidence: 0.914042474761905

 $00{:}04{:}53.248 \dashrightarrow 00{:}04{:}55.692$  negative HPV test with that screening

NOTE Confidence: 0.914042474761905

 $00{:}04{:}55{.}692 \dashrightarrow 00{:}04{:}58{.}230$  confers a strong degree of protection

NOTE Confidence: 0.914042474761905

 $00{:}04{:}58.299 \dashrightarrow 00{:}05{:}00.955$  over the course of the next five years.

NOTE Confidence: 0.914042474761905

 $00{:}05{:}00{.}960 \dashrightarrow 00{:}05{:}02{.}570$  And so women can feel reassured that

NOTE Confidence: 0.914042474761905

 $00{:}05{:}02{.}570 \dashrightarrow 00{:}05{:}04{.}459$  they have a very low likelihood of going

NOTE Confidence: 0.914042474761905

 $00{:}05{:}04{.}459 \dashrightarrow 00{:}05{:}06{.}421$  on to develop a pre cancer or cancer

NOTE Confidence: 0.914042474761905

 $00{:}05{:}06{.}421 \dashrightarrow 00{:}05{:}10{.}280$  of the cervix in the subsequent five years.

NOTE Confidence: 0.914042474761905

 $00{:}05{:}10.280 \dashrightarrow 00{:}05{:}12.920$  In terms of detection though,

 $00:05:12.920 \rightarrow 00:05:13.964$  and moving beyond screening,

NOTE Confidence: 0.914042474761905

 $00{:}05{:}13{.}964 \dashrightarrow 00{:}05{:}15{.}530$  patients need to present to the

NOTE Confidence: 0.914042474761905

 $00:05:15.574 \rightarrow 00:05:17.242$  gynecologist in the interim if they

NOTE Confidence: 0.914042474761905

 $00:05:17.242 \rightarrow 00:05:18.890$  feel that they're developing any of

NOTE Confidence: 0.914042474761905

 $00:05:18.890 \rightarrow 00:05:20.354$  those symptoms I talked about earlier.

NOTE Confidence: 0.966519037

 $00{:}05{:}22{.}120 \dashrightarrow 00{:}05{:}25{.}004$  And so can you talk a little

NOTE Confidence: 0.966519037

00:05:25.004 --> 00:05:26.898 bit more about HPV vaccinations?

NOTE Confidence: 0.966519037

 $00:05:26.898 \rightarrow 00:05:30.411$  I mean, it seems like we talk a lot about

NOTE Confidence: 0.966519037

 $00:05:30.411 \rightarrow 00:05:33.232$  HPV in the association with cervical cancer,

NOTE Confidence: 0.966519037

 $00:05:33.240 \longrightarrow 00:05:36.120$  but some people might still be

NOTE Confidence: 0.966519037

 $00{:}05{:}36{.}120 \dashrightarrow 00{:}05{:}38{.}040$  unaware about HPV vaccination,

NOTE Confidence: 0.966519037

 $00:05:38.040 \rightarrow 00:05:40.632$  who should get it, when they should get it.

NOTE Confidence: 0.966519037

 $00{:}05{:}40.640 \dashrightarrow 00{:}05{:}44.090$  And I understand that now the age guidelines

NOTE Confidence: 0.966519037

 $00:05:44.090 \dashrightarrow 00:05:46.515$  for HPV vaccination have expanded.

NOTE Confidence: 0.966519037

 $00:05:46.520 \longrightarrow 00:05:48.320$  Can you talk a little bit more about that?

NOTE Confidence: 0.9299149475

 $00{:}05{:}48.520 \dashrightarrow 00{:}05{:}51.012$  Absolutely. This is one of my favorite

- NOTE Confidence: 0.9299149475
- $00:05:51.012 \rightarrow 00:05:53.488$  topics because I think it's a unique
- NOTE Confidence: 0.9299149475
- $00{:}05{:}53.488 \dashrightarrow 00{:}05{:}56.240$  example of a vaccine that can be thought
- NOTE Confidence: 0.9299149475
- $00{:}05{:}56{.}314 \dashrightarrow 00{:}05{:}58{.}678$  of as a cancer prevention strategy.
- NOTE Confidence: 0.9299149475
- $00{:}05{:}58.680 \dashrightarrow 00{:}06{:}00.997$  I think when this first came out
- NOTE Confidence: 0.9299149475
- $00:06:01.000 \rightarrow 00:06:03.118$  in the early 2000s,
- NOTE Confidence: 0.9299149475
- $00{:}06{:}03.120 \dashrightarrow 00{:}06{:}05.451$  there was a lot of reluctance around
- NOTE Confidence: 0.9299149475
- $00{:}06{:}05{.}451 \dashrightarrow 00{:}06{:}07{.}803$  providing a vaccine that was associated
- NOTE Confidence: 0.9299149475
- $00:06:07.803 \dashrightarrow 00:06:09.958$  with a sexually transmitted infection.
- NOTE Confidence: 0.9299149475
- 00:06:09.960 --> 00:06:12.894 However, we've seen just a dramatic
- NOTE Confidence: 0.9299149475
- $00{:}06{:}12.894 \dashrightarrow 00{:}06{:}15.880$  reduction in HPV associated cancers in
- NOTE Confidence: 0.9299149475
- $00{:}06{:}15.880 \dashrightarrow 00{:}06{:}18.680$  patients who use this vaccine early on.
- NOTE Confidence: 0.9299149475
- $00:06:18.680 \longrightarrow 00:06:21.340$  And so the ideal time to offer
- NOTE Confidence: 0.9299149475
- $00{:}06{:}21{.}340 \dashrightarrow 00{:}06{:}23{.}802$  vaccination is really in that a dolescent
- NOTE Confidence: 0.9299149475
- $00:06:23.802 \rightarrow 00:06:26.714$  period prior to first exposure to HPV.
- NOTE Confidence: 0.9299149475
- $00:06:26.720 \rightarrow 00:06:28.316$  And so we typically say between
- NOTE Confidence: 0.9299149475

 $00{:}06{:}28.316 \dashrightarrow 00{:}06{:}30.719$  the ages of 9 to 11 and I

NOTE Confidence: 0.9299149475

 $00{:}06{:}30{.}719$  -->  $00{:}06{:}31{.}995$  would strongly encourage women,

NOTE Confidence: 0.9299149475

00:06:32.000 --> 00:06:32.938 men, parents,

NOTE Confidence: 0.9299149475

00:06:32.938 --> 00:06:35.752 grandparents, to have a very frank

NOTE Confidence: 0.9299149475

 $00{:}06{:}35.752 \dashrightarrow 00{:}06{:}38.169$  conversation with the pediatricians about

NOTE Confidence: 0.9299149475

 $00{:}06{:}38{.}169 \dashrightarrow 00{:}06{:}41{.}452$  ensuring that the HPV vaccine is included NOTE Confidence: 0.9299149475

 $00:06:41.525 \rightarrow 00:06:44.316$  in the vaccine series for girls and boys.

NOTE Confidence: 0.9299149475

 $00{:}06{:}44.316 \dashrightarrow 00{:}06{:}46.696$  We know from some internal data in

NOTE Confidence: 0.9299149475

00:06:46.696 --> 00:06:49.066 the state of Connecticut that the

NOTE Confidence: 0.9299149475

 $00{:}06{:}49{.}066 \dashrightarrow 00{:}06{:}51{.}179$  other vaccines recommended at 9 to 11

NOTE Confidence: 0.9299149475

 $00:06:51.179 \longrightarrow 00:06:53.195$  have an uptake rate over 90%.

NOTE Confidence: 0.9299149475

 $00:06:53.200 \rightarrow 00:06:55.558$  But completion of the HPV vaccine

NOTE Confidence: 0.9299149475

00:06:55.558 --> 00:06:57.897 series in our state remains very

NOTE Confidence: 0.9299149475

 $00:06:57.897 \longrightarrow 00:06:59.955$  low at around 50 to 60%.

NOTE Confidence: 0.9299149475

 $00:06:59.960 \longrightarrow 00:07:01.560$  And there's really no reason

NOTE Confidence: 0.9299149475

 $00{:}07{:}01.560 \dashrightarrow 00{:}07{:}02.840$  for this other than

 $00:07:03.762 \rightarrow 00:07:05.606$  some misinformation and reluctance

NOTE Confidence: 0.9299149475

 $00{:}07{:}05{.}606 \dashrightarrow 00{:}07{:}07{.}882$  on providers and sometimes parents

NOTE Confidence: 0.9299149475

 $00:07:07.882 \dashrightarrow 00:07:10.437$  in seeing the benefit to the vaccine.

NOTE Confidence: 0.9299149475

00:07:10.440 --> 00:07:12.520 Although I don't treat head and neck cancer,

NOTE Confidence: 0.9299149475

 $00{:}07{:}12.520 \dashrightarrow 00{:}07{:}14.788$  we are seeing a really robust set

NOTE Confidence: 0.9299149475

00:07:14.788 --> 00:07:16.590 of studies coming out demonstrating

NOTE Confidence: 0.9299149475

 $00{:}07{:}16.590 \dashrightarrow 00{:}07{:}18.876$  the association of HPV with cancers

NOTE Confidence: 0.9299149475

 $00{:}07{:}18.876 \dashrightarrow 00{:}07{:}20.600$  of the head and neck.

NOTE Confidence: 0.9299149475

00:07:20.600 --> 00:07:23.180 And just another reason to reinforce

NOTE Confidence: 0.9299149475

 $00{:}07{:}23.180 \dashrightarrow 00{:}07{:}25.310$  the parents and to children who are

NOTE Confidence: 0.9299149475

 $00{:}07{:}25{.}310 \dashrightarrow 00{:}07{:}26{.}926$  taking the vaccine that we should

NOTE Confidence: 0.9299149475

 $00{:}07{:}26{.}926 \dashrightarrow 00{:}07{:}28{.}984$  really look at this as a cancer

NOTE Confidence: 0.9299149475

 $00{:}07{:}28{.}984 \dashrightarrow 00{:}07{:}30{.}543$  prevention strategy as opposed to

NOTE Confidence: 0.9299149475

 $00{:}07{:}30{.}543 \dashrightarrow 00{:}07{:}32{.}063$  something that is associated with

NOTE Confidence: 0.9299149475

 $00:07:32.063 \longrightarrow 00:07:33.736$  an infection that's acquired through

NOTE Confidence: 0.9299149475

 $00:07:33.736 \longrightarrow 00:07:34.440$  sexual activity.

- NOTE Confidence: 0.899574332222222
- $00:07:35.400 \longrightarrow 00:07:40.314$  The reluctance on
- NOTE Confidence: 0.899574332222222
- $00:07:40.314 \rightarrow 00:07:45.078$  people to take this vaccine I think is
- NOTE Confidence: 0.899574332222222
- 00:07:45.078 --> 00:07:45.996 really concerning.
- NOTE Confidence: 0.899574332222222
- $00:07:46.000 \longrightarrow 00:07:47.666$  And we've seen this not only
- NOTE Confidence: 0.899574332222222
- 00:07:47.666 --> 00:07:49.719 in our own state as you mentioned,
- NOTE Confidence: 0.899574332222222
- $00:07:49.720 \longrightarrow 00:07:53.080$  but even globally.
- NOTE Confidence: 0.899574332222222
- $00{:}07{:}53.080 \dashrightarrow 00{:}07{:}55.720$  And I think
- NOTE Confidence: 0.899574332222222
- $00:07:55.720 \longrightarrow 00:07:58.216$  part of it is that
- NOTE Confidence: 0.899574332222222
- 00:07:58.216 --> 00:08:00.280 parents may say,
- NOTE Confidence: 0.899574332222222
- 00:08:00.280 --> 00:08:03.220 my child is not going to engage
- NOTE Confidence: 0.899574332222222
- 00:08:03.220 > 00:08:06.320 in premarital sexual activity.
- NOTE Confidence: 0.899574332222222
- $00{:}08{:}06{.}320 \dashrightarrow 00{:}08{:}09{.}981$  And so why should I vaccinate them
- NOTE Confidence: 0.899574332222222
- $00:08:09.981 \rightarrow 00:08:13.200$  between the ages of nine and 11?
- NOTE Confidence: 0.899574332222222
- 00:08:13.200 --> 00:08:15.384 Can you talk a little
- NOTE Confidence: 0.899574332222222
- $00:08:15.384 \rightarrow 00:08:17.160$  bit more about that?
- NOTE Confidence: 0.857562113333333

- 00:08:17.760 --> 00:08:18.972 Absolutely,
- NOTE Confidence: 0.857562113333333
- 00:08:18.972 --> 00:08:21.396 it's parents and it's also providers.
- NOTE Confidence: 0.857562113333333
- 00:08:21.400 --> 00:08:23.256 We've done a lot of work internally
- NOTE Confidence: 0.857562113333333
- $00:08:23.256 \rightarrow 00:08:25.040$  here in the state of Connecticut.
- NOTE Confidence: 0.857562113333333
- $00{:}08{:}25{.}040 \dashrightarrow 00{:}08{:}27{.}096$  I work with the Department of Health on
- NOTE Confidence: 0.857562113333333
- $00:08:27.096 \rightarrow 00:08:30.825$  this in educating both our Pediatrics
- NOTE Confidence: 0.857562113333333
- $00:08:30.825 \rightarrow 00:08:32.852$  colleagues around ways to bring
- NOTE Confidence: 0.857562113333333
- $00:08:32.852 \rightarrow 00:08:34.517$  up these discussions with parents.
- NOTE Confidence: 0.857562113333333
- $00{:}08{:}34{.}520 \dashrightarrow 00{:}08{:}35{.}636$  There's a lot of
- NOTE Confidence: 0.857562113333333
- $00:08:35.640 \rightarrow 00:08:37.848$  people who still feel uncomfortable for some
- NOTE Confidence: 0.857562113333333
- $00:08:37.848 \rightarrow 00:08:40.124$  reason or another addressing a sexually
- NOTE Confidence: 0.857562113333333
- $00:08:40.124 \rightarrow 00:08:43.559$  related topic in a patient of that age.
- NOTE Confidence: 0.857562113333333
- $00{:}08{:}43.560 \dashrightarrow 00{:}08{:}46.350$  But the data really speaks for itself and I
- NOTE Confidence: 0.857562113333333
- $00:08:46.350 \rightarrow 00:08:49.260$  think changing the narrative like I said,
- NOTE Confidence: 0.857562113333333
- $00{:}08{:}49{.}260 \dashrightarrow 00{:}08{:}52{.}347$  to reinforcing this is to prevent a
- NOTE Confidence: 0.857562113333333
- $00:08:52.347 \longrightarrow 00:08:55.434$  cancer far down the road.

00:08:55.440 --> 00:08:58.736 You know, we're not looking to provide

NOTE Confidence: 0.857562113333333

 $00{:}08{:}58{.}736 \dashrightarrow 00{:}09{:}01{.}472$  some sort of assurance to adolescents

NOTE Confidence: 0.857562113333333

 $00{:}09{:}01{.}472 \dashrightarrow 00{:}09{:}04{.}132$  that are having unprotected sex that it is safe

NOTE Confidence: 0.857562113333333

 $00:09:04.132 \longrightarrow 00:09:05.756$  because they're vaccinated.

NOTE Confidence: 0.857562113333333

00:09:05.760 --> 00:09:07.050 But really what we are looking

NOTE Confidence: 0.857562113333333

 $00:09:07.050 \rightarrow 00:09:08.439$  at is the long game here,

NOTE Confidence: 0.857562113333333

 $00:09:08.440 \longrightarrow 00:09:10.960$  which is to prevent a cancer,

NOTE Confidence: 0.857562113333333

 $00:09:10.960 \rightarrow 00:09:12.480$  a multitude of cancers actually,

NOTE Confidence: 0.857562113333333

 $00:09:12.480 \longrightarrow 00:09:14.820$  not just cervical cancer that

NOTE Confidence: 0.857562113333333

 $00:09:14.820 \longrightarrow 00:09:17.160$  could be really life limiting.

NOTE Confidence: 0.857562113333333

 $00:09:17.160 \longrightarrow 00:09:19.592$  And looking at the sort of long

NOTE Confidence: 0.857562113333333

 $00:09:19.592 \dashrightarrow 00:09:21.458$  term investment of this very safe

NOTE Confidence: 0.857562113333333

 $00{:}09{:}21.458 \dashrightarrow 00{:}09{:}23.040$  vaccine that has now been around

NOTE Confidence: 0.857562113333333

 $00:09:23.040 \longrightarrow 00:09:24.320$  for over a decade.

 $00:09:29.440 \longrightarrow 00:09:30.920$  If somebody is listening

NOTE Confidence: 0.897982256

 $00:09:30.920 \rightarrow 00:09:32.736$  to this and they think, OK,

 $00:09:32.736 \longrightarrow 00:09:35.424$  I get it, but my child is now

NOTE Confidence: 0.897982256

 $00:09:35.424 \longrightarrow 00:09:38.379$  beyond the age of 9 to 11 and maybe

NOTE Confidence: 0.897982256

 $00:09:38.379 \longrightarrow 00:09:40.628$  they're in their late teens,

NOTE Confidence: 0.897982256

 $00:09:40.628 \rightarrow 00:09:42.913$  maybe even their early 20s,

NOTE Confidence: 0.897982256

 $00:09:42.920 \longrightarrow 00:09:44.396$  can they still get the vaccine?

NOTE Confidence: 0.96292017

 $00{:}09{:}44.720 \dashrightarrow 00{:}09{:}47.653$  Absolutely. We've got a great

NOTE Confidence: 0.96292017

 $00{:}09{:}47.653 \dashrightarrow 00{:}09{:}49.651$  data set and clinical trials

NOTE Confidence: 0.96292017

 $00:09:49.651 \dashrightarrow 00:09:51.004$  showing effectiveness in what

NOTE Confidence: 0.96292017

 $00:09:51.004 \dashrightarrow 00:09:52.798$  we're calling the catch up cohort.

NOTE Confidence: 0.96292017

 $00:09:52.800 \longrightarrow 00:09:54.438$  So those are a group of people

NOTE Confidence: 0.96292017

 $00{:}09{:}54{.}438 \dashrightarrow 00{:}09{:}56{.}049$  who did not have the opportunity

NOTE Confidence: 0.96292017

00:09:56.049 --> 00:09:58.037 or may<br/>be chose not to take the

NOTE Confidence: 0.96292017

00:09:58.095 --> 00:10:00.237 vaccine in the earlier years

NOTE Confidence: 0.96292017

 $00{:}10{:}00{.}237 \dashrightarrow 00{:}10{:}01{.}596$  when it's initially recommended.

NOTE Confidence: 0.96292017

 $00{:}10{:}01{.}596 \dashrightarrow 00{:}10{:}04{.}212$  But we do still see statistically

 $00:10:04.212 \rightarrow 00:10:06.334$  significant benefits in a reduction

NOTE Confidence: 0.96292017

 $00{:}10{:}06{.}334 \dashrightarrow 00{:}10{:}08{.}204$  of HPV associated illnesses and

NOTE Confidence: 0.96292017

00:10:08.204 --> 00:10:10.436 cancers in those people taking the

NOTE Confidence: 0.96292017

 $00:10:10.436 \rightarrow 00:10:12.879$  vaccine really up until their mid 20s.

NOTE Confidence: 0.96292017

 $00:10:12.880 \longrightarrow 00:10:14.770$  There is some new data to say

NOTE Confidence: 0.96292017

 $00:10:14.770 \longrightarrow 00:10:16.855$  that up until the sort of early

NOTE Confidence: 0.96292017

 $00:10:16.855 \longrightarrow 00:10:18.360$  40s there may be benefit,

NOTE Confidence: 0.96292017

 $00:10:18.360 \rightarrow 00:10:20.286$  but it's quite individualized and the

NOTE Confidence: 0.96292017

00:10:20.286 --> 00:10:22.164 recommendation is for for people to

NOTE Confidence: 0.96292017

 $00{:}10{:}22.164 \dashrightarrow 00{:}10{:}24.054$  discuss with their provider to see if

NOTE Confidence: 0.96292017

 $00{:}10{:}24.054 \dashrightarrow 00{:}10{:}25.957$  maybe they would be a good candidate.

NOTE Confidence: 0.96292017

 $00{:}10{:}25{.}960 \dashrightarrow 00{:}10{:}27{.}628$  But if we're looking at the

NOTE Confidence: 0.96292017

 $00{:}10{:}27.628 \dashrightarrow 00{:}10{:}29.670$  cost benefit here or

NOTE Confidence: 0.96292017

 $00:10:29.670 \rightarrow 00:10:30.834$  the risk benefit analysis,

NOTE Confidence: 0.96292017

 $00:10:30.840 \longrightarrow 00:10:32.440$  this vaccine is very safe.

NOTE Confidence: 0.96292017

 $00:10:32.440 \rightarrow 00:10:34.757$  We don't see any major safety signals.

- NOTE Confidence: 0.96292017
- $00:10:34.760 \rightarrow 00:10:37.248$  This has been around for a long time and

 $00{:}10{:}37.248 \dashrightarrow 00{:}10{:}39.872$  if you can confer any reduction in risk,

NOTE Confidence: 0.96292017

00:10:39.880 --> 00:10:42.211 I think it's a really worthwhile

NOTE Confidence: 0.96292017

 $00{:}10{:}42.211 \dashrightarrow 00{:}10{:}44.288$  conversation for both these teens

NOTE Confidence: 0.96292017

 $00{:}10{:}44.288 \dashrightarrow 00{:}10{:}46.718$  and 20 year olds to

NOTE Confidence: 0.96292017

 $00{:}10{:}49{.}742 \dashrightarrow 00{:}10{:}50{.}998$  have with their doctors.

NOTE Confidence: 0.9442628775

 $00:10:52.240 \longrightarrow 00:10:54.565$  Is the vaccine covered by

NOTE Confidence: 0.9442628775

 $00:10:54.565 \rightarrow 00:10:56.320 \text{ most health plans}?$ 

NOTE Confidence: 0.913681879166667

 $00{:}10{:}56{.}320 \dashrightarrow 00{:}10{:}58{.}990$  Yes, most health plans do cover this

NOTE Confidence: 0.913681879166667

 $00{:}10{:}58{.}990 \dashrightarrow 00{:}11{:}01{.}797$  because it is recommended by both the

NOTE Confidence: 0.913681879166667

00:11:01.797 --> 00:11:04.179 CDC and many major organizations

NOTE Confidence: 0.913681879166667

 $00{:}11{:}04{.}179 \dashrightarrow 00{:}11{:}07{.}637$  who make our sort of national

NOTE Confidence: 0.913681879166667

 $00{:}11{:}07.637 \dashrightarrow 00{:}11{:}09.275$  guidelines around vaccination.

NOTE Confidence: 0.913681879166667

00:11:09.280 --> 00:11:11.352 And in the state of Connecticut for

NOTE Confidence: 0.913681879166667

 $00:11:11.352 \rightarrow 00:11:13.564$  certain age groups it's covered as well.

 $00:11:13.564 \longrightarrow 00:11:15.334$  So these are things

NOTE Confidence: 0.913681879166667

 $00:11:15.334 \rightarrow 00:11:16.624$  that you should definitely bring

NOTE Confidence: 0.913681879166667

 $00:11:16.624 \rightarrow 00:11:17.999$  up with your pediatrician.

NOTE Confidence: 0.913681879166667

 $00{:}11{:}18{.}000 \dashrightarrow 00{:}11{:}20{.}544$  And now we actually have a number of

NOTE Confidence: 0.913681879166667

 $00{:}11{:}20{.}544 \dashrightarrow 00{:}11{:}22{.}418$  pharmacists and pharmacies that carry

NOTE Confidence: 0.913681879166667

 $00{:}11{:}22{.}418 \dashrightarrow 00{:}11{:}24{.}764$  the vaccine and do not necessarily

NOTE Confidence: 0.913681879166667

 $00:11:24.764 \rightarrow 00:11:27.000$  require the prescription of an MD.

NOTE Confidence: 0.913681879166667

00:11:27.000 --> 00:11:28.908 And so I think you certainly

NOTE Confidence: 0.913681879166667

00:11:28.908 --> 00:11:30.712 have that conversation with your

NOTE Confidence: 0.913681879166667

 $00:11:30.712 \rightarrow 00:11:32.119$  trusted healthcare provider.

NOTE Confidence: 0.913681879166667

 $00{:}11{:}32{.}120 \dashrightarrow 00{:}11{:}33{.}320$  And for those healthcare

NOTE Confidence: 0.913681879166667

 $00:11:33.320 \longrightarrow 00:11:34.520$  providers out there listening,

NOTE Confidence: 0.913681879166667

 $00:11:34.520 \longrightarrow 00:11:36.625$  I cannot reinforce enough the

NOTE Confidence: 0.913681879166667

00:11:36.625 --> 00:11:38.309 importance of your strong

NOTE Confidence: 0.913681879166667

 $00{:}11{:}38{.}309 \dashrightarrow 00{:}11{:}40{.}000$  recommendation to parents and kids.

NOTE Confidence: 0.913681879166667

 $00:11:40.000 \rightarrow 00:11:42.436$  We know that's the number one reason,

- NOTE Confidence: 0.913681879166667
- $00{:}11{:}42{.}440 \dashrightarrow 00{:}11{:}44{.}660$  or that is associated with vaccine
- NOTE Confidence: 0.913681879166667
- $00:11:44.660 \rightarrow 00:11:46.140$  uptake, is recommendation because
- NOTE Confidence: 0.913681879166667
- $00:11:46.205 \rightarrow 00:11:48.085$  you have that strong the rapeutic
- NOTE Confidence: 0.913681879166667
- $00{:}11{:}48.085 \dashrightarrow 00{:}11{:}49.965$  relationship with your patients and
- NOTE Confidence: 0.913681879166667
- $00{:}11{:}50{.}025 \dashrightarrow 00{:}11{:}51{.}925$  their families and to either seek this
- NOTE Confidence: 0.913681879166667
- 00:11:51.925 --> 00:11:53.463 through the clinic that you see that
- NOTE Confidence: 0.913681879166667
- $00:11:53.463 \rightarrow 00:11:55.169$  you get carrying or to see go to
- NOTE Confidence: 0.913681879166667
- $00:11:55.169 \rightarrow 00:11:56.639$  local pharmacy who has it in stock.
- NOTE Confidence: 0.904871485882353
- $00{:}11{:}57{.}680 \dashrightarrow 00{:}12{:}00{.}102$  Is the vaccine given in one shot
- NOTE Confidence: 0.904871485882353
- $00:12:00.102 \longrightarrow 00:12:03.061$  or is it multiple shots that you
- NOTE Confidence: 0.904871485882353
- $00:12:03.061 \rightarrow 00:12:05.800$  require to get immunity?
- NOTE Confidence: 0.86624038
- 00:12:05.800 --> 00:12:08.304 Great question. So it is designed to be a
- NOTE Confidence: 0.86624038
- $00:12:08.304 \longrightarrow 00:12:10.391$  multi shot regimen depending on the
- NOTE Confidence: 0.86624038
- $00{:}12{:}10{.}391 \dashrightarrow 00{:}12{:}13{.}159$  age whether it will be two or three.
- NOTE Confidence: 0.86624038
- $00{:}12{:}13.160 \dashrightarrow 00{:}12{:}15.608$  Although we have seen some data
- NOTE Confidence: 0.86624038

 $00:12:15.608 \longrightarrow 00:12:17.990$  coming out of countries that are lower

NOTE Confidence: 0.86624038

 $00{:}12{:}17{.}990 \dashrightarrow 00{:}12{:}20{.}408$  middle income where access to a repeated

NOTE Confidence: 0.86624038

 $00:12:20.408 \rightarrow 00:12:22.676$  series is not reasonable or feasible

NOTE Confidence: 0.86624038

 $00{:}12{:}22.676 \dashrightarrow 00{:}12{:}25.358$  and there has been some very exciting

NOTE Confidence: 0.86624038

 $00{:}12{:}25{.}360 \dashrightarrow 00{:}12{:}26{.}932$  results showing strong immunogenicity

NOTE Confidence: 0.86624038

 $00{:}12{:}26{.}932 \dashrightarrow 00{:}12{:}29{.}680$  even if you just get one shot.

NOTE Confidence: 0.86624038

 $00{:}12{:}29.680 \dashrightarrow 00{:}12{:}32.248$  Obviously we recommend patients get all

NOTE Confidence: 0.86624038

 $00:12:32.248 \rightarrow 00:12:35.797$  two or all three depending on their age,

NOTE Confidence: 0.86624038

00:12:35.800 --> 00:12:37.515 but at least just getting the one

NOTE Confidence: 0.86624038

 $00:12:37.515 \rightarrow 00:12:39.500$  seems to to confer some protection and

NOTE Confidence: 0.86624038

 $00:12:39.500 \longrightarrow 00:12:41.680$  that is long lasting at least.

NOTE Confidence: 0.9612721516666667

00:12:42.440 --> 00:12:44.258 Can you clarify who gets two

NOTE Confidence: 0.9612721516666667

 $00:12:44.258 \longrightarrow 00:12:46.320$  shots and who gets three shots?

NOTE Confidence: 0.9612721516666667

 $00:12:46.320 \longrightarrow 00:12:47.760$  You mentioned that has

NOTE Confidence: 0.961272151666667

 $00:12:47.760 \longrightarrow 00:12:49.360$  something to do with age.

NOTE Confidence: 0.9594554425

 $00:12:49.360 \rightarrow 00:12:52.920$  So in the younger 9 to 11 population,

- NOTE Confidence: 0.9594554425
- $00:12:52.920 \longrightarrow 00:12:55.710$  the 2 is fine. Those of us in the catch
- NOTE Confidence: 0.9594554425
- $00:12:55.782 \rightarrow 00:12:58.414$  up cohort who would be getting it in
- NOTE Confidence: 0.9594554425
- $00:12:58.414 \longrightarrow 00:13:00.440$  the early 20s would be the three shot.
- NOTE Confidence: 0.935269300833333
- 00:13:01.400 --> 00:13:04.193 OK, so let's suppose you have a
- NOTE Confidence: 0.935269300833333
- $00{:}13{:}04{.}193 \dashrightarrow 00{:}13{:}07{.}079$  child who has gotten vaccinated.
- NOTE Confidence: 0.935269300833333
- 00:13:07.080 --> 00:13:09.984 Do they still need Pap smears
- NOTE Confidence: 0.935269300833333
- 00:13:09.984 --> 00:13:12.706 and HPV tests and if so,
- NOTE Confidence: 0.935269300833333
- $00:13:12.706 \rightarrow 00:13:13.754$  when should those start?
- NOTE Confidence: 0.933524778571429
- $00:13:14.280 \longrightarrow 00:13:15.400$  That's a great question.
- NOTE Confidence: 0.933524778571429
- $00:13:15.400 \rightarrow 00:13:18.135$  For right now, we do not have any
- NOTE Confidence: 0.933524778571429
- 00:13:18.135 00:13:19.651 different guidelines for people
- NOTE Confidence: 0.933524778571429
- $00{:}13{:}19.651 \dashrightarrow 00{:}13{:}22.279$  who are vaccinated or unvaccinated.
- NOTE Confidence: 0.933524778571429
- $00{:}13{:}22{.}280 \dashrightarrow 00{:}13{:}24{.}806$  And the Pap smears usually start
- NOTE Confidence: 0.933524778571429
- $00{:}13{:}24.806 \dashrightarrow 00{:}13{:}26.800$  somewhere between 21 to 25.
- NOTE Confidence: 0.933524778571429
- $00:13:26.800 \longrightarrow 00:13:28.963$  And we defer the HPV testing to
- NOTE Confidence: 0.933524778571429

00:13:28.963 --> 00:13:30.944 around 30 just because we know

NOTE Confidence: 0.933524778571429

00:13:30.944 --> 00:13:32.918 this virus is so prevalent in

NOTE Confidence: 0.933524778571429

 $00:13:32.918 \longrightarrow 00:13:35.252$  the community and it takes many,

NOTE Confidence: 0.933524778571429

 $00:13:35.252 \rightarrow 00:13:37.959$  many years for those cell changes to happen.

NOTE Confidence: 0.933524778571429

 $00:13:37.960 \longrightarrow 00:13:39.199$  So it can be a little complicated,

NOTE Confidence: 0.933524778571429

 $00{:}13{:}39{.}200 \dashrightarrow 00{:}13{:}41{.}387$  but we have tried to make it as

NOTE Confidence: 0.933524778571429

 $00:13:41.387 \longrightarrow 00:13:43.450$  clear as possible for the

NOTE Confidence: 0.933524778571429

 $00:13:43.450 \rightarrow 00:13:45.719$  family docs and gyns in the community.

NOTE Confidence: 0.933524778571429

 $00{:}13{:}45{.}720 \dashrightarrow 00{:}13{:}46{.}320$  Perfect.

NOTE Confidence: 0.9385589

 $00:13:46.600 \rightarrow 00:13:48.070$  Well, we need to take a short

NOTE Confidence: 0.9385589

 $00{:}13{:}48.070 \dashrightarrow 00{:}13{:}49.520$  break for a medical minute.

NOTE Confidence: 0.9385589

 $00:13:49.520 \longrightarrow 00:13:51.256$  Please stay tuned to learn more about

NOTE Confidence: 0.9385589

 $00:13:51.256 \rightarrow 00:13:53.073$  the care of patients with cervical

NOTE Confidence: 0.9385589

 $00{:}13{:}53{.}073 \dashrightarrow 00{:}13{:}55{.}107$  cancer in honor of Cervical Cancer

NOTE Confidence: 0.9385589

 $00{:}13{:}55{.}107 \dashrightarrow 00{:}13{:}56{.}518$  Awareness Month with my guest,

NOTE Confidence: 0.9385589

00:13:56.520 --> 00:13:57.600 Doctor Mitchell Clark.

- NOTE Confidence: 0.909323426
- 00:13:58.160 --> 00:14:00.240 Funding for Yale Cancer Answers
- NOTE Confidence: 0.909323426
- $00{:}14{:}00{.}240 \dashrightarrow 00{:}14{:}02{.}320$  comes from Smilow Cancer Hospital,
- NOTE Confidence: 0.909323426
- $00:14:02.320 \rightarrow 00:14:04.780$  where the lung cancer Screening program
- NOTE Confidence: 0.909323426
- $00:14:04.780 \rightarrow 00:14:07.238$  provides screening to those at risk
- NOTE Confidence: 0.909323426
- 00:14:07.238 --> 00:14:09.118 for lung cancer and individualized,
- NOTE Confidence: 0.909323426
- $00:14:09.120 \rightarrow 00:14:11.880$  state-of-the-art evaluation of lung nodules.
- NOTE Confidence: 0.909323426
- 00:14:11.880 --> 00:14:16.760 To learn more visit smilocancerhospital.org.
- NOTE Confidence: 0.909323426
- $00{:}14{:}16.760 \dashrightarrow 00{:}14{:}18.548$  Breast cancer is one of the
- NOTE Confidence: 0.909323426
- 00:14:18.548 --> 00:14:20.160 most common cancers in women.
- NOTE Confidence: 0.909323426
- 00:14:20.160 --> 00:14:21.471 In Connecticut alone,
- NOTE Confidence: 0.909323426
- 00:14:21.471 --> 00:14:23.656 approximately 3500 women will be
- NOTE Confidence: 0.909323426
- $00:14:23.656 \rightarrow 00:14:26.118$  diagnosed with breast cancer this year.
- NOTE Confidence: 0.909323426
- $00:14:26.120 \longrightarrow 00:14:27.695$  But there is hope thanks
- NOTE Confidence: 0.909323426
- 00:14:27.695 --> 00:14:28.640 to earlier detection,
- NOTE Confidence: 0.909323426
- $00:14:28.640 \longrightarrow 00:14:29.759$  non invasive treatments,
- NOTE Confidence: 0.909323426

- $00{:}14{:}29.759 \dashrightarrow 00{:}14{:}31.997$  and the development of novel the rapies.
- NOTE Confidence: 0.909323426
- $00{:}14{:}32{.}000 \dashrightarrow 00{:}14{:}33{.}632$  To fight breast cancer,
- NOTE Confidence: 0.909323426
- $00{:}14{:}33{.}632 \dashrightarrow 00{:}14{:}36{.}080$  women should schedule a baseline mammogram
- NOTE Confidence: 0.909323426
- $00:14:36.143 \longrightarrow 00:14:38.807$  beginning at age 40 or earlier if they have
- NOTE Confidence: 0.909323426
- $00{:}14{:}38{.}807 \dashrightarrow 00{:}14{:}41{.}399$  risk factors associated with the disease.
- NOTE Confidence: 0.909323426
- $00:14:41.400 \longrightarrow 00:14:42.230$  With screening,
- NOTE Confidence: 0.909323426
- $00:14:42.230 \longrightarrow 00:14:43.060$  early detection,
- NOTE Confidence: 0.909323426
- $00:14:43.060 \rightarrow 00:14:44.720$  and a healthy lifestyle,
- NOTE Confidence: 0.909323426
- $00{:}14{:}44.720 \dashrightarrow 00{:}14{:}46.920$  breast cancer can be defeated.
- NOTE Confidence: 0.909323426
- $00:14:46.920 \rightarrow 00:14:48.724$  Clinical trials are currently
- NOTE Confidence: 0.909323426
- $00:14:48.724 \rightarrow 00:14:50.528$  underway at federally designated
- NOTE Confidence: 0.909323426
- $00{:}14{:}50{.}528 \dashrightarrow 00{:}14{:}51{.}920$  comprehensive cancer centers,
- NOTE Confidence: 0.909323426
- $00{:}14{:}51{.}920 \dashrightarrow 00{:}14{:}53{.}820$  such as Yale Cancer Center
- NOTE Confidence: 0.909323426
- 00:14:53.820 --> 00:14:55.720 and Smilow Cancer Hospital,
- NOTE Confidence: 0.909323426
- $00{:}14{:}55{.}720 \dashrightarrow 00{:}14{:}57{.}360$  to make innovative new
- NOTE Confidence: 0.909323426
- $00:14:57.360 \longrightarrow 00:14:59.000$  treatments available to patients.

- NOTE Confidence: 0.909323426
- 00:14:59.000 --> 00:15:01.510 Digital breast tomosynthesis or 3D
- NOTE Confidence: 0.909323426
- $00{:}15{:}01{.}510 \dashrightarrow 00{:}15{:}04{.}020$  mammography is also transforming breast
- NOTE Confidence: 0.909323426
- $00:15:04.088 \rightarrow 00:15:06.312$  cancer screening by significantly
- NOTE Confidence: 0.909323426
- $00:15:06.312 \rightarrow 00:15:07.980$  reducing unnecessary procedures
- NOTE Confidence: 0.909323426
- 00:15:07.980 --> 00:15:10.600 while picking up more cancers.
- NOTE Confidence: 0.909323426
- $00{:}15{:}10.600 \dashrightarrow 00{:}15{:}12.872$  More information is available
- NOTE Confidence: 0.909323426
- 00:15:12.872 --> 00:15:13.965 at yalecancercenter.org.
- NOTE Confidence: 0.909323426
- 00:15:13.965 --> 00:15:17.115 You're listening to Connecticut Public Radio.
- NOTE Confidence: 0.909323426
- 00:15:17.120 --> 00:15:17.560 Welcome
- NOTE Confidence: 0.957541114
- $00{:}15{:}17.560 \dashrightarrow 00{:}15{:}19.080$  back to Yale Cancer Answers.
- NOTE Confidence: 0.957541114
- 00:15:19.080 --> 00:15:20.600 This is Doctor Anees Chagpar,
- NOTE Confidence: 0.957541114
- $00{:}15{:}20.600 \dashrightarrow 00{:}15{:}22.679$  and I'm joined to night by my guest,
- NOTE Confidence: 0.957541114
- 00:15:22.680 --> 00:15:23.610 Doctor Mitchell Clark.
- NOTE Confidence: 0.957541114
- $00{:}15{:}23.610 \dashrightarrow 00{:}15{:}25.160$  We're discussing the care of
- NOTE Confidence: 0.957541114
- $00{:}15{:}25{.}160 \dashrightarrow 00{:}15{:}26{.}599$  patients with cervical cancer.
- NOTE Confidence: 0.957541114

 $00:15:26.600 \longrightarrow 00:15:27.984$  Now before the break,

NOTE Confidence: 0.957541114

 $00{:}15{:}27{.}984 \dashrightarrow 00{:}15{:}30{.}704$  we talked a lot about screening and

NOTE Confidence: 0.957541114

 $00{:}15{:}30{.}704 \dashrightarrow 00{:}15{:}34{.}148$  prevention with HPV tests and Pap smears

NOTE Confidence: 0.957541114

 $00{:}15{:}34{.}148 \dashrightarrow 00{:}15{:}37{.}358$  and the very important HPV vaccine.

NOTE Confidence: 0.957541114

 $00{:}15{:}37{.}360 \dashrightarrow 00{:}15{:}39{.}888$  But Mitchell, now I want to pivot a

NOTE Confidence: 0.957541114

 $00:15:39.888 \longrightarrow 00:15:42.600$  little bit into patients who

NOTE Confidence: 0.957541114

 $00:15:42.600 \longrightarrow 00:15:45.720$  are found to have cervical cancer.

 $00{:}15{:}46.686 \dashrightarrow 00{:}15{:}49.419$  Can you talk a little bit more about

NOTE Confidence: 0.957541114

 $00{:}15{:}49{.}419 \dashrightarrow 00{:}15{:}51{.}399$  how cervical cancer is diagnosed

NOTE Confidence: 0.957541114

 $00{:}15{:}51{.}399 \dashrightarrow 00{:}15{:}54{.}159$  and how is that diagnosis made,

NOTE Confidence: 0.957541114

 $00:15:54.160 \rightarrow 00:15:58.140$  whether on a Pap smear or symptomatically?

 $00:15:59.720 \longrightarrow 00:16:01.934$  In general, we tend to detect

NOTE Confidence: 0.813147749333333

 $00:16:01.934 \rightarrow 00:16:03.410$  these symptomatically because the

NOTE Confidence: 0.813147749333333

00:16:03.477 --> 00:16:05.553 Pap smear is really designed to

NOTE Confidence: 0.813147749333333

 $00{:}16{:}05{.}553 \dashrightarrow 00{:}16{:}07{.}285$  detect precance rous changes where

NOTE Confidence: 0.813147749333333

 $00{:}16{:}07{.}285 \dashrightarrow 00{:}16{:}09{.}450$  an intervention can be undertaken

NOTE Confidence: 0.813147749333333

 $00:16:09.514 \rightarrow 00:16:11.679$  to prevent development into cancer.

- NOTE Confidence: 0.813147749333333
- $00:16:11.680 \longrightarrow 00:16:13.576$  And so patients will often have
- NOTE Confidence: 0.813147749333333
- 00:16:13.576 --> 00:16:15.653 some type of bleeding symptom or
- NOTE Confidence: 0.813147749333333
- $00:16:15.653 \rightarrow 00:16:17.318$  some pelvic discomfort or pain.
- NOTE Confidence: 0.813147749333333
- $00:16:17.320 \rightarrow 00:16:19.490$  But in general, there will be some
- NOTE Confidence: 0.813147749333333
- $00{:}16{:}19{.}490 \dashrightarrow 00{:}16{:}21{.}154$  bleeding either between the periods
- NOTE Confidence: 0.813147749333333
- $00:16:21.154 \dashrightarrow 00:16:22.834$  or in the postmenopausal period,
- NOTE Confidence: 0.813147749333333
- $00:16:22.840 \longrightarrow 00:16:24.736$  which prompts an evaluation
- NOTE Confidence: 0.813147749333333
- $00:16:24.736 \rightarrow 00:16:26.158$  by the gynecologist.
- NOTE Confidence: 0.813147749333333
- $00:16:26.160 \rightarrow 00:16:27.636$  When patients go to the office,
- NOTE Confidence: 0.813147749333333
- $00:16:27.640 \rightarrow 00:16:29.632$  they can expect that their gynecologist
- NOTE Confidence: 0.813147749333333
- $00:16:29.632 \rightarrow 00:16:32.220$  will offer a pelvic exam with a speculum
- NOTE Confidence: 0.813147749333333
- $00{:}16{:}32.220 \dashrightarrow 00{:}16{:}34.431$  to visualize the cervix in order to
- NOTE Confidence: 0.813147749333333
- $00{:}16{:}34{.}431 \dashrightarrow 00{:}16{:}36{.}958$  see whether or not there's any obvious
- NOTE Confidence: 0.813147749333333
- $00{:}16{:}36{.}958 \dashrightarrow 00{:}16{:}38{.}790$  abnormality suggestive of a cancer.
- NOTE Confidence: 0.813147749333333
- $00:16:38.790 \longrightarrow 00:16:41.010$  Very often a biopsy will be
- NOTE Confidence: 0.813147749333333

00:16:41.010 --> 00:16:42.479 undertaken at that point,

NOTE Confidence: 0.813147749333333

 $00:16:42.480 \rightarrow 00:16:44.268$  which can usually be accomplished in

NOTE Confidence: 0.813147749333333

 $00:16:44.268 \rightarrow 00:16:46.462$  the office and that pathology and that NOTE Confidence: 0.813147749333333

 $00:16:46.462 \rightarrow 00:16:48.346$  result will help us better understand

NOTE Confidence: 0.813147749333333

 $00{:}16{:}48{.}346 \dashrightarrow 00{:}16{:}50{.}000$  if those bleeding symptoms were

NOTE Confidence: 0.813147749333333

 $00{:}16{:}50{.}000 \dashrightarrow 00{:}16{:}53{.}640$  related to a cervical cancer or not.

NOTE Confidence: 0.813147749333333

 $00:16:53.640 \longrightarrow 00:16:55.960$  And generally at that point,

NOTE Confidence: 0.813147749333333

 $00:16:55.960 \rightarrow 00:16:57.610$  whether based on the suspicion of

NOTE Confidence: 0.813147749333333

 $00:16:57.610 \rightarrow 00:16:59.332$  the exam or whether the gynecologist

NOTE Confidence: 0.813147749333333

 $00{:}16{:}59{.}332 \dashrightarrow 00{:}17{:}01{.}299$  would like to wait for the results

NOTE Confidence: 0.813147749333333

 $00:17:01.299 \longrightarrow 00:17:02.360$  of the pathology,

NOTE Confidence: 0.813147749333333

 $00{:}17{:}02.360 \dashrightarrow 00{:}17{:}04.592$  they'll then refer that patient on

NOTE Confidence: 0.813147749333333

 $00{:}17{:}04.592 \dashrightarrow 00{:}17{:}07.043$  to someone like myself or our team

NOTE Confidence: 0.813147749333333

 $00:17:07.043 \longrightarrow 00:17:09.724$  within the GYN group in order

NOTE Confidence: 0.813147749333333

 $00:17:09.724 \rightarrow 00:17:11.770$  to better understand the stage and

NOTE Confidence: 0.813147749333333

 $00:17:11.770 \dashrightarrow 00:17:13.320$  treatment options for that patient.

- NOTE Confidence: 0.871593631666667
- 00:17:13.600 --> 00:17:15.676 How are patients staged? I mean,
- NOTE Confidence: 0.871593631666667
- $00:17:15.680 \longrightarrow 00:17:17.997$  is this a series of imaging tests?
- NOTE Confidence: 0.831040628125
- $00:17:18.240 \longrightarrow 00:17:20.364$  Exactly, we stage these
- NOTE Confidence: 0.831040628125
- $00:17:20.364 \rightarrow 00:17:22.269$  patients clinically meaning we don't
- NOTE Confidence: 0.831040628125
- $00:17:22.269 \rightarrow 00:17:24.399$  necessarily need to perform an operation.
- NOTE Confidence: 0.831040628125
- $00{:}17{:}24.400 \dashrightarrow 00{:}17{:}27.235$  And in order to understand this stage,
- NOTE Confidence: 0.831040628125
- $00:17:27.240 \longrightarrow 00:17:29.275$  historically
- NOTE Confidence: 0.831040628125
- $00{:}17{:}29{.}275 \dashrightarrow 00{:}17{:}31{.}948$  we would do exam under an aesthesia.
- 00:17:34.200 --> 00:17:37.371 But now we have really high quality
- NOTE Confidence: 0.831040628125
- $00{:}17{:}37{.}371 \dashrightarrow 00{:}17{:}40{.}004$  imaging options and we partner with
- NOTE Confidence: 0.831040628125
- $00:17:40.004 \rightarrow 00:17:42.159$  our radiology colleagues to generally
- NOTE Confidence: 0.831040628125
- $00{:}17{:}42.159 \dashrightarrow 00{:}17{:}44.118$  perform an MRI and a PET scan.
- NOTE Confidence: 0.831040628125
- $00:17:44.120 \rightarrow 00:17:46.619$  The MRI is important to better understand
- NOTE Confidence: 0.831040628125
- $00{:}17{:}46.619 \dashrightarrow 00{:}17{:}49.080$  the size and local features.
- NOTE Confidence: 0.831040628125
- 00:17:49.080 --> 00:17:51.180 Local meaning within the
- NOTE Confidence: 0.831040628125
- $00{:}17{:}51{.}180 \dashrightarrow 00{:}17{:}53{.}789$  cervix of the tumor and then the PET

 $00:17:53.789 \rightarrow 00:17:56.370$  scan helps us ensure or detect any

NOTE Confidence: 0.831040628125

00:17:56.370 --> 00:17:58.788 signs of metastatic disease outside of

NOTE Confidence: 0.831040628125

 $00:17:58.788 \rightarrow 00:18:00.924$  the primary tumor within the cervix.

NOTE Confidence: 0.831040628125

 $00:18:00.924 \rightarrow 00:18:03.800$  Once we have all of that information,

NOTE Confidence: 0.831040628125

 $00{:}18{:}03{.}800 \dashrightarrow 00{:}18{:}05{.}852$  we sit down as a multidisciplinary

NOTE Confidence: 0.831040628125

 $00{:}18{:}05{.}852 \dashrightarrow 00{:}18{:}07{.}647$  group and review those results

NOTE Confidence: 0.831040628125

 $00{:}18{:}07{.}647 \dashrightarrow 00{:}18{:}09{.}807$  and then we can better understand

NOTE Confidence: 0.831040628125

 $00{:}18{:}09{.}807 \dashrightarrow 00{:}18{:}12{.}035$  which options that would be best

NOTE Confidence: 0.831040628125

 $00:18:12.035 \longrightarrow 00:18:13.475$  for each individual patient.

NOTE Confidence: 0.823290295714286

 $00:18:14.080 \longrightarrow 00:18:17.839$  Take us through the options,

NOTE Confidence: 0.823290295714286

 $00{:}18{:}17{.}840 \dashrightarrow 00{:}18{:}20{.}432$  what on the table when it comes

NOTE Confidence: 0.823290295714286

 $00{:}18{:}20{.}432 \dashrightarrow 00{:}18{:}22{.}359$  to treatment of cervical cancer.

NOTE Confidence: 0.962148388333333

 $00{:}18{:}22{.}440 \dashrightarrow 00{:}18{:}23{.}718$  A lot of this depends on,

NOTE Confidence: 0.962148388333333

00:18:23.720 --> 00:18:25.200 you know, each individual patient,

NOTE Confidence: 0.962148388333333

 $00{:}18{:}25{.}200 \dashrightarrow 00{:}18{:}27{.}797$  their age and what their goals are.

00:18:27.800 --> 00:18:28.896 And so, you know,

NOTE Confidence: 0.962148388333333

00:18:28.896 --> 00:18:30.266 we do unfortunately see some

NOTE Confidence: 0.962148388333333

 $00:18:30.266 \rightarrow 00:18:31.706$  of these cancers occurring

NOTE Confidence: 0.962148388333333

 $00:18:31.706 \rightarrow 00:18:33.556$  in women of reproductive age,

NOTE Confidence: 0.962148388333333

 $00{:}18{:}33{.}560 \dashrightarrow 00{:}18{:}35{.}708$  perhaps those who have either not

NOTE Confidence: 0.962148388333333

00:18:35.708 --> 00:18:38.120 had an opportunity to carry a child,

NOTE Confidence: 0.962148388333333

 $00:18:38.120 \longrightarrow 00:18:39.715$  if that's within their family

NOTE Confidence: 0.962148388333333

00:18:39.715 --> 00:18:41.638 plan, or whether they're hoping to

NOTE Confidence: 0.962148388333333

 $00:18:41.638 \longrightarrow 00:18:43.276$  have more children down the road.

NOTE Confidence: 0.962148388333333

 $00{:}18{:}43{.}280 \dashrightarrow 00{:}18{:}45{.}236$  But are faced with this diagnosis.

NOTE Confidence: 0.962148388333333

00:18:45.240 --> 00:18:47.466 So the first thing they understand is

NOTE Confidence: 0.962148388333333

 $00:18:47.466 \longrightarrow 00:18:49.639$  does this patient have an interest

NOTE Confidence: 0.962148388333333

 $00:18:49.639 \rightarrow 00:18:51.559$  in preserving her fertility options?

NOTE Confidence: 0.962148388333333

 $00{:}18{:}51{.}560 \dashrightarrow 00{:}18{:}53{.}989$  We do know that for certain cancer

NOTE Confidence: 0.962148388333333

 $00:18:53.989 \longrightarrow 00:18:56.208$  stages or sizes of the tumor

NOTE Confidence: 0.962148388333333

 $00:18:56.208 \rightarrow 00:18:57.676$  and in certain patients,

- NOTE Confidence: 0.962148388333333
- $00:18:57.680 \longrightarrow 00:18:59.630$  a fertility sparing approach is very
- NOTE Confidence: 0.962148388333333
- $00{:}18{:}59{.}630 \dashrightarrow 00{:}19{:}01{.}654$  reasonable and seems to have the
- NOTE Confidence: 0.962148388333333
- $00{:}19{:}01{.}654 \dashrightarrow 00{:}19{:}03{.}319$  same long term on cologic outcomes,
- NOTE Confidence: 0.962148388333333
- $00:19:03.320 \longrightarrow 00:19:04.304$  which is important.
- NOTE Confidence: 0.962148388333333
- $00:19:04.304 \rightarrow 00:19:05.944$  Obviously that pregnancy would be
- NOTE Confidence: 0.962148388333333
- $00{:}19{:}05{.}944 \dashrightarrow 00{:}19{:}07{.}763$  considered high risk down the road and
- NOTE Confidence: 0.962148388333333
- $00:19:07.763 \rightarrow 00:19:09.880$  there may be some issues in getting pregnant.
- NOTE Confidence: 0.962148388333333
- $00:19:09.880 \rightarrow 00:19:11.623$  We've got many years worth of data
- NOTE Confidence: 0.962148388333333
- $00{:}19{:}11.623 \dashrightarrow 00{:}19{:}14.103$  now to so show that in certain women
- NOTE Confidence: 0.962148388333333
- $00:19:14.103 \rightarrow 00:19:16.176$  those options are reasonable and they
- NOTE Confidence: 0.962148388333333
- $00:19:16.176 \longrightarrow 00:19:18.556$  do not have to compromise their
- NOTE Confidence: 0.962148388333333
- $00:19:18.556 \rightarrow 00:19:20.092$  oncology outcomes just for fertility.
- NOTE Confidence: 0.962148388333333
- $00{:}19{:}20.092 \dashrightarrow 00{:}19{:}22.080$  So it's been a very exciting advance
- NOTE Confidence: 0.962148388333333
- $00:19:22.131 \longrightarrow 00:19:23.937$  in the field for those women who
- NOTE Confidence: 0.962148388333333
- $00{:}19{:}23{.}937 \dashrightarrow 00{:}19{:}25{.}366$  are not interested on preserving
- NOTE Confidence: 0.962148388333333

 $00:19:25.366 \longrightarrow 00:19:27.160$  their fertility or may not have

NOTE Confidence: 0.962148388333333

 $00{:}19{:}27.160 \dashrightarrow 00{:}19{:}28.970$  that option based on the results of

NOTE Confidence: 0.962148388333333

 $00:19:28.970 \longrightarrow 00:19:30.520$  those tests that we talked about,

NOTE Confidence: 0.962148388333333

 $00:19:30.520 \rightarrow 00:19:31.600$  we then have to decide,

NOTE Confidence: 0.962148388333333

 $00{:}19{:}31{.}600 \dashrightarrow 00{:}19{:}33{.}581$  is this a woman who would be

NOTE Confidence: 0.962148388333333

 $00:19:33.581 \rightarrow 00:19:35.000$  best served with surgery,

NOTE Confidence: 0.962148388333333

00:19:35.000 --> 00:19:36.251 meaning radical hysterectomy

NOTE Confidence: 0.962148388333333

 $00:19:36.251 \rightarrow 00:19:37.919$  to remove the uterus,

NOTE Confidence: 0.962148388333333

 $00:19:37.920 \longrightarrow 00:19:39.985$  cervix and tumor or do we think

NOTE Confidence: 0.962148388333333

 $00:19:39.985 \longrightarrow 00:19:42.153$  that this cancer will be best

NOTE Confidence: 0.962148388333333

 $00{:}19{:}42{.}153 \dashrightarrow 00{:}19{:}44{.}183$  controlled with a combination of

NOTE Confidence: 0.962148388333333

 $00:19:44.183 \rightarrow 00:19:45.920$  chemotherapy and radiation?

NOTE Confidence: 0.962148388333333

 $00:19:45.920 \longrightarrow 00:19:47.628$  And a lot of that depends on

NOTE Confidence: 0.962148388333333

 $00:19:47.628 \rightarrow 00:19:49.040$  the size of the tumor,

NOTE Confidence: 0.962148388333333

 $00{:}19{:}49.040 \dashrightarrow 00{:}19{:}50.906$  some of the information we get

NOTE Confidence: 0.962148388333333

 $00:19:50.906 \rightarrow 00:19:52.659$  from the pathology in our exam,

- NOTE Confidence: 0.962148388333333
- $00{:}19{:}52.659 \dashrightarrow 00{:}19{:}53.478$  in the office.
- NOTE Confidence: 0.95033454125
- $00{:}19{:}53{.}840 \dashrightarrow 00{:}19{:}57{.}375$  And so for women who do want
- NOTE Confidence: 0.95033454125
- $00:19:57.375 \longrightarrow 00:19:59.500$  to preserve their fertility,
- NOTE Confidence: 0.95033454125
- $00:19:59.500 \rightarrow 00:20:01.660$  clearly the radical hysterectomy
- NOTE Confidence: 0.95033454125
- $00{:}20{:}01.660 \dashrightarrow 00{:}20{:}04.800$  is not a viable option.
- NOTE Confidence: 0.95033454125
- $00{:}20{:}04.800 \dashrightarrow 00{:}20{:}06.760$  So what does their treatment
- NOTE Confidence: 0.95033454125
- 00:20:06.760 --> 00:20:08.720 algorithm kind of look like?
- NOTE Confidence: 0.896241514
- 00:20:09.240 --> 00:20:11.788 Right, so we do what is called
- NOTE Confidence: 0.896241514
- 00:20:11.788 --> 00:20:12.880 a radical trachelectomy,
- NOTE Confidence: 0.896241514
- $00:20:12.880 \longrightarrow 00:20:15.408$  which is a procedure to remove the cervix
- NOTE Confidence: 0.896241514
- $00{:}20{:}15{.}408 \dashrightarrow 00{:}20{:}18{.}037$  and the tissue surrounding the cervix.
- NOTE Confidence: 0.896241514
- $00{:}20{:}18.040 \dashrightarrow 00{:}20{:}19.546$  We also sample some lymph nodes
- NOTE Confidence: 0.896241514
- $00:20:19.546 \longrightarrow 00:20:21.388$  at the same time to make sure
- NOTE Confidence: 0.896241514
- $00{:}20{:}21{.}388 \dashrightarrow 00{:}20{:}22{.}954$  that cancer has not spread.
- NOTE Confidence: 0.896241514
- $00:20:22.960 \longrightarrow 00:20:24.200$  What we do then,
- NOTE Confidence: 0.896241514

 $00{:}20{:}24{.}200 \dashrightarrow 00{:}20{:}26{.}441$  after the cervix has been removed is

NOTE Confidence: 0.896241514

 $00{:}20{:}26{.}441 \dashrightarrow 00{:}20{:}28{.}611$  reconstruct the uterus to the top of

NOTE Confidence: 0.896241514

 $00{:}20{:}28{.}611$  -->  $00{:}20{:}31{.}220$  the vagina and place a device there NOTE Confidence: 0.896241514

 $00:20:31.220 \rightarrow 00:20:33.676$  called a circlage which helps prevent NOTE Confidence: 0.896241514

 $00:20:33.676 \rightarrow 00:20:36.094$  any dilation of the lower portion

NOTE Confidence: 0.896241514

 $00:20:36.094 \rightarrow 00:20:38.919$  of the uterus during the pregnancy.

NOTE Confidence: 0.896241514

 $00{:}20{:}38{.}920 \dashrightarrow 00{:}20{:}40{.}663$  It appears that this is a safe

NOTE Confidence: 0.896241514

 $00:20:40.663 \rightarrow 00:20:42.315$  option for women who want

NOTE Confidence: 0.896241514

 $00{:}20{:}42{.}315 \dashrightarrow 00{:}20{:}43{.}439$  to choose this approach,

NOTE Confidence: 0.896241514

 $00{:}20{:}43{.}440 \dashrightarrow 00{:}20{:}45{.}704$  but as you can imagine there will be

NOTE Confidence: 0.896241514

 $00{:}20{:}45.704 \dashrightarrow 00{:}20{:}47.358$  some challenges with the fertility.

NOTE Confidence: 0.896241514

00:20:47.360 --> 00:20:47.916 I'm sorry,

NOTE Confidence: 0.896241514

 $00{:}20{:}47{.}916 \dashrightarrow 00{:}20{:}49{.}862$  with the pregnancy and will need to

NOTE Confidence: 0.896241514

 $00:20:49.862 \dashrightarrow 00:20:52.357$  be closely monitored by a high risk team.

NOTE Confidence: 0.896241514

 $00{:}20{:}52{.}360 \dashrightarrow 00{:}20{:}54{.}908$  But it appears that this surgery can

NOTE Confidence: 0.896241514

 $00:20:54.908 \rightarrow 00:20:57.040$  be performed safely from a vaginal,

- NOTE Confidence: 0.896241514
- $00{:}20{:}57{.}040 \dashrightarrow 00{:}20{:}59{.}865$  laparoscopic or even a traditional
- NOTE Confidence: 0.896241514
- 00:20:59.865 --> 00:21:01.560 open laparotomy approach.
- NOTE Confidence: 0.896241514
- $00{:}21{:}01{.}560 \dashrightarrow 00{:}21{:}02{.}545$  And patients tend to
- NOTE Confidence: 0.896241514
- $00:21:02.545 \longrightarrow 00:21:03.800$  do well in the long term.
- NOTE Confidence: 0.9490801075
- $00{:}21{:}04{.}920 \dashrightarrow 00{:}21{:}07{.}538$  Is this a longer or more complicated
- NOTE Confidence: 0.9490801075
- $00:21:07.538 \rightarrow 00:21:10.159$  procedure than the radical hysterectomy?
- NOTE Confidence: 0.872467593333333
- $00:21:10.600 \longrightarrow 00:21:12.833$  Yeah, it can be a little bit
- NOTE Confidence: 0.872467593333333
- 00:21:12.833 --> 00:21:14.839 longer and more complex.
- NOTE Confidence: 0.872467593333333
- $00:21:14.840 \rightarrow 00:21:17.102$  And that's why we certainly encourage
- NOTE Confidence: 0.872467593333333
- $00{:}21{:}17.102 \dashrightarrow 00{:}21{:}20.172$  patients to see a group or a team
- NOTE Confidence: 0.872467593333333
- $00:21:20.172 \rightarrow 00:21:22.037$  with expertise in this procedure.
- NOTE Confidence: 0.872467593333333
- 00:21:22.040 --> 00:21:25.480 But for those who do undergo the surgery,
- NOTE Confidence: 0.872467593333333
- $00{:}21{:}25{.}480 \dashrightarrow 00{:}21{:}26{.}638$  they appear to have
- NOTE Confidence: 0.872467593333333
- $00{:}21{:}26.640 \dashrightarrow 00{:}21{:}28.795$  comparable on cologic outcomes and have
- NOTE Confidence: 0.872467593333333
- $00:21:28.795 \rightarrow 00:21:31.959$  gone on to carry children down the road,
- NOTE Confidence: 0.872467593333333

 $00:21:31.960 \rightarrow 00:21:33.290$  which is always exciting to see those

NOTE Confidence: 0.872467593333333

 $00:21:33.290 \rightarrow 00:21:34.451$  pictures in the office when patients

NOTE Confidence: 0.872467593333333

 $00:21:34.451 \rightarrow 00:21:35.880$  come back to see us and follow up.

NOTE Confidence: 0.817037430625

00:21:36.280 --> 00:21:40.360 Yeah, I'm sure for the patients

NOTE Confidence: 0.817037430625

 $00:21:40.360 \rightarrow 00:21:43.856$  for whom fertility is not a major concern,

NOTE Confidence: 0.817037430625

 $00{:}21{:}43.856$  -->  $00{:}21{:}46.320$  you mentioned that there were two options. NOTE Confidence: 0.817037430625

 $00{:}21{:}46{.}320 \dashrightarrow 00{:}21{:}48{.}679$  One was the radical hysterectomy and the

NOTE Confidence: 0.817037430625

 $00:21:48.679 \rightarrow 00:21:51.085$  other was chemotherapy and radiation.

NOTE Confidence: 0.817037430625

 $00{:}21{:}51{.}085 \dashrightarrow 00{:}21{:}53{.}960$  Are those two equivalent on cologically?

NOTE Confidence: 0.945672965909091

 $00{:}21{:}54{.}280 \dashrightarrow 00{:}21{:}56{.}168$  That's a great point and I bring that

NOTE Confidence: 0.945672965909091

00:21:56.168 --> 00:21:58.171 up with my patients when I talk to

NOTE Confidence: 0.945672965909091

 $00:21:58.171 \rightarrow 00:22:00.159$  them because they do appear equivalent.

NOTE Confidence: 0.945672965909091

 $00:22:00.160 \longrightarrow 00:22:02.456$  And what we're trying to do is

NOTE Confidence: 0.945672965909091

 $00:22:02.456 \rightarrow 00:22:04.536$  identify patients who would not

NOTE Confidence: 0.945672965909091

 $00:22:04.536 \rightarrow 00:22:06.596$  necessarily require adjuvant treatment.

NOTE Confidence: 0.945672965909091

 $00:22:06.600 \rightarrow 00:22:09.200$  Meaning if someone is going to have surgery,

NOTE Confidence: 0.945672965909091

 $00{:}22{:}09{.}200 \dashrightarrow 00{:}22{:}11{.}424$  we want to ensure that then after the

NOTE Confidence: 0.945672965909091

00:22:11.424 --> 00:22:13.233 surgery there's no indication to give

NOTE Confidence: 0.945672965909091

 $00{:}22{:}13{.}233 \dashrightarrow 00{:}22{:}15{.}027$  radiation after because we know the

NOTE Confidence: 0.945672965909091

 $00{:}22{:}15{.}083 \dashrightarrow 00{:}22{:}17{.}064$  toxicity and side effects are worse if

NOTE Confidence: 0.945672965909091

 $00{:}22{:}17.064 \dashrightarrow 00{:}22{:}19.235$  patients need a surgery and then we

NOTE Confidence: 0.945672965909091

 $00{:}22{:}19{.}235 \dashrightarrow 00{:}22{:}21{.}519$  know they need radiation in addition to that.

NOTE Confidence: 0.945672965909091

 $00:22:21.520 \longrightarrow 00:22:23.403$  So we try to pre select patients

NOTE Confidence: 0.945672965909091

 $00:22:23.403 \longrightarrow 00:22:25.239$  to either need one or the other.

NOTE Confidence: 0.945672965909091

 $00:22:25.240 \longrightarrow 00:22:26.650$  For some reason,

NOTE Confidence: 0.945672965909091

 $00:22:26.650 \longrightarrow 00:22:29.000$  patients often perceive radiation or

NOTE Confidence: 0.945672965909091

 $00{:}22{:}29{.}000 \dashrightarrow 00{:}22{:}31{.}485$  chemotherapy as maybe not curative or

NOTE Confidence: 0.945672965909091

 $00{:}22{:}31.485 \dashrightarrow 00{:}22{:}34.240$  I'm just trying to palliate this cancer.

NOTE Confidence: 0.945672965909091

 $00:22:34.240 \longrightarrow 00:22:35.990$  That is really not the case in

NOTE Confidence: 0.945672965909091

 $00{:}22{:}35{.}990 \dashrightarrow 00{:}22{:}37{.}200$  cancer of the cervix.

NOTE Confidence: 0.945672965909091

 $00{:}22{:}37{.}200 \dashrightarrow 00{:}22{:}39{.}925$  And we treat with a curative intent to

NOTE Confidence: 0.945672965909091

 $00:22:39.925 \rightarrow 00:22:42.760$  make these cancers go away long term.

NOTE Confidence: 0.945672965909091

 $00{:}22{:}42.760 \dashrightarrow 00{:}22{:}44.867$  So I try to help patients understand

NOTE Confidence: 0.945672965909091

 $00{:}22{:}44.867 \dashrightarrow 00{:}22{:}47.361$  that we want to select an individualized

NOTE Confidence: 0.945672965909091

 $00:22:47.361 \longrightarrow 00:22:49.647$  treatment plan that is best suited

NOTE Confidence: 0.945672965909091

 $00:22:49.714 \longrightarrow 00:22:51.558$  for their individual scenario.

NOTE Confidence: 0.945672965909091

 $00:22:51.560 \longrightarrow 00:22:53.780$  And if that plan is radiation

NOTE Confidence: 0.945672965909091

 $00:22:53.780 \longrightarrow 00:22:54.520$  to chemotherapy,

NOTE Confidence: 0.945672965909091

 $00:22:54.520 \longrightarrow 00:22:56.495$  they should not feel that

NOTE Confidence: 0.945672965909091

 $00{:}22{:}56.495 \dashrightarrow 00{:}22{:}57.680$  they're somehow being,

NOTE Confidence: 0.945672965909091

00:22:57.680 --> 00:22:58.178 you know,

NOTE Confidence: 0.945672965909091

 $00{:}22{:}58{.}178 \dashrightarrow 00{:}22{:}59{.}921$  put into a category that will not

NOTE Confidence: 0.945672965909091

 $00:22:59.921 \rightarrow 00:23:02.052$  have the same outcomes of a patient

NOTE Confidence: 0.945672965909091

 $00{:}23{:}02{.}052 \dashrightarrow 00{:}23{:}03{.}359$  undergoing a surgical approach.

NOTE Confidence: 0.938042660909091

00:23:04.720 --> 00:23:07.606 So if they're equivalent, why would

NOTE Confidence: 0.938042660909091

00:23:07.606 --> 00:23:10.640 anybody do the radical surgery?

NOTE Confidence: 0.81822455

 $00:23:10.640 \rightarrow 00:23:13.300$  For the smaller tumors,

 $00:23:17.073 \rightarrow 00:23:19.088$  they have one operation that tends

NOTE Confidence: 0.81822455

 $00:23:19.088 \longrightarrow 00:23:21.200$  to be a little bit less in terms

NOTE Confidence: 0.81822455

 $00:23:21.270 \longrightarrow 00:23:23.634$  of toxicity to the other pelvic

NOTE Confidence: 0.81822455

00:23:23.634 --> 00:23:25.210 structures because radiation can

NOTE Confidence: 0.81822455

 $00{:}23{:}25{.}274 \dashrightarrow 00{:}23{:}27{.}158$  have some side effects on the bowel.

NOTE Confidence: 0.81822455

00:23:27.160 --> 00:23:29.428 The bladder patients may experience some

NOTE Confidence: 0.81822455

 $00{:}23{:}29{.}428 \dashrightarrow 00{:}23{:}32{.}353$  long term issues in terms of diarrhea

NOTE Confidence: 0.81822455

 $00:23:32.353 \longrightarrow 00:23:34.598$  or constipation or bladder irritation.

NOTE Confidence: 0.81822455

00:23:34.600 --> 00:23:35.792 In terms of toxicity,

NOTE Confidence: 0.81822455

 $00:23:35.792 \longrightarrow 00:23:37.580$  there certainly can be more toxicity

NOTE Confidence: 0.81822455

 $00{:}23{:}37{.}638 \dashrightarrow 00{:}23{:}39{.}078$  with the radiation approach,

NOTE Confidence: 0.81822455

 $00:23:39.080 \longrightarrow 00:23:41.078$  but when looking at the long

NOTE Confidence: 0.81822455

00:23:41.078 --> 00:23:42.077 term oncologic outcomes,

NOTE Confidence: 0.81822455

 $00:23:42.080 \longrightarrow 00:23:43.840$  they appear equivalent for

NOTE Confidence: 0.81822455

 $00{:}23{:}43.840 \dashrightarrow 00{:}23{:}46.040$  certain stages of this cancer.

NOTE Confidence: 0.81822455

00:23:46.040 --> 00:23:48.210 Obviously if we find on the PET

- NOTE Confidence: 0.81822455
- $00:23:48.210 \longrightarrow 00:23:50.343$  scan that the cancer is spread

NOTE Confidence: 0.81822455

 $00:23:50.343 \rightarrow 00:23:52.233$  outside of the pelvic area,

NOTE Confidence: 0.81822455

 $00:23:52.240 \rightarrow 00:23:54.790$  then neither surgery or radiation

NOTE Confidence: 0.81822455

 $00:23:54.790 \longrightarrow 00:23:56.320$  are necessarily indicated.

NOTE Confidence: 0.81822455

 $00{:}23{:}56{.}320 \dashrightarrow 00{:}23{:}58{.}738$  And we often choose a combination

NOTE Confidence: 0.81822455

 $00{:}23{:}58{.}738 \dashrightarrow 00{:}24{:}01{.}149$  of chemotherapy and some of these

NOTE Confidence: 0.81822455

00:24:01.149 --> 00:24:02.560 newer agents like immunotherapy

NOTE Confidence: 0.81822455

 $00:24:02.560 \rightarrow 00:24:04.600$  which many patients are asking about.

NOTE Confidence: 0.81822455

 $00{:}24{:}04{.}600 \dashrightarrow 00{:}24{:}06{.}994$  And it's been very sort of present

NOTE Confidence: 0.81822455

 $00:24:06.994 \longrightarrow 00:24:09.577$  in the media and we're very

NOTE Confidence: 0.81822455

 $00:24:09.577 \longrightarrow 00:24:11.760$  excited to see that a lot of these

NOTE Confidence: 0.81822455

 $00{:}24{:}11.760 \dashrightarrow 00{:}24{:}13.295$  immuno therapies and new drug

NOTE Confidence: 0.81822455

00:24:13.295 --> 00:24:15.200 developments are showing promise in cancer of

NOTE Confidence: 0.81822455

 $00{:}24{:}15{.}200 \dashrightarrow 00{:}24{:}16{.}080$  the cervix as well.

NOTE Confidence: 0.819863424615385

 $00:24:16.920 \longrightarrow 00:24:18.780$  So I want to get to the drugs

NOTE Confidence: 0.819863424615385

 $00:24:18.840 \longrightarrow 00:24:20.912$  in a minute, but just to finish

NOTE Confidence: 0.819863424615385

 $00{:}24{:}20{.}912 \dashrightarrow 00{:}24{:}22{.}702$  up the conversation with regards

NOTE Confidence: 0.819863424615385

 $00:24:22.702 \longrightarrow 00:24:25.256$  to fertility preservation and the

NOTE Confidence: 0.819863424615385

 $00:24:25.256 \rightarrow 00:24:27.520$  different options for women who do

NOTE Confidence: 0.819863424615385

 $00:24:27.520 \longrightarrow 00:24:29.851$  want to preserve their fertility,

NOTE Confidence: 0.819863424615385

 $00{:}24{:}29{.}851 \dashrightarrow 00{:}24{:}33{.}313$  is chemotherapy and radiation the rapy an

NOTE Confidence: 0.819863424615385

00:24:33.313 - 00:24:36.564 option if they choose to, for example,

NOTE Confidence: 0.819863424615385

 $00:24:36.564 \rightarrow 00:24:40.210$  harvest their eggs or ovarian

NOTE Confidence: 0.819863424615385

 $00{:}24{:}40{.}210 \dashrightarrow 00{:}24{:}42{.}400$  tissue prior to the chemotherapy and

NOTE Confidence: 0.819863424615385

 $00:24:42.400 \rightarrow 00:24:44.649$  radiation and that way they could

NOTE Confidence: 0.819863424615385

 $00:24:44.649 \rightarrow 00:24:46.474$  avoid the more complicated surgery?

NOTE Confidence: 0.923030389565217

 $00{:}24{:}46{.}920 \dashrightarrow 00{:}24{:}49{.}116$  Absolutely. The retrieval of the eggs

NOTE Confidence: 0.923030389565217

 $00:24:49.116 \rightarrow 00:24:51.405$  is certainly possible and we have

NOTE Confidence: 0.923030389565217

 $00{:}24{:}51{.}405 \dashrightarrow 00{:}24{:}53{.}320$  a wonderful group of reproductive

NOTE Confidence: 0.923030389565217

 $00:24:53.320 \longrightarrow 00:24:54.861$  endocrinologists that we work

NOTE Confidence: 0.923030389565217

 $00:24:54.861 \longrightarrow 00:24:57.040$  closely with who get patients in

- NOTE Confidence: 0.923030389565217
- $00:24:57.040 \longrightarrow 00:24:58.940$  quickly to stimulate an ovarian
- NOTE Confidence: 0.923030389565217
- $00:24:58.940 \longrightarrow 00:25:01.000$  cycle and retrieve those eggs.
- NOTE Confidence: 0.923030389565217
- 00:25:01.000 --> 00:25:03.002 Now, if patients go on to receive
- NOTE Confidence: 0.923030389565217
- $00{:}25{:}03.002 \dashrightarrow 00{:}25{:}04.336$  the radiation and chemotherapy
- NOTE Confidence: 0.923030389565217
- $00:25:04.336 \longrightarrow 00:25:05.996$  after the egg retrieval,
- NOTE Confidence: 0.923030389565217
- $00:25:06.000 \rightarrow 00:25:07.388$  the uterus will unfortunately
- NOTE Confidence: 0.923030389565217
- $00:25:07.388 \longrightarrow 00:25:09.884$  not be able to function in the
- NOTE Confidence: 0.923030389565217
- 00:25:09.884 --> 00:25:11.639 capacity to carry a pregnancy.
- NOTE Confidence: 0.923030389565217
- $00{:}25{:}11.640 \dashrightarrow 00{:}25{:}13.776$  But patients would have the option
- NOTE Confidence: 0.923030389565217
- $00:25:13.776 \rightarrow 00:25:16.266$  to use those harvested eggs with a
- NOTE Confidence: 0.923030389565217
- $00:25:16.266 \rightarrow 00:25:18.131$  gestational carrier or surrogate to
- NOTE Confidence: 0.923030389565217
- $00:25:18.131 \rightarrow 00:25:21.120$  carry a child that is genetically theirs.
- NOTE Confidence: 0.923030389565217
- $00:25:21.120 \longrightarrow 00:25:21.884$  But unfortunately,
- NOTE Confidence: 0.923030389565217
- $00{:}25{:}21.884 \dashrightarrow 00{:}25{:}24.558$  the radiation does do damage to the
- NOTE Confidence: 0.923030389565217
- $00{:}25{:}24.558 \dashrightarrow 00{:}25{:}26.699$  uterine structures in terms of its
- NOTE Confidence: 0.923030389565217

 $00{:}25{:}26.699 \dashrightarrow 00{:}25{:}29.318$  ability to carry a pregnancy down the road.

NOTE Confidence: 0.885923349230769

 $00{:}25{:}31{.}280 \dashrightarrow 00{:}25{:}35{.}051$  So moving on to the patients who have

NOTE Confidence: 0.885923349230769

00:25:35.051 --> 00:25:37.360 metastatic cancer for whom chemotherapy

NOTE Confidence: 0.885923349230769

 $00:25:37.360 \rightarrow 00:25:40.960$  or immunotherapy are indicated,

NOTE Confidence: 0.885923349230769

 $00{:}25{:}40.960 \dashrightarrow 00{:}25{:}43.336$  can you first of all tell us a little

NOTE Confidence: 0.885923349230769

 $00{:}25{:}43{.}336 \dashrightarrow 00{:}25{:}46{.}004$  bit about how many patients or what

NOTE Confidence: 0.885923349230769

 $00:25:46.004 \rightarrow 00:25:48.114$  proportion of patients with cervical

NOTE Confidence: 0.885923349230769

 $00:25:48.114 \rightarrow 00:25:50.046$  cancer present with metastatic

NOTE Confidence: 0.885923349230769

 $00{:}25{:}50.046 \dashrightarrow 00{:}25{:}52.524$  disease versus non metastatic and

NOTE Confidence: 0.885923349230769

 $00:25:52.524 \rightarrow 00:25:54.879$  and what's their prognosis like?

NOTE Confidence: 0.850798004285714

 $00{:}25{:}55{.}600 \dashrightarrow 00{:}25{:}58{.}274$  Yes. Fortunately we do not see a

NOTE Confidence: 0.850798004285714

 $00:25:58.280 \longrightarrow 00:26:00.275$  high number of patients.

NOTE Confidence: 0.850798004285714

 $00{:}26{:}00{.}280 \dashrightarrow 00{:}26{:}01{.}912$  We're probably talking in the order

NOTE Confidence: 0.850798004285714

 $00:26:01.912 \longrightarrow 00:26:04.062$  of five to 10% who are presenting

NOTE Confidence: 0.850798004285714

 $00:26:04.062 \rightarrow 00:26:05.832$  with metastatic disease when they

NOTE Confidence: 0.850798004285714

 $00:26:05.832 \rightarrow 00:26:07.559$  first show up to the clinic.

- NOTE Confidence: 0.850798004285714
- $00:26:07.560 \longrightarrow 00:26:09.359$  And this is likely due to
- NOTE Confidence: 0.850798004285714
- $00:26:09.360 \longrightarrow 00:26:11.195$  our excellent screening and patients
- NOTE Confidence: 0.850798004285714
- $00:26:11.195 \rightarrow 00:26:13.987$  being aware of the symptoms to get care
- NOTE Confidence: 0.850798004285714
- $00:26:13.987 \rightarrow 00:26:16.073$  to detect disease in its earliest stage.
- NOTE Confidence: 0.850798004285714
- 00:26:16.080 --> 00:26:18.236 But when these patients do show up,
- NOTE Confidence: 0.850798004285714
- 00:26:18.240 --> 00:26:19.928 you know for years we did not have
- NOTE Confidence: 0.850798004285714
- $00:26:19.928 \longrightarrow 00:26:21.956$  much in terms of options to offer them.
- NOTE Confidence: 0.850798004285714
- 00:26:21.960 --> 00:26:23.648 Cytotoxic chemotherapy was really
- NOTE Confidence: 0.850798004285714
- $00:26:23.648 \longrightarrow 00:26:26.520$  all that we had and prognosis
- NOTE Confidence: 0.850798004285714
- $00:26:26.520 \rightarrow 00:26:28.758$  was not great for those patients.
- NOTE Confidence: 0.850798004285714
- $00{:}26{:}28{.}760 \dashrightarrow 00{:}26{:}31{.}203$  We're very excited to see the rapid
- NOTE Confidence: 0.850798004285714
- $00{:}26{:}31{.}203 \dashrightarrow 00{:}26{:}33{.}481$  expansion of drug development in the
- NOTE Confidence: 0.850798004285714
- $00{:}26{:}33{.}481 \dashrightarrow 00{:}26{:}35{.}809$  cervical cancer space even over the
- NOTE Confidence: 0.850798004285714
- $00{:}26{:}35{.}809 \dashrightarrow 00{:}26{:}38{.}176$  last three to four years where we
- NOTE Confidence: 0.850798004285714
- $00{:}26{:}38.176 \dashrightarrow 00{:}26{:}40.472$  have seen a number of new approvals
- NOTE Confidence: 0.850798004285714

 $00:26:40.472 \longrightarrow 00:26:42.934$  and really ongoing interest and

NOTE Confidence: 0.850798004285714

00:26:42.934 --> 00:26:44.998 excitement in additional clinical

NOTE Confidence: 0.850798004285714

 $00:26:44.998 \longrightarrow 00:26:47.376$  trials that will hopefully see

NOTE Confidence: 0.850798004285714

 $00:26:47.376 \rightarrow 00:26:49.325$  these drugs brought into the ovarian

NOTE Confidence: 0.850798004285714

 $00:26:49.325 \longrightarrow 00:26:51.479$  cancer space to help more women.

NOTE Confidence: 0.902210003333333

00:26:52.200 --> 00:26:54.312 Can you talk a little

NOTE Confidence: 0.902210003333333

 $00:26:54.312 \longrightarrow 00:26:56.275$  bit about some of the ongoing

NOTE Confidence: 0.902210003333333

 $00{:}26{:}56{.}275 \dashrightarrow 00{:}26{:}57{.}985$  clinical trials and research

NOTE Confidence: 0.902210003333333

 $00{:}26{:}57{.}985 \dashrightarrow 00{:}26{:}59{.}960$  that you're most excited about?

NOTE Confidence: 0.900419812666666

00:27:00.360 --> 00:27:01.080 Yeah, absolutely.

NOTE Confidence: 0.900419812666666

00:27:01.080 --> 00:27:03.600 You know like all cancers we often

NOTE Confidence: 0.900419812666666

 $00{:}27{:}03.600 \dashrightarrow 00{:}27{:}06.029$  see the new drugs develop for patients

NOTE Confidence: 0.900419812666666

00:27:06.029 --> 00:27:08.112 you know later in their cancer

NOTE Confidence: 0.900419812666666

 $00{:}27{:}08.112 \dashrightarrow 00{:}27{:}10.492$  journey and it takes some time for

NOTE Confidence: 0.900419812666666

 $00{:}27{:}10.492 \dashrightarrow 00{:}27{:}13.280$  those medications to trickle into

NOTE Confidence: 0.900419812666666

 $00:27:13.280 \rightarrow 00:27:16.316$  the earlier phase of cancer treatment.

- NOTE Confidence: 0.900419812666666
- 00:27:16.320 --> 00:27:18.850 And so use of immunotherapy
- NOTE Confidence: 0.900419812666666
- $00:27:18.850 \longrightarrow 00:27:20.874$  in the earlier elements,
- NOTE Confidence: 0.900419812666666
- $00:27:20.880 \longrightarrow 00:27:23.030$  meaning not waiting for
- NOTE Confidence: 0.900419812666666
- 00:27:23.030 00:27:25.180 recurrence or maybe in patients
- NOTE Confidence: 0.900419812666666
- $00{:}27{:}25{.}257 \dashrightarrow 00{:}27{:}27{.}124$  who have a tumor that is perhaps
- NOTE Confidence: 0.900419812666666
- $00{:}27{:}27{.}124 \dashrightarrow 00{:}27{:}28{.}720$  too big for fertility sparing.
- NOTE Confidence: 0.900419812666666
- 00:27:28.720 --> 00:27:30.764 But maybe we can use an immunotherapy
- NOTE Confidence: 0.900419812666666
- $00:27:30.764 \longrightarrow 00:27:33.092$  to shrink that down and then offer
- NOTE Confidence: 0.900419812666666
- $00:27:33.092 \rightarrow 00:27:34.837$  patients a fertility sparing option.
- NOTE Confidence: 0.900419812666666
- 00:27:34.840 --> 00:27:37.078 I think would be very exciting
- NOTE Confidence: 0.900419812666666
- $00:27:37.080 \longrightarrow 00:27:38.840$  because with immunotherapy we really
- NOTE Confidence: 0.900419812666666
- $00{:}27{:}38{.}840 \dashrightarrow 00{:}27{:}41{.}356$  see a difference in the side effect
- NOTE Confidence: 0.900419812666666
- $00:27:41.356 \longrightarrow 00:27:43.076$  profile for patients as well.
- NOTE Confidence: 0.900419812666666
- $00{:}27{:}43.080 \dashrightarrow 00{:}27{:}44.900$  So it's not just about the
- NOTE Confidence: 0.900419812666666
- $00:27:44.900 \longrightarrow 00:27:46.240$  long term cancer outcomes,
- NOTE Confidence: 0.900419812666666

 $00:27:46.240 \rightarrow 00:27:48.910$  but how patients feel their quality

NOTE Confidence: 0.900419812666666

 $00:27:48.910 \longrightarrow 00:27:50.913$  of life and their experience

NOTE Confidence: 0.900419812666666

 $00:27:50.913 \rightarrow 00:27:52.397$  during their cancer care.

NOTE Confidence: 0.900419812666666

 $00:27:52.400 \longrightarrow 00:27:54.740$  And immunotherapy seems to be

NOTE Confidence: 0.900419812666666

 $00{:}27{:}54{.}740 \dashrightarrow 00{:}27{:}56{.}841$  offering patients a different but

NOTE Confidence: 0.900419812666666

 $00:27:56.841 \rightarrow 00:27:58.776$  in somewhat improved side effect

NOTE Confidence: 0.900419812666666

 $00:27:58.776 \longrightarrow 00:28:01.033$  profile when we compare it to

NOTE Confidence: 0.900419812666666

 $00:28:01.033 \rightarrow 00:28:02.798$  some of the older chemotherapies.

NOTE Confidence: 0.900419812666666

 $00:28:02.800 \longrightarrow 00:28:03.904$  Other than that,

NOTE Confidence: 0.900419812666666

 $00:28:03.904 \rightarrow 00:28:06.112$  we're excited to see some updated

NOTE Confidence: 0.900419812666666

 $00{:}28{:}06{.}112 \dashrightarrow 00{:}28{:}08{.}123$  cervical surgery trials that have

NOTE Confidence: 0.900419812666666

 $00{:}28{:}08{.}123 \dashrightarrow 00{:}28{:}10{.}088$  been presented in conference format

NOTE Confidence: 0.900419812666666

 $00:28:10.088 \rightarrow 00:28:12.392$  to suggest that maybe for certain

NOTE Confidence: 0.900419812666666

 $00:28:12.392 \rightarrow 00:28:14.659$  women the radical surgery is not

NOTE Confidence: 0.900419812666666

 $00:28:14.659 \rightarrow 00:28:17.592$  necessary anymore and we can do a

NOTE Confidence: 0.900419812666666

 $00:28:17.592 \rightarrow 00:28:20.360$  smaller less invasive hysterectomy,

- NOTE Confidence: 0.900419812666666
- $00:28:20.360 \longrightarrow 00:28:22.880$  but confer a similar long term
- NOTE Confidence: 0.900419812666666
- $00:28:22.880 \longrightarrow 00:28:24.560$  outcome for those women.
- NOTE Confidence: 0.900419812666666
- $00{:}28{:}24{.}560 \dashrightarrow 00{:}28{:}26{.}216$  And that would be a real game changer
- NOTE Confidence: 0.900419812666666
- $00:28:26.216 \rightarrow 00:28:28.279$  in the surgical treatment of this cancer.
- NOTE Confidence: 0.900419812666666
- $00{:}28{:}28{.}280 \dashrightarrow 00{:}28{:}29{.}528$  So we look forward to that
- NOTE Confidence: 0.900419812666666
- $00{:}28{:}29{.}528 \dashrightarrow 00{:}28{:}30{.}360$  publication coming up soon.
- NOTE Confidence: 0.891338373333333
- 00:28:31.080 --> 00:28:32.880 Doctor Mitchell Clark is an
- NOTE Confidence: 0.891338373333333
- 00:28:32.880 --> 00:28:34.320 Assistant professor of Obstetrics,
- NOTE Confidence: 0.891338373333333
- $00{:}28{:}34{.}320 \dashrightarrow 00{:}28{:}36{.}144$  Gynecology, and Reproductive Sciences
- NOTE Confidence: 0.891338373333333
- $00:28:36.144 \longrightarrow 00:28:38.880$  at the Yale School of Medicine.
- NOTE Confidence: 0.891338373333333
- 00:28:38.880 --> 00:28:40.820 If you have questions,
- NOTE Confidence: 0.891338373333333
- $00:28:40.820 \rightarrow 00:28:42.737$  the address is canceranswers@yale.edu,
- NOTE Confidence: 0.891338373333333
- $00:28:42.737 \rightarrow 00:28:45.479$  and past editions of the program
- NOTE Confidence: 0.891338373333333
- $00{:}28{:}45{.}479 \dashrightarrow 00{:}28{:}47{.}853$  are available in audio and written
- NOTE Confidence: 0.891338373333333
- $00{:}28{:}47.853 \dashrightarrow 00{:}28{:}48.788$  form at yale cancercenter.org.
- NOTE Confidence: 0.891338373333333

00:28:48.788 --> 00:28:51.252 We hope you'll join us next week to

NOTE Confidence: 0.891338373333333

 $00{:}28{:}51{.}252 \dashrightarrow 00{:}28{:}53{.}137$  learn more about the fight against

NOTE Confidence: 0.891338373333333

00:28:53.137 --> 00:28:55.000 cancer here on Connecticut Public Radio.

NOTE Confidence: 0.891338373333333

 $00{:}28{:}55{.}000 \dashrightarrow 00{:}28{:}57{.}562$  Funding for Yale Cancer Answers is

NOTE Confidence: 0.891338373333333

 $00{:}28{:}57{.}562 \dashrightarrow 00{:}29{:}00{.}000$  provided by Smilow Cancer Hospital.