WEBVTT

00:00:00.000 --> 00:00:03.192 Funding for Yale Cancer Answers is

00:00:03.192 --> 00:00:06.210 provided by Smilow Cancer Hospital.

00:00:06.210 --> 00:00:08.365 Welcome to Yale Cancer Answers

00:00:08.365 --> 00:00:10.089 with Doctor Anees Chagpar.

00:00:10.090 --> 00:00:11.574 Yale Cancer Answers features

00:00:11.574 --> 00:00:13.429 the latest information on cancer

00:00:13.429 --> 00:00:15.327 care by welcoming oncologists and

00:00:15.327 --> 00:00:17.523 specialists who are on the forefront

00:00:17.580 --> 00:00:19.266 of the battle to fight cancer.

00:00:19.270 --> 00:00:21.923 This week it's a conversation about GYN

00:00:21.923 --> 00:00:24.378 cancers with Doctor Peter Dottino. Dr.

00:00:24.378 --> 00:00:26.466 Dottino is a professor of obstetrics,

00:00:26.470 --> 00:00:28.094 gynecology and reproductive sciences

00:00:28.094 --> 00:00:30.530 at the Yale School of Medicine,

00:00:30.530 --> 00:00:32.690 where Doctor Chagpar is a professor

00:00:32.690 --> 00:00:33.770 of surgical oncology.

NOTE Confidence: 0.930114146363636

00:00:35.830 --> 00:00:37.934 Maybe we can start off by you

NOTE Confidence: 0.930114146363636

00:00:37.934 --> 00:00:39.968 telling us a little bit more about

NOTE Confidence: 0.930114146363636

00:00:39.968 --> 00:00:41.899 yourself and what it is you do.

NOTE Confidence: 0.73887324

00:00:42.010 --> 00:00:44.950 I'm a board certified obstetrician,

NOTE Confidence: 0.73887324

00:00:44.950 --> 00:00:48.070 gynecologist is how I started and

NOTE Confidence: 0.73887324

00:00:48.070 --> 00:00:52.316 then I did a subspecialty training in

NOTE Confidence: 0.73887324

00:00:52.316 --> 00:00:55.890 gynecologic oncology almost 40 years ago.

NOTE Confidence: 0.73887324

00:00:55.890 --> 00:00:58.890 I'm currently board certified in both

NOTE Confidence: 0.73887324

00:00:58.890 --> 00:01:00.890 gynecological oncology and obstetrics

NOTE Confidence: 0.73887324

00:01:00.966 --> 00:01:03.612 and gynecology and my practice is pretty

NOTE Confidence: 0.73887324

00:01:03.612 --> 00:01:06.264 much gynecologic oncology which is women

NOTE Confidence: 0.73887324

00:01:06.270 --> 00:01:08.910 with cancer that affects the reproductive

NOTE Confidence: 0.73887324

00:01:08.910 --> 00:01:11.760 tract is what I see and treat.

NOTE Confidence: 0.73887324

00:01:11.760 --> 00:01:14.504 Not only do I do the surgeries

NOTE Confidence: 0.73887324

00:01:14.504 --> 00:01:17.080 for women with those diseases,

NOTE Confidence: 0.73887324

00:01:17.080 --> 00:01:18.808 but I also do the treatment

NOTE Confidence: 0.73887324

00:01:18.808 --> 00:01:19.960 and the treatment planning.

NOTE Confidence: 0.73887324

00:01:19.960 --> 00:01:22.960 I do administer chemotherapy.

NOTE Confidence: 0.73887324

00:01:22.960 --> 00:01:26.710 I work with radiation oncologists.

00:01:29.030 --> 00:01:31.382 When we talk about

NOTE Confidence: 0.892032779090909

00:01:31.382 --> 00:01:32.950 women with gynecologic cancers,

NOTE Confidence: 0.892032779090909

00:01:32.950 --> 00:01:36.680 that always seems to me to be a rather large

NOTE Confidence: 0.892032779090909

00:01:36.680 --> 00:01:38.800 bucket of of cancers.

NOTE Confidence: 0.892032779090909

00:01:38.800 --> 00:01:40.728 Can you tell us a little bit more

NOTE Confidence: 0.892032779090909

00:01:40.728 --> 00:01:42.778 about the different types of cancers,

NOTE Confidence: 0.892032779090909

00:01:42.780 --> 00:01:44.325 the frequency with which you

NOTE Confidence: 0.892032779090909

00:01:44.325 --> 00:01:46.228 see them and a little bit

NOTE Confidence: 0.892032779090909

00:01:46.228 --> 00:01:47.974 more about each of the types?

NOTE Confidence: 0.835071775

00:01:49.120 --> 00:01:50.006 Good question.

NOTE Confidence: 0.835071775

00:01:50.006 --> 00:01:52.664 So the the most common gynecologic

NOTE Confidence: 0.835071775

00:01:52.664 --> 00:01:55.350 cancer is uterine cancer or the other

NOTE Confidence: 0.835071775

00:01:55.350 --> 00:01:58.579 name it goes by is endometrial cancer.

NOTE Confidence: 0.835071775

00:01:58.580 --> 00:02:02.971 And there's roughly about 65,000

NOTE Confidence: 0.835071775

00:02:02.971 --> 00:02:06.850 cases in the US a year of women

NOTE Confidence: 0.835071775

00:02:06.956 --> 00:02:09.480 that get uterine cancer.

NOTE Confidence: 0.835071775

00:02:09.480 --> 00:02:12.540 Uterine cancer is the one

NOTE Confidence: 0.835071775

00:02:12.540 --> 00:02:14.988 gynecologic malignancy that is

NOTE Confidence: 0.835071775

00:02:14.988 --> 00:02:17.797 increasing in incidence every year

NOTE Confidence: 0.835071775

00:02:17.800 --> 00:02:20.040 and that is thought to be due to

NOTE Confidence: 0.835071775

00:02:20.040 --> 00:02:24.565 the increasing rates of obesity in our

NOTE Confidence: 0.835071775

00:02:24.565 --> 00:02:27.040 society because obesity is directly

NOTE Confidence: 0.835071775

00:02:27.131 --> 00:02:30.236 related to women getting endometrial

NOTE Confidence: 0.835071775

00:02:30.240 --> 00:02:33.606 cancer, but if you look at the the most common

NOTE Confidence: 0.835071775

00:02:33.606 --> 00:02:36.457 overall cancers that affect women today,

NOTE Confidence: 0.835071775

00:02:36.460 --> 00:02:38.572 it's number one breast,

NOTE Confidence: 0.835071775

00:02:38.572 --> 00:02:41.212 #2 lung and #3 colon.

NOTE Confidence: 0.835071775

00:02:41.220 --> 00:02:42.928 But what's going to happen in the

NOTE Confidence: 0.835071775

00:02:42.928 --> 00:02:44.698 next two to five years is that

NOTE Confidence: 0.835071775

00:02:44.698 --> 00:02:46.577 Colon will fall out of the third

NOTE Confidence: 0.835071775

00:02:46.577 --> 00:02:48.695 spot because of all the colonoscopy

NOTE Confidence: 0.835071775

00:02:48.695 --> 00:02:50.138 screening that's taking place.

NOTE Confidence: 0.835071775

00:02:50.138 --> 00:02:52.406 And uterine cancer will be the

NOTE Confidence: 0.835071775

00:02:52.406 --> 00:02:54.483 third most common cancer that

NOTE Confidence: 0.835071775

00:02:54.483 --> 00:02:57.524 affects women overall after breast

NOTE Confidence: 0.835071775

00:02:57.524 --> 00:03:00.342 and lung cancer following

NOTE Confidence: 0.835071775

00:03:00.342 --> 00:03:03.790 Endometrial cancer, ovarian cancer,

NOTE Confidence: 0.835071775

00:03:03.790 --> 00:03:06.730 which there's about 22,000 new cases,

NOTE Confidence: 0.835071775

00:03:06.730 --> 00:03:10.600 here in the US.

NOTE Confidence: 0.835071775

00:03:10.600 --> 00:03:11.806 And unfortunately,

NOTE Confidence: 0.835071775

00:03:11.806 --> 00:03:14.821 without a screening test to

NOTE Confidence: 0.835071775

00:03:14.821 --> 00:03:17.260 diagnose this disease early,

NOTE Confidence: 0.835071775

00:03:17.260 --> 00:03:19.766 85% of the ladies who actually present

NOTE Confidence: 0.835071775

00:03:19.766 --> 00:03:22.567 or walk into my office and need

NOTE Confidence: 0.835071775

00:03:22.567 --> 00:03:24.700 some specialist who treats ovarian

NOTE Confidence: 0.835071775

00:03:24.700 --> 00:03:27.580 cancer will be in very advanced

NOTE Confidence: 0.835071775

00:03:27.580 --> 00:03:30.677 stages, stage three and stage 4.

NOTE Confidence: 0.835071775

00:03:30.680 --> 00:03:32.393 Following endometrial cancer,

NOTE Confidence: 0.835071775

00:03:32.393 --> 00:03:36.390 we will have cervical cancer roughly about

NOTE Confidence: 0.835071775

00:03:36.390 --> 00:03:40.156 14,000 cases to 12,000 cases a year.

NOTE Confidence: 0.835071775

00:03:40.160 --> 00:03:42.904 And then we have the rarer types

NOTE Confidence: 0.835071775

00:03:42.904 --> 00:03:45.137 which would be vaginal cancer

NOTE Confidence: 0.835071775

00:03:45.137 --> 00:03:47.557 and vulvar cancer which affects

NOTE Confidence: 0.835071775

00:03:47.557 --> 00:03:50.100 the skin on the outside.

NOTE Confidence: 0.835071775

00:03:50.100 --> 00:03:53.097 And then that makes up the the range

NOTE Confidence: 0.835071775

00:03:53.097 --> 00:03:56.537 of what we see as gynecologic oncologist.

NOTE Confidence: 0.887725089090909

00:03:57.600 --> 00:04:00.036 You know it's so interesting that

NOTE Confidence: 0.887725089090909

00:04:00.036 --> 00:04:02.230 you say that endometrial cancer

NOTE Confidence: 0.887725089090909

00:04:02.230 --> 00:04:04.906 will likely take the third spot

NOTE Confidence: 0.887725089090909

00:04:04.906 --> 00:04:07.459 instead of colon cancer in large

NOTE Confidence: 0.887725089090909

00:04:07.459 --> 00:04:10.187 part due to the fact that we have

NOTE Confidence: 0.887725089090909

00:04:10.268 --> 00:04:12.654 good screening for colon cancers.

NOTE Confidence: 0.887725089090909

00:04:12.654 --> 00:04:15.426 Are there good screening techniques for

NOTE Confidence: 0.887725089090909

00:04:15.426 --> 00:04:18.738 for the GYN cancers that you mentioned?

NOTE Confidence: 0.7355185

00:04:19.510 --> 00:04:24.430 Well, if you look historically the

NOTE Confidence: 0.7355185

00:04:24.430 --> 00:04:26.416 screening test that was devised

NOTE Confidence: 0.7355185

00:04:26.416 --> 00:04:29.094 I think in the late 1930s,

NOTE Confidence: 0.7355185

00:04:29.094 --> 00:04:32.090 the Pap test was one of the

NOTE Confidence: 0.7355185

00:04:32.090 --> 00:04:33.950 first screening tests

NOTE Confidence: 0.7355185

00:04:33.950 --> 00:04:36.683 in all of cancer and that was

NOTE Confidence: 0.7355185

00:04:36.683 --> 00:04:38.819 designed to screen for cervical

NOTE Confidence: 0.7355185

00:04:38.891 --> 00:04:41.183 cancer because back in that time

NOTE Confidence: 0.7355185

00:04:41.183 --> 00:04:43.520 range cervical cancer was the most

NOTE Confidence: 0.7355185

00:04:43.520 --> 00:04:45.520 common cancer that affected women.

NOTE Confidence: 0.7355185

00:04:45.520 --> 00:04:48.184 And over the years the Pap test

NOTE Confidence: 0.7355185

00:04:48.184 --> 00:04:51.155 has been refined and now not only does

NOTE Confidence: 0.7355185

00:04:51.155 --> 00:04:54.130 it pick up cervical cancer but most

NOTE Confidence: 0.7355185

00:04:54.130 --> 00:04:56.956 importantly it picks up the precancerous

NOTE Confidence: 0.7355185

00:04:56.960 --> 00:04:59.780 lesions that affect the cervix.

NOTE Confidence: 0.7355185

00:04:59.780 --> 00:05:02.372 And so what that means is that when somebody

NOTE Confidence: 0.7355185

00:05:02.380 --> 00:05:04.080 has a precancerous lesion,

NOTE Confidence: 0.7355185

00:05:04.080 --> 00:05:07.850 we can eradicate those in an office setting,

NOTE Confidence: 0.7355185

00:05:07.850 --> 00:05:09.332 either with cryotherapy,

NOTE Confidence: 0.7355185

00:05:09.332 --> 00:05:11.308 which is freezing it,

NOTE Confidence: 0.7355185

00:05:11.310 --> 00:05:14.670 we can use laser to vaporize it,

NOTE Confidence: 0.7355185

00:05:14.670 --> 00:05:17.566 or we can just simply excise the lesion.

NOTE Confidence: 0.7355185

00:05:17.570 --> 00:05:20.384 And that's why in this country the

NOTE Confidence: 0.7355185

00:05:20.384 --> 00:05:22.407 incidence of cervical cancer went

NOTE Confidence: 0.7355185

00:05:22.407 --> 00:05:25.011 from the most common cancer to the

NOTE Confidence: 0.7355185

00:05:25.011 --> 00:05:27.430 13th most least likely of cancers

NOTE Confidence: 0.7355185

00:05:27.430 --> 00:05:30.198 for women because the Pap

NOTE Confidence: 0.7355185

00:05:30.198 --> 00:05:32.658 test for women in general access

NOTE Confidence: 0.7355185

00:05:32.658 --> 00:05:33.650 health care has made a huge impact.

NOTE Confidence: 0.7355185

00:05:39.790 --> 00:05:42.256 If you look at the rest of the

NOTE Confidence: 0.7355185

00:05:42.256 --> 00:05:44.066 world and developing

NOTE Confidence: 0.7355185

00:05:44.066 --> 00:05:46.501 countries who don't for economic

NOTE Confidence: 0.7355185

00:05:46.501 --> 00:05:49.057 reasons have access to PAP testing,

NOTE Confidence: 0.7355185

00:05:49.060 --> 00:05:50.700 cervical cancer is either the

NOTE Confidence: 0.7355185

00:05:50.700 --> 00:05:52.969 number one or #2 killer of women.

NOTE Confidence: 0.7355185

00:05:52.970 --> 00:05:55.371 But worldwide because there is an absence

NOTE Confidence: 0.7355185

00:05:55.371 --> 00:05:57.688 of a screening modality and it's

NOTE Confidence: 0.7355185

00:05:58.202 --> 00:05:59.482 an absolute tragedy that

NOTE Confidence: 0.7355185

00:05:59.482 --> 00:06:01.350 we have a screening modality,

NOTE Confidence: 0.7355185

00:06:01.350 --> 00:06:03.168 but yet it

NOTE Confidence: 0.7355185

00:06:03.168 --> 00:06:05.583 remains one of the number one and

NOTE Confidence: 0.7355185

00:06:05.583 --> 00:06:07.473 #2 killers of women worldwide.

NOTE Confidence: 0.83941789875

00:06:07.770 --> 00:06:09.866 I mean I guess the other thing that's

NOTE Confidence: 0.83941789875

00:06:09.870 --> 00:06:11.170 unfortunate for cervical cancer

NOTE Confidence: 0.83941789875

00:06:11.170 --> 00:06:13.610 is that we also have a vaccine?

NOTE Confidence: 0.883447102

00:06:13.760 --> 00:06:16.860 That's correct and that's beginning

NOTE Confidence: 0.883447102

00:06:16.860 --> 00:06:18.743 to make an impact

NOTE Confidence: 0.883447102

00:06:18.743 --> 00:06:20.454 because I think the vaccines

NOTE Confidence: 0.883447102

00:06:20.454 --> 00:06:22.720 now are maybe 10 to 12 years old.

NOTE Confidence: 0.883447102

00:06:22.720 --> 00:06:24.760 And so in addition to the

NOTE Confidence: 0.883447102

00:06:24.760 --> 00:06:26.840 Pap test with the vaccine,

NOTE Confidence: 0.883447102

00:06:26.840 --> 00:06:30.392 this should be and will be

NOTE Confidence: 0.883447102

00:06:30.392 --> 00:06:32.760 hopefully an eradicable disease.

NOTE Confidence: 0.883447102

00:06:32.760 --> 00:06:36.057 There's still a lot of

NOTE Confidence: 0.883447102

00:06:36.060 --> 00:06:38.342 stumbling blocks in the developing

NOTE Confidence: 0.883447102

00:06:38.342 --> 00:06:40.659 world to the uptake of the vaccine,

NOTE Confidence: 0.883447102

00:06:40.660 --> 00:06:42.748 but in the developing nations there has

NOTE Confidence: 0.883447102

00:06:42.748 --> 00:06:45.472 been huge uptake in the

NOTE Confidence: 0.883447102

00:06:45.472 --> 00:06:47.362 vaccine and this will make between

NOTE Confidence: 0.883447102

00:06:47.435 --> 00:06:49.535 the Pap test and the vaccine

NOTE Confidence: 0.883447102

00:06:49.540 --> 00:06:52.624 will make an enormous impact on

NOTE Confidence: 0.883447102

00:06:52.624 --> 00:06:54.680 eradication of cervical cancer.

NOTE Confidence: 0.883447102

00:06:54.680 --> 00:06:57.122 I'll give you an example that

NOTE Confidence: 0.883447102

00:06:57.122 --> 00:07:00.115 roughly maybe 15-18 years ago I used

NOTE Confidence: 0.883447102

00:07:00.115 --> 00:07:02.999 to do about 70 radical operations

NOTE Confidence: 0.883447102

00:07:02.999 --> 00:07:06.059 for cervical cancer a year.

NOTE Confidence: 0.883447102

00:07:06.060 --> 00:07:08.756 Currently now I will do maybe one or

NOTE Confidence: 0.883447102

00:07:08.756 --> 00:07:11.772 two a year, that's how good the

NOTE Confidence: 0.883447102

00:07:11.772 --> 00:07:14.127 Pap test has been in identifying

NOTE Confidence: 0.883447102

00:07:14.127 --> 00:07:16.597 these precancerous lesions that are

NOTE Confidence: 0.883447102

00:07:16.597 --> 00:07:19.329 just so easily treatable.

00:07:25.098 --> 00:07:27.324 In my practice people that have

NOTE Confidence: 0.883447102

00:07:27.324 --> 00:07:28.778 cervical cancer usually they've

NOTE Confidence: 0.883447102

00:07:28.778 --> 00:07:30.663 either migrated here from countries

NOTE Confidence: 0.883447102

00:07:30.663 --> 00:07:33.043 that did not have PAP screening

NOTE Confidence: 0.883447102

00:07:33.043 --> 00:07:35.018 unfortunately or some people have

NOTE Confidence: 0.883447102

00:07:35.018 --> 00:07:36.998 fallen through the healthcare

NOTE Confidence: 0.883447102

00:07:36.998 --> 00:07:39.770 cracks in our system and they just

NOTE Confidence: 0.883447102

00:07:39.845 --> 00:07:42.638 either don't have money or they don't

NOTE Confidence: 0.883447102

00:07:42.638 --> 00:07:45.080 have access to PAP testing,

NOTE Confidence: 0.883447102

00:07:45.080 --> 00:07:48.070 which is also a tragedy.

NOTE Confidence: 0.811895206

00:07:48.220 --> 00:07:50.520 What about for endometrial cancer,

NOTE Confidence: 0.811895206

00:07:50.520 --> 00:07:52.797 do we have any kind of screening for that?

NOTE Confidence: 0.909516953333333

00:07:53.930 --> 00:07:57.486 No, there is no screening test that

NOTE Confidence: 0.909516953333333

00:07:57.486 --> 00:08:00.220 will detect endometrial cancer today.

NOTE Confidence: 0.909516953333333

00:08:00.220 --> 00:08:02.780 And there's work being

NOTE Confidence: 0.909516953333333

00:08:02.780 --> 00:08:06.066 done on that and one of

NOTE Confidence: 0.909516953333333

00:08:06.066 --> 00:08:08.718 the sort of pushbacks from the

NOTE Confidence: 0.909516953333333

00:08:08.718 --> 00:08:10.794 general community is that endometrial

NOTE Confidence: 0.909516953333333

00:08:10.794 --> 00:08:13.914 cancer, because women start having

NOTE Confidence: 0.909516953333333

00:08:13.914 --> 00:08:16.873 abnormal bleeding very early in

NOTE Confidence: 0.909516953333333

00:08:16.873 --> 00:08:19.526 the course of the disease,

NOTE Confidence: 0.909516953333333

00:08:19.530 --> 00:08:21.990 which leads most of them to

NOTE Confidence: 0.909516953333333

00:08:21.990 --> 00:08:23.630 see physicians very early,

NOTE Confidence: 0.909516953333333

00:08:23.630 --> 00:08:26.910 so probably about 3/4 of the disease that

NOTE Confidence: 0.909516953333333

00:08:26.910 --> 00:08:30.305 we see today is because

NOTE Confidence: 0.909516953333333

00:08:30.310 --> 00:08:32.599 they have bleeding, they come in,

NOTE Confidence: 0.909516953333333

00:08:32.600 --> 00:08:35.248 they have a a biopsy of the uterus

NOTE Confidence: 0.909516953333333

00:08:35.248 --> 00:08:37.118 that cancer is usually detected

NOTE Confidence: 0.909516953333333

00:08:37.118 --> 00:08:39.374 in very early stage one.

NOTE Confidence: 0.909516953333333

00:08:39.380 --> 00:08:42.502 And the cure rates in stage one

NOTE Confidence: 0.909516953333333

00:08:42.502 --> 00:08:44.924 are relatively high exceeding

NOTE Confidence: 0.909516953333333

00:08:44.924 --> 00:08:49.520 over 85 to the low 90% cure rates.

NOTE Confidence: 0.909516953333333

00:08:49.520 --> 00:08:50.586 That's fantastic.

NOTE Confidence: 0.909516953333333

00:08:50.586 --> 00:08:53.016 The caveat I would put to that,

NOTE Confidence: 0.909516953333333

00:08:53.020 --> 00:08:55.197 much like cervical cancer where there is

NOTE Confidence: 0.909516953333333

00:09:00.344 --> 00:09:02.276 a well defined precancerous lesion,

NOTE Confidence: 0.909516953333333

00:09:02.280 --> 00:09:05.794 we also know that there are well

NOTE Confidence: 0.909516953333333

00:09:05.794 --> 00:09:07.934 defined precancerous lesions of

NOTE Confidence: 0.909516953333333

00:09:07.934 --> 00:09:10.110 the uterus called hyperplasia.

NOTE Confidence: 0.909516953333333

00:09:10.110 --> 00:09:13.251 And the time it takes to go from a

NOTE Confidence: 0.909516953333333

00:09:13.251 --> 00:09:15.598 mild hyperplasia to uterine cancer

NOTE Confidence: 0.909516953333333

00:09:15.598 --> 00:09:19.422 is roughly about 8 to 9 years.

NOTE Confidence: 0.909516953333333

00:09:19.422 --> 00:09:21.150 So it's slow growing.

NOTE Confidence: 0.909516953333333

00:09:21.150 --> 00:09:23.201 And what that tells you is

NOTE Confidence: 0.909516953333333

00:09:23.201 --> 00:09:25.590 that if you could pick up these

NOTE Confidence: 0.909516953333333

00:09:25.590 --> 00:09:26.800 precancerous lesions,

NOTE Confidence: 0.909516953333333

00:09:26.800 --> 00:09:29.825 those could be treated without

NOTE Confidence: 0.909516953333333

00:09:29.830 --> 00:09:31.338 surgery in most cases,

NOTE Confidence: 0.909516953333333

00:09:31.338 --> 00:09:32.846 usually with hormonal treatments,

NOTE Confidence: 0.909516953333333

00:09:32.850 --> 00:09:36.805 those can be reversed and spare ladies

NOTE Confidence: 0.909516953333333

00:09:36.810 --> 00:09:39.206 the exposure to hysterectomy,

NOTE Confidence: 0.909516953333333

00:09:39.206 --> 00:09:41.003 potential surgical complications

NOTE Confidence: 0.909516953333333

00:09:41.003 --> 00:09:44.433 and also a loss of time from

NOTE Confidence: 0.909516953333333

00:09:44.433 --> 00:09:46.749 work from family and so forth.

NOTE Confidence: 0.909516953333333

00:09:46.750 --> 00:09:48.110 So there's

NOTE Confidence: 0.909516953333333

00:09:48.110 --> 00:09:50.105 a lot of work being directed towards,

00:09:51.022 --> 00:09:54.214 how can we detect these precancerous

NOTE Confidence: 0.909516953333333

00:09:54.214 --> 00:09:57.117 stages or the earliest cancer stages.

NOTE Confidence: 0.909516953333333

00:09:57.120 --> 00:09:57.774 Because again,

NOTE Confidence: 0.909516953333333

00:09:57.774 --> 00:09:59.736 if you can avoid a hysterectomy,

NOTE Confidence: 0.909516953333333

00:09:59.740 --> 00:10:02.060 that would just be a homerun.

NOTE Confidence: 0.809806246

00:10:04.270 --> 00:10:06.340 So tell us more about the

NOTE Confidence: 0.809806246

00:10:06.340 --> 00:10:07.720 screening that's being developed.

NOTE Confidence: 0.811380046666667

00:10:07.830 --> 00:10:09.564 Screening has kind of passed

00:10:09.564 --> 00:10:11.709 through a number of different stages.

00:10:11.710 --> 00:10:13.404 And one of the first things that

00:10:13.404 --> 00:10:15.369 had come on that probably about

00:10:15.369 --> 00:10:18.883 10-12 years ago was the use of what

00:10:18.883 --> 00:10:21.568 we call a transvaginal ultrasound,

00:10:21.570 --> 00:10:23.270 where an ultrasound probe is

00:10:23.270 --> 00:10:24.630 inserted into the vagina,

00:10:24.630 --> 00:10:27.410 goes directly against the cervix

00:10:27.410 --> 00:10:30.315 and it allows you to measure very

00:10:30.315 --> 00:10:32.003 accurately in millimeters the

00:10:32.003 --> 00:10:34.586 thickness of the lining of the uterus.

00:10:34.590 --> 00:10:37.404 And we know for certain

00:10:37.410 --> 00:10:38.331 ranges of patients

00:10:38.331 --> 00:10:40.730 how thick we would expect it to be,

00:10:40.730 --> 00:10:43.130 what would be considered normal and

00:10:43.130 --> 00:10:45.104 what would be considered abnormal

NOTE Confidence: 0.811380046666667

00:10:45.104 --> 00:10:47.246 and it was hoped that the

NOTE Confidence: 0.811380046666667

00:10:47.246 --> 00:10:49.197 use of this would lead to

NOTE Confidence: 0.811380046666667

00:10:49.200 --> 00:10:50.781 identifying precursor cases.

NOTE Confidence: 0.811380046666667

00:10:50.781 --> 00:10:55.027 But what we didn't find out what that

NOTE Confidence: 0.811380046666667

00:10:55.027 --> 00:10:58.303 those studies that were done was that

NOTE Confidence: 0.811380046666667

00:10:58.303 --> 00:11:01.756 ultrasound is not inexpensive #1 and #2

NOTE Confidence: 0.811380046666667

00:11:01.760 --> 00:11:03.784 we didn't know what interval do you use?

NOTE Confidence: 0.811380046666667

00:11:03.784 --> 00:11:05.871 Like with your mammogram you do

NOTE Confidence: 0.811380046666667

00:11:05.871 --> 00:11:08.380 it every year, do you do it every two years?

NOTE Confidence: 0.811380046666667

00:11:08.380 --> 00:11:10.004 And the same thing with the Pap

NOTE Confidence: 0.811380046666667

00:11:10.004 --> 00:11:11.436 test, we've now refined

NOTE Confidence: 0.811380046666667

00:11:11.436 --> 00:11:13.307 it so some women can get a PAP

NOTE Confidence: 0.811380046666667

00:11:13.307 --> 00:11:14.675 every year.

NOTE Confidence: 0.811380046666667

00:11:14.680 --> 00:11:18.235 Some may use it every two to three years.

00:11:18.822 --> 00:11:20.277 One of the tasks that

NOTE Confidence: 0.778157092352941

17

00:11:22.290 --> 00:11:24.048 I with my colleagues have been

NOTE Confidence: 0.778157092352941

00:11:24.048 --> 00:11:26.414 working on is a procedure

NOTE Confidence: 0.778157092352941

00:11:26.414 --> 00:11:27.910 called the uterine lavage.

NOTE Confidence: 0.778157092352941

00:11:27.910 --> 00:11:29.653 And what that means is when a

NOTE Confidence: 0.778157092352941

00:11:29.653 --> 00:11:31.429 woman comes in for her Pap test,

NOTE Confidence: 0.778157092352941

00:11:31.430 --> 00:11:34.650 which literally takes 15 seconds to do,

NOTE Confidence: 0.778157092352941

00:11:34.650 --> 00:11:36.000 after we do the Pap test,

NOTE Confidence: 0.778157092352941

00:11:36.000 --> 00:11:39.705 then we take about a teaspoon of saline

NOTE Confidence: 0.778157092352941

00:11:39.705 --> 00:11:43.114 and we put it

NOTE Confidence: 0.778157092352941

00:11:43.114 --> 00:11:45.235 inside the uterus and then we rinse

NOTE Confidence: 0.778157092352941

00:11:45.235 --> 00:11:47.331 out the inside of the uterus and we

NOTE Confidence: 0.778157092352941

00:11:47.391 --> 00:11:49.956 take that fluid and we take it to our

NOTE Confidence: 0.778157092352941

00:11:49.956 --> 00:11:52.660 laboratory and we look for specific

NOTE Confidence: 0.778157092352941

00:11:52.660 --> 00:11:55.600 different protein markers that are

NOTE Confidence: 0.778157092352941

00:11:55.600 --> 00:11:57.952 indicative of these precancerous

NOTE Confidence: 0.778157092352941

00:11:57.952 --> 00:12:00.279 and early cancer states.

NOTE Confidence: 0.778157092352941

00:12:00.280 --> 00:12:04.158 And so far today we've done this

NOTE Confidence: 0.778157092352941

00:12:04.158 --> 00:12:06.599 uterine lavage technique on over

NOTE Confidence: 0.778157092352941

00:12:06.600 --> 00:12:10.620 750 women and we found this to

NOTE Confidence: 0.778157092352941

00:12:10.620 --> 00:12:13.347 be as a screening test greater

NOTE Confidence: 0.778157092352941

00:12:13.347 --> 00:12:16.456 than 90% sensitive and specific.

NOTE Confidence: 0.778157092352941

00:12:16.456 --> 00:12:20.445 So we are currently expanding that

NOTE Confidence: 0.778157092352941

00:12:20.445 --> 00:12:23.954 to increase our numbers and that's

NOTE Confidence: 0.778157092352941

00:12:23.954 --> 00:12:26.850 something that again it's easy to do,

NOTE Confidence: 0.778157092352941

00:12:26.850 --> 00:12:30.007 it's very inexpensive like a Pap test,

NOTE Confidence: 0.778157092352941

00:12:30.010 --> 00:12:32.250 and it can pick up these

NOTE Confidence: 0.778157092352941

00:12:32.250 --> 00:12:33.970 kind of precancerous conditions.

NOTE Confidence: 0.88109965

00:12:35.330 --> 00:12:36.136 That's amazing.

NOTE Confidence: 0.88109965

00:12:36.136 --> 00:12:38.957 It sounds like that could really have

NOTE Confidence: 0.88109965

00:12:38.957 --> 00:12:41.707 a huge impact for uterine cancer.

NOTE Confidence: 0.88109965

00:12:41.710 --> 00:12:43.999 When do you think that might become

NOTE Confidence: 0.88109965

00:12:44.000 --> 00:12:46.532 something that we can see

NOTE Confidence: 0.88109965

00:12:46.532 --> 00:12:48.220 in regular clinical practice?

00:12:51.067 --> 00:12:52.889 The way these are going now,

NOTE Confidence: 0.842423254615385

00:12:52.890 --> 00:12:56.257 it possibly could be

NOTE Confidence: 0.842423254615385

00:12:56.257 --> 00:12:59.476 18 to 24 months you know depending

NOTE Confidence: 0.842423254615385

00:12:59.476 --> 00:13:01.730 upon you know a lot of external

NOTE Confidence: 0.842423254615385

00:13:01.803 --> 00:13:03.868 factors and how soon it takes to

NOTE Confidence: 0.842423254615385

00:13:03.870 --> 00:13:05.616 recruit this many patients

NOTE Confidence: 0.842423254615385

00:13:05.616 --> 00:13:07.786 or to get your application to the

NOTE Confidence: 0.842423254615385

00:13:07.786 --> 00:13:09.682 FDA for approval and so forth.

NOTE Confidence: 0.842423254615385

00:13:09.690 --> 00:13:12.070 But it's very, very encouraging.

NOTE Confidence: 0.877713605384615

00:13:12.980 --> 00:13:14.732 Fantastic. Well, we're going to take

NOTE Confidence: 0.877713605384615

00:13:14.732 --> 00:13:16.880 a short break for a medical minute.

NOTE Confidence: 0.877713605384615

00:13:16.880 --> 00:13:18.536 Please stay tuned to learn more

NOTE Confidence: 0.877713605384615

00:13:18.536 --> 00:13:20.693 about the care of GYN cancers with

NOTE Confidence: 0.877713605384615

00:13:20.693 --> 00:13:22.348 my guest doctor Peter Dottino.

NOTE Confidence: 0.799930713

00:13:22.780 --> 00:13:24.790 Funding for Yale Cancer Answers

NOTE Confidence: 0.799930713

00:13:24.790 --> 00:13:26.800 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.799930713

00:13:26.800 --> 00:13:28.444 where their one-of-a-kind

NOTE Confidence: 0.799930713

00:13:28.444 --> 00:13:29.540 Sexuality, intimacy,

NOTE Confidence: 0.799930713

00:13:29.540 --> 00:13:31.940 and menopause program combines medical

NOTE Confidence: 0.799930713

00:13:31.940 --> 00:13:33.380 and psychological interventions

NOTE Confidence: 0.799930713

00:13:33.380 --> 00:13:35.816 for women who experience sexual

NOTE Confidence: 0.799930713

00:13:35.816 --> 00:13:37.226 dysfunction after cancer.

NOTE Confidence: 0.799930713

00:13:37.230 --> 00:13:40.880 Smilowcancerhospital.org.

NOTE Confidence: 0.799930713

00:13:40.880 --> 00:13:43.185 Over 230,000 Americans will be

NOTE Confidence: 0.799930713

00:13:43.185 --> 00:13:45.940 diagnosed with lung cancer this year,

NOTE Confidence: 0.799930713

00:13:45.940 --> 00:13:47.615 and in Connecticut alone there

NOTE Confidence: 0.799930713

00:13:47.615 --> 00:13:50.192 will be over 2700 new cases.

NOTE Confidence: 0.799930713

00:13:50.192 --> 00:13:52.872 More than 85% of lung cancer

NOTE Confidence: 0.799930713

00:13:52.872 --> 00:13:54.912 diagnosis are related to smoking,

NOTE Confidence: 0.799930713

00:13:54.920 --> 00:13:57.398 and quitting even after decades of use,

NOTE Confidence: 0.799930713

00:13:57.400 --> 00:13:59.505 can significantly reduce your risk

NOTE Confidence: 0.799930713

00:13:59.505 --> 00:14:01.940 of developing lung cancer each day.

NOTE Confidence: 0.799930713

00:14:01.940 --> 00:14:04.256 Patients with lung cancer are surviving

NOTE Confidence: 0.799930713

00:14:04.256 --> 00:14:06.701 thanks to increased access to advanced

NOTE Confidence: 0.799930713

00:14:06.701 --> 00:14:08.377 therapies and specialized care.

NOTE Confidence: 0.799930713

00:14:08.380 --> 00:14:10.060 New treatment options and surgical

NOTE Confidence: 0.799930713

00:14:10.060 --> 00:14:11.740 techniques are giving lung cancer

NOTE Confidence: 0.799930713

00:14:11.740 --> 00:14:13.410 survivors more hope than they

NOTE Confidence: 0.799930713

00:14:13.410 --> 00:14:14.746 have ever had before.

NOTE Confidence: 0.799930713

00:14:14.750 --> 00:14:17.285 Clinical trials are currently underway

NOTE Confidence: 0.799930713

00:14:17.285 --> 00:14:19.313 at federally designated Comprehensive

NOTE Confidence: 0.799930713

00:14:19.313 --> 00:14:21.439 cancer centers such as the battle

NOTE Confidence: 0.799930713

00:14:21.439 --> 00:14:23.696 two trial at Yale Cancer Center and

NOTE Confidence: 0.799930713

00:14:23.696 --> 00:14:25.915 Smilow Cancer Hospital to learn if a

NOTE Confidence: 0.799930713

00:14:25.915 --> 00:14:28.305 drug or combination of drugs based

NOTE Confidence: 0.799930713

00:14:28.305 --> 00:14:30.804 on personal biomarkers can help to

NOTE Confidence: 0.799930713

00:14:30.804 --> 00:14:33.006 control non small cell lung cancer.

NOTE Confidence: 0.799930713

00:14:33.010 --> 00:14:35.394 More information is available

NOTE Confidence: 0.799930713

00:14:35.394 --> 00:14:36.410 at yalecancercenter.org.

NOTE Confidence: 0.799930713

00:14:36.410 --> 00:14:38.930 You're listening to Connecticut public radio.

NOTE Confidence: 0.834705865

00:14:40.120 --> 00:14:42.298 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.834705865

00:14:42.300 --> 00:14:43.860 This is doctor Anees Chagpar

NOTE Confidence: 0.834705865

00:14:43.860 --> 00:14:45.918 and I'm joined tonight by my guest,

NOTE Confidence: 0.834705865

00:14:45.920 --> 00:14:47.144 doctor Peter Dottino.

NOTE Confidence: 0.834705865

00:14:47.144 --> 00:14:49.592 We're talking about the care of

NOTE Confidence: 0.834705865

00:14:49.592 --> 00:14:51.813 patients with Gyn cancers and

NOTE Confidence: 0.834705865

00:14:51.813 --> 00:14:53.557 diagnostic and screening tools.

NOTE Confidence: 0.834705865

00:14:53.560 --> 00:14:55.430 And right before the break,

NOTE Confidence: 0.834705865

00:14:55.430 --> 00:14:58.209 Doctor Dottino was telling us about how

NOTE Confidence: 0.834705865

00:14:58.209 --> 00:15:00.319 Pap smears have really revolutionized

NOTE Confidence: 0.834705865

00:15:00.319 --> 00:15:03.112 the care for cervical cancer and some

NOTE Confidence: 0.834705865

00:15:03.112 --> 00:15:06.017 of his recent work looking at lavage,

NOTE Confidence: 0.834705865

00:15:06.020 --> 00:15:07.966 which can be done at the same

NOTE Confidence: 0.834705865

00:15:07.966 --> 00:15:10.230 time as a pap smear that can

NOTE Confidence: 0.834705865

00:15:10.230 --> 00:15:12.338 screen for endometrial cancer,

NOTE Confidence: 0.834705865

00:15:12.338 --> 00:15:16.125 which is set to become the third

NOTE Confidence: 0.834705865

00:15:16.125 --> 00:15:18.745 most common cancer in women.

NOTE Confidence: 0.834705865

00:15:18.750 --> 00:15:20.016 So doctor Dottino,

NOTE Confidence: 0.834705865

00:15:20.016 --> 00:15:22.548 the other cancer that women often

NOTE Confidence: 0.834705865

00:15:22.548 --> 00:15:25.178 talk about and think about in terms

NOTE Confidence: 0.834705865

00:15:25.178 --> 00:15:27.789 of GYN cancers is ovarian cancer.

NOTE Confidence: 0.834705865

00:15:27.790 --> 00:15:31.426 Can you tell us a little bit more about

NOTE Confidence: 0.834705865

00:15:31.426 --> 00:15:35.111 ovarian cancer in terms of its prognosis and

00:15:35.973 --> 00:15:38.128 kind of how it presents?

NOTE Confidence: 0.834705865

00:15:38.130 --> 00:15:40.470 It's often called the silent cancer.

NOTE Confidence: 0.834705865

00:15:40.470 --> 00:15:40.968 Is that right?

NOTE Confidence: 0.87469157

00:15:41.840 --> 00:15:43.576 You know, it is called that,

24

NOTE Confidence: 0.87469157

00:15:43.580 --> 00:15:47.256 but it turns out that it's actually

NOTE Confidence: 0.87469157

00:15:47.256 --> 00:15:50.166 not a silent cancer and by that I

NOTE Confidence: 0.87469157

00:15:50.166 --> 00:15:53.008 mean the following, it turns out that

NOTE Confidence: 0.87469157

00:15:53.008 --> 00:15:55.780 extensive studies that have been done

NOTE Confidence: 0.87469157

00:15:55.780 --> 00:15:58.342 show that all women will have symptoms

NOTE Confidence: 0.87469157

00:15:58.342 --> 00:16:01.429 for at least three to four months and

NOTE Confidence: 0.87469157

00:16:01.429 --> 00:16:04.303 those symptoms they usually report to

NOTE Confidence: 0.87469157

00:16:04.303 --> 00:16:08.010 their doctor or they feel that those

NOTE Confidence: 0.87469157

00:16:08.010 --> 00:16:09.350 symptoms are with

NOTE Confidence: 0.87469157

00:16:09.350 --> 00:16:10.690 menopause or with aging.

NOTE Confidence: 0.87469157

00:16:10.690 --> 00:16:11.890 These would be symptoms of,

NOTE Confidence: 0.87469157

00:16:11.890 --> 00:16:14.488 say, what we call early satiety,

NOTE Confidence: 0.87469157

00:16:14.490 --> 00:16:16.498 so that when you eat something you have

NOTE Confidence: 0.87469157

00:16:16.498 --> 00:16:18.466 a couple of bites but you feel full.

NOTE Confidence: 0.87469157

00:16:18.470 --> 00:16:20.810 Sometimes it could be urinary frequency,

NOTE Confidence: 0.87469157

00:16:20.810 --> 00:16:22.250 where you think maybe I'm getting

NOTE Confidence: 0.87469157

00:16:22.250 --> 00:16:22.970 a little older,

NOTE Confidence: 0.87469157

00:16:22.970 --> 00:16:24.986 I could have a urinary infection.

NOTE Confidence: 0.87469157

00:16:24.990 --> 00:16:26.135 Sometimes it could be symptoms

NOTE Confidence: 0.87469157

00:16:26.135 --> 00:16:27.760 of where it's a little difficult

NOTE Confidence: 0.87469157

00:16:27.760 --> 00:16:30.274 to buckle your pants and

NOTE Confidence: 0.87469157

00:16:30.274 --> 00:16:32.919 your pants feel very tight.

NOTE Confidence: 0.87469157

00:16:32.920 --> 00:16:35.116 And it could be lower back

NOTE Confidence: 0.87469157

00:16:35.116 --> 00:16:37.571 pain or pain with intercourse,

NOTE Confidence: 0.87469157

00:16:37.571 --> 00:16:38.753 sexual intercourse.

NOTE Confidence: 0.87469157

00:16:38.753 --> 00:16:42.299 And those symptoms could go sometimes

NOTE Confidence: 0.87469157

00:16:42.299 --> 00:16:44.938 with either urinary infection,

NOTE Confidence: 0.87469157

00:16:44.940 --> 00:16:47.052 GI inflammation or many other things

NOTE Confidence: 0.87469157

00:16:47.052 --> 00:16:48.928 and most often either patients

NOTE Confidence: 0.87469157

00:16:48.928 --> 00:16:50.933 don't think that they possibly

NOTE Confidence: 0.87469157

00:16:50.933 --> 00:16:52.537 could be developing ovary

NOTE Confidence: 0.87469157

00:16:52.540 --> 00:16:55.291 cancer and a lot of times even

NOTE Confidence: 0.87469157

00:16:55.291 --> 00:16:56.868 their primary care physicians,

NOTE Confidence: 0.87469157

00:16:56.868 --> 00:16:59.626 whether that be a primary care OBGYN

NOTE Confidence: 0.87469157

00:16:59.626 --> 00:17:02.276 or a Primary Health care provider

NOTE Confidence: 0.87469157

00:17:02.280 --> 00:17:04.560 don't think that these could

NOTE Confidence: 0.87469157

00:17:04.560 --> 00:17:06.840 be related to ovary cancer.

NOTE Confidence: 0.87469157

00:17:06.840 --> 00:17:11.978 And because of the delay,

NOTE Confidence: 0.87469157

00:17:11.980 --> 00:17:14.360 85% of the ladies who actually finally

NOTE Confidence: 0.87469157

00:17:14.360 --> 00:17:17.739 make it in to see myself or anybody else

NOTE Confidence: 0.87469157

00:17:17.740 --> 00:17:19.924 who's a gynecologic oncologist will

NOTE Confidence: 0.87469157

00:17:19.924 --> 00:17:22.657 either be in stage three or stage four.

NOTE Confidence: 0.87469157

00:17:22.660 --> 00:17:25.537 And at that stage actually the medical

NOTE Confidence: 0.87469157

00:17:25.537 --> 00:17:27.661 student can establish the diagnosis

NOTE Confidence: 0.87469157

00:17:27.661 --> 00:17:30.127 because the stomach area and

NOTE Confidence: 0.87469157

00:17:30.127 --> 00:17:32.443 the abdominal area is swollen with

NOTE Confidence: 0.87469157

00:17:32.443 --> 00:17:34.800 fluid and patients are unable to

NOTE Confidence: 0.87469157

00:17:34.800 --> 00:17:37.530 eat, their legs could be swollen.

NOTE Confidence: 0.87469157

00:17:37.530 --> 00:17:39.875 So at that point it's very

NOTE Confidence: 0.87469157

00:17:39.875 --> 00:17:42.560 easy to make a diagnosis and that

NOTE Confidence: 0.87469157

00:17:42.560 --> 00:17:45.116 course then usually follows some kind

NOTE Confidence: 0.87469157

00:17:45.116 --> 00:17:47.828 of an ultra radical surgery procedure

NOTE Confidence: 0.87469157

00:17:47.828 --> 00:17:50.684 to remove all of the disease and

NOTE Confidence: 0.87469157

00:17:50.684 --> 00:17:53.776 then either six or eight months of

NOTE Confidence: 0.87469157

00:17:53.776 --> 00:17:57.165 chemotherapy and then what we call

NOTE Confidence: 0.87469157

00:17:57.165 --> 00:17:59.521 maintenance or consolidation

NOTE Confidence: 0.87469157

00:17:59.521 --> 00:18:02.580 therapy to keep the disease away.

NOTE Confidence: 0.87469157

00:18:02.580 --> 00:18:05.476 And so even in the best of circumstances,

NOTE Confidence: 0.87469157

00:18:05.480 --> 00:18:08.105 most people with advanced disease

NOTE Confidence: 0.87469157

00:18:08.105 --> 00:18:10.205 unfortunately will relapse even

NOTE Confidence: 0.87469157

00:18:10.205 --> 00:18:12.949 after having ultra radical surgery.

NOTE Confidence: 0.87469157

00:18:12.950 --> 00:18:16.568 Six or eight months of chemotherapy.

NOTE Confidence: 0.87469157

00:18:16.570 --> 00:18:18.080 So it's a difficult disease,

NOTE Confidence: 0.87469157

00:18:18.080 --> 00:18:20.376 but what we do know that about 8%

NOTE Confidence: 0.87469157

00:18:20.380 --> 00:18:22.928 of ovarian cancer is picked up by

NOTE Confidence: 0.87469157

00:18:22.928 --> 00:18:25.119 mistake where somebody may have a

NOTE Confidence: 0.87469157

00:18:25.119 --> 00:18:26.839 gallbladder operation and they look

NOTE Confidence: 0.87469157

00:18:26.839 --> 00:18:29.418 at the ovary and they see there's

NOTE Confidence: 0.87469157

00:18:29.418 --> 00:18:31.525 something abnormal or they may go

NOTE Confidence: 0.87469157

00:18:31.525 --> 00:18:33.805 for an MRI for back pain that they

NOTE Confidence: 0.87469157

00:18:33.805 --> 00:18:36.158 may see a growth on the ovary.

NOTE Confidence: 0.87469157

00:18:36.160 --> 00:18:38.416 And what we do know that if ovary

NOTE Confidence: 0.87469157

00:18:38.416 --> 00:18:40.560 cancer is picked up in stage one,

NOTE Confidence: 0.87469157

00:18:40.560 --> 00:18:43.878 the cure rates are over 90% long term

NOTE Confidence: 0.87469157

00:18:43.878 --> 00:18:46.674 survivors that's greater than 10 years.

NOTE Confidence: 0.87469157

00:18:46.680 --> 00:18:48.759 So what we've been struggling with in

NOTE Confidence: 0.87469157

00:18:48.759 --> 00:18:50.901 the field is to develop a screening

NOTE Confidence: 0.87469157

00:18:50.901 --> 00:18:53.303 tool that would allow us to pick it

NOTE Confidence: 0.87469157

00:18:53.303 --> 00:18:55.256 up in early stage because an early

NOTE Confidence: 0.87469157

00:18:55.256 --> 00:18:59.055 stage cure is possible.

NOTE Confidence: 0.87469157

00:18:59.055 --> 00:19:01.867 Cure is remotely possibly even in advanced disease

NOTE Confidence: 0.87469157

00:19:01.867 --> 00:19:02.570 unfortunately

NOTE Confidence: 0.817650005

00:19:02.665 --> 00:19:03.709 even today.

NOTE Confidence: 0.8955799825

00:19:04.860 --> 00:19:07.163 And so what has been your progress

NOTE Confidence: 0.8955799825

00:19:07.163 --> 00:19:09.324 in terms of developing screening

NOTE Confidence: 0.8955799825

00:19:09.324 --> 00:19:11.520 tools for ovarian cancer?

NOTE Confidence: 0.8955799825

00:19:11.520 --> 00:19:13.014 Can you tell us more about

NOTE Confidence: 0.8955799825

00:19:13.014 --> 00:19:14.372 whether there are any bright

NOTE Confidence: 0.8955799825

00:19:14.372 --> 00:19:15.887 lights on the horizon there?

NOTE Confidence: 0.695465213333333

00:19:16.280 --> 00:19:19.736 Sure. We've got

NOTE Confidence: 0.695465213333333

00:19:19.740 --> 00:19:22.295 a blood test that was

NOTE Confidence: 0.695465213333333

00:19:22.295 --> 00:19:24.774 developed and it's called a CA 125

NOTE Confidence: 0.695465213333333

00:19:24.774 --> 00:19:27.133 and that was a blood test that

NOTE Confidence: 0.695465213333333

00:19:27.133 --> 00:19:29.597 again is about 25 years old now,

NOTE Confidence: 0.695465213333333

00:19:29.600 --> 00:19:32.237 but it was one of the first markers that

NOTE Confidence: 0.695465213333333

00:19:32.237 --> 00:19:34.536 was found to be in the blood for ovary

NOTE Confidence: 0.695465213333333

00:19:34.540 --> 00:19:36.210 cancer and we thought that

NOTE Confidence: 0.695465213333333

00:19:36.210 --> 00:19:38.230 that would be a home run.

NOTE Confidence: 0.695465213333333

00:19:38.230 --> 00:19:40.477 But what unfortunately we found out as

NOTE Confidence: 0.695465213333333

00:19:40.477 --> 00:19:43.240 the test went into widespread use is that

NOTE Confidence: 0.695465213333333

00:19:43.240 --> 00:19:45.417 there were many other things besides

NOTE Confidence: 0.695465213333333

00:19:45.417 --> 00:19:48.070 cancer that would make the test elevated,

NOTE Confidence: 0.695465213333333

00:19:48.070 --> 00:19:51.934 such as uterine fibroids,

NOTE Confidence: 0.695465213333333

00:19:51.934 --> 00:19:52.900 endometriosis.

NOTE Confidence: 0.695465213333333

00:19:52.900 --> 00:19:54.324 These are benign conditions

NOTE Confidence: 0.695465213333333

00:19:54.324 --> 00:19:55.748 that could affect women.

NOTE Confidence: 0.695465213333333

00:19:55.750 --> 00:19:57.580 Any kind of inflammation in

NOTE Confidence: 0.695465213333333

00:19:57.580 --> 00:20:00.429 the body or the pelvic area

NOTE Confidence: 0.695465213333333

00:20:00.429 --> 00:20:02.305 like diverticular disease could

NOTE Confidence: 0.695465213333333

00:20:02.305 --> 00:20:05.139 elevate this so that it had

NOTE Confidence: 0.695465213333333

00:20:05.140 --> 00:20:07.359 no value, it turns out,

NOTE Confidence: 0.695465213333333

00:20:07.360 --> 00:20:09.940 as a screening test for

NOTE Confidence: 0.695465213333333

00:20:09.940 --> 00:20:13.340 ovarian cancer at all,

NOTE Confidence: 0.695465213333333

00:20:13.340 --> 00:20:15.450 unfortunately.

NOTE Confidence: 0.695465213333333

00:20:15.450 --> 00:20:18.210 The other thing that again,

NOTE Confidence: 0.695465213333333

00:20:18.210 --> 00:20:21.250 as we discussed in the first

NOTE Confidence: 0.695465213333333

00:20:21.250 --> 00:20:23.950 segment you're using the uterine lavage,

NOTE Confidence: 0.695465213333333

00:20:23.950 --> 00:20:26.893 what we found is 2 things have happened

NOTE Confidence: 0.695465213333333

00:20:26.893 --> 00:20:31.690 one through multiscale Genomics we are able to

NOTE Confidence: 0.695465213333333

00:20:31.690 --> 00:20:33.398 demonstrate, not myself,

NOTE Confidence: 0.695465213333333

00:20:33.398 --> 00:20:35.106 but in the archaeological

NOTE Confidence: 0.695465213333333

00:20:35.106 --> 00:20:36.980 community, that

NOTE Confidence: 0.695465213333333

00:20:36.980 --> 00:20:39.926 the majority of ovary cancer actually

NOTE Confidence: 0.695465213333333

00:20:39.926 --> 00:20:42.809 does not originate in the ovary,

NOTE Confidence: 0.695465213333333

00:20:42.810 --> 00:20:44.680 but it originates in the

NOTE Confidence: 0.695465213333333

00:20:44.680 --> 00:20:46.550 end of the fallopian tube.

NOTE Confidence: 0.695465213333333

00:20:46.550 --> 00:20:49.120 The thought of the fallopian

NOTE Confidence: 0.695465213333333

00:20:49.120 --> 00:20:52.254 tube that sits over the ovary

NOTE Confidence: 0.695465213333333

00:20:52.254 --> 00:20:55.050 and collects an egg and so

NOTE Confidence: 0.695465213333333

00:20:55.050 --> 00:20:57.306 that portion of the fallopian tube

NOTE Confidence: 0.695465213333333

00:20:57.310 --> 00:20:59.587 it develops a precancerous lesion,

NOTE Confidence: 0.695465213333333

00:21:02.290 --> 00:21:04.555 which has been estimated by

NOTE Confidence: 0.695465213333333

00:21:04.555 --> 00:21:06.820 mathematical modeling to take about

NOTE Confidence: 0.695465213333333

00:21:06.893 --> 00:21:09.406 6 years until it turns into cancer.

NOTE Confidence: 0.695465213333333

00:21:09.410 --> 00:21:09.750 Now,

NOTE Confidence: 0.695465213333333

00:21:09.750 --> 00:21:12.130 when we were doing our uterine lavage

NOTE Confidence: 0.695465213333333

00:21:12.130 --> 00:21:14.030 for screening for uterine cancer,

NOTE Confidence: 0.695465213333333

00:21:14.030 --> 00:21:15.997 we noticed by chance that we were

NOTE Confidence: 0.695465213333333

00:21:15.997 --> 00:21:17.839 actually picking up cells

NOTE Confidence: 0.695465213333333

00:21:17.839 --> 00:21:19.723 from the fallopian tube that would

NOTE Confidence: 0.695465213333333

00:21:19.723 --> 00:21:21.361 fall into the uterus and that

NOTE Confidence: 0.695465213333333

00:21:21.361 --> 00:21:23.038 would give us a clue and

NOTE Confidence: 0.695465213333333

00:21:23.038 --> 00:21:25.894 we have now done this test and

NOTE Confidence: 0.695465213333333

00:21:25.894 --> 00:21:29.124 been able to detect early ovarian

NOTE Confidence: 0.695465213333333

00:21:29.124 --> 00:21:31.440 cancer utilizing this test.

NOTE Confidence: 0.695465213333333

00:21:31.440 --> 00:21:35.225 So we think that it will be a

NOTE Confidence: 0.695465213333333

00:21:35.225 --> 00:21:37.110 combined test that uterine lavage

NOTE Confidence: 0.695465213333333

00:21:37.186 --> 00:21:40.258 that will allow us to detect early and

NOTE Confidence: 0.695465213333333

00:21:40.258 --> 00:21:42.658 endometrial and early ovarian cancer.

NOTE Confidence: 0.695465213333333

00:21:42.660 --> 00:21:44.980 So we're very excited about it.

NOTE Confidence: 0.695465213333333

00:21:44.980 --> 00:21:47.293 It's kind of what we call the Holy

NOTE Confidence: 0.695465213333333

00:21:47.293 --> 00:21:49.835 Grail in this field because early detection,

NOTE Confidence: 0.695465213333333

00:21:49.840 --> 00:21:51.560 it becomes a game changer,

NOTE Confidence: 0.695465213333333

00:21:51.560 --> 00:21:52.889 absolute game changer.

NOTE Confidence: 0.777410528

00:21:54.650 --> 00:21:56.970 And it certainly sounds exciting.

NOTE Confidence: 0.777410528

00:21:56.970 --> 00:21:59.609 The one question that I would have

NOTE Confidence: 0.777410528

00:21:59.609 --> 00:22:02.653 is it sounds like the test for

NOTE Confidence: 0.777410528

00:22:02.653 --> 00:22:04.938 ovarian cancer is really dependent

NOTE Confidence: 0.777410528

00:22:04.938 --> 00:22:07.847 upon those cells dropping into the

NOTE Confidence: 0.777410528

00:22:07.847 --> 00:22:10.628 the uterus from the fallopian tube.

NOTE Confidence: 0.777410528

00:22:10.628 --> 00:22:14.860 Do all cells do that or would you miss some?

NOTE Confidence: 0.764162451666667

00:22:15.310 --> 00:22:17.548 Well, that's what

NOTE Confidence: 0.764162451666667

00:22:17.550 --> 00:22:20.110 we're trying to work out now,

NOTE Confidence: 0.764162451666667

00:22:20.110 --> 00:22:23.080 but we do know that there is peristalsis

NOTE Confidence: 0.764162451666667

00:22:23.080 --> 00:22:26.030 in the muscular length of

NOTE Confidence: 0.764162451666667

00:22:26.030 --> 00:22:29.000 the tube because the tube

NOTE Confidence: 0.764162451666667

00:22:29.000 --> 00:22:31.310 has what they call it the end of the tube,

NOTE Confidence: 0.764162451666667

00:22:31.310 --> 00:22:33.235 is these fimbria, which are tiny,

NOTE Confidence: 0.764162451666667

00:22:33.240 --> 00:22:36.219 like fingers that sit on top of the ovary.

NOTE Confidence: 0.764162451666667

00:22:36.220 --> 00:22:38.880 So that when a woman ovulates and

NOTE Confidence: 0.764162451666667

00:22:38.880 --> 00:22:41.520 an egg burst out of the ovary,

NOTE Confidence: 0.764162451666667

00:22:41.520 --> 00:22:44.570 the fimbria pick up the egg and put it into

NOTE Confidence: 0.764162451666667

00:22:44.642 --> 00:22:47.477 the fallopian tube and then the muscles,

NOTE Confidence: 0.764162451666667

00:22:47.480 --> 00:22:49.634 the peristaltic motion of the tube

NOTE Confidence: 0.764162451666667

00:22:49.634 --> 00:22:52.133 brings the egg down into the uterus

NOTE Confidence: 0.764162451666667

00:22:52.133 --> 00:22:54.125 so that it can be fertilized.

00:22:55.012 --> 00:22:57.658 What we theorize that those same

NOTE Confidence: 0.764162451666667

00:22:57.658 --> 00:22:59.762 precancerous cells are just moved

NOTE Confidence: 0.764162451666667

00:22:59.762 --> 00:23:02.048 along and dropped into the tube

NOTE Confidence: 0.764162451666667

00:23:02.048 --> 00:23:04.229 will that be everybody

NOTE Confidence: 0.764162451666667

00:23:04.230 --> 00:23:06.182 that we will have to workout

NOTE Confidence: 0.764162451666667

00:23:06.182 --> 00:23:08.326 as we go along with our test?

00:23:10.716 --> 00:23:12.420 So it's something to be seen,

NOTE Confidence: 0.764162451666667

00:23:12.420 --> 00:23:14.492 but that is a distinct

NOTE Confidence: 0.764162451666667

00:23:14.492 --> 00:23:15.750 possibility that

NOTE Confidence: 0.764162451666667

00:23:15.750 --> 00:23:17.475 we're definitely picking up these

NOTE Confidence: 0.764162451666667

00:23:17.475 --> 00:23:18.165 precancerous cells.

NOTE Confidence: 0.764162451666667

00:23:18.170 --> 00:23:19.660 There's no question about that.

NOTE Confidence: 0.876568055333333

00:23:19.890 --> 00:23:22.610 And I mean one would

NOTE Confidence: 0.876568055333333

00:23:22.610 --> 00:23:25.028 surmise that picking up some of them,

NOTE Confidence: 0.876568055333333

00:23:25.030 --> 00:23:27.574 even if you don't pick up all of

NOTE Confidence: 0.876568055333333

00:23:27.574 --> 00:23:30.290 them would still be a real boon for

NOTE Confidence: 0.876568055333333

00:23:30.290 --> 00:23:32.718 a cancer where there really isn't

NOTE Confidence: 0.876568055333333

00:23:32.718 --> 00:23:35.258 any other screening test available.

NOTE Confidence: 0.871841405333333

00:23:36.180 --> 00:23:37.312 No question about that.

NOTE Confidence: 0.871841405333333

00:23:37.312 --> 00:23:39.407 So one of the other ways we're

NOTE Confidence: 0.871841405333333

00:23:39.407 --> 00:23:41.423 approaching this is the same techniques

NOTE Confidence: 0.871841405333333

00:23:41.423 --> 00:23:43.741 that we use to analyze the uterine

NOTE Confidence: 0.871841405333333

00:23:43.741 --> 00:23:46.026 lavage fluid where we take the test,

NOTE Confidence: 0.871841405333333

00:23:46.026 --> 00:23:48.056 the lavage for a woman.

NOTE Confidence: 0.871841405333333

00:23:48.060 --> 00:23:50.476 Right now, we also take a blood sample.

NOTE Confidence: 0.871841405333333

00:23:50.480 --> 00:23:51.208 And interestingly,

NOTE Confidence: 0.871841405333333

00:23:51.208 --> 00:23:53.756 what we find is the same signal

NOTE Confidence: 0.871841405333333

00:23:53.756 --> 00:23:55.681 that we're picking up in the

NOTE Confidence: 0.871841405333333

00:23:55.681 --> 00:23:58.100 lavage we can pick up in the blood.

NOTE Confidence: 0.871841405333333

00:23:58.100 --> 00:24:00.564 So it may be that the test is

NOTE Confidence: 0.871841405333333

00:24:00.564 --> 00:24:03.037 done in combination where we do

NOTE Confidence: 0.871841405333333

00:24:03.037 --> 00:24:05.689 a lavage plus a blood sample.

NOTE Confidence: 0.871841405333333

00:24:05.690 --> 00:24:07.902 So that way we might cover for

NOTE Confidence: 0.871841405333333

00:24:07.902 --> 00:24:10.008 those patients where the cells

NOTE Confidence: 0.871841405333333

00:24:10.008 --> 00:24:12.198 actually don't fall into the uterus.

NOTE Confidence: 0.841994937142857

00:24:13.940 --> 00:24:18.197 And so now we have a good

NOTE Confidence: 0.841994937142857

00:24:18.197 --> 00:24:21.600 screening test for cervical cancer.

NOTE Confidence: 0.841994937142857

00:24:21.600 --> 00:24:24.054 We potentially have one for uterine

NOTE Confidence: 0.841994937142857

00:24:24.054 --> 00:24:26.839 cancer and maybe even ovarian cancer.

NOTE Confidence: 0.841994937142857

00:24:26.840 --> 00:24:28.868 The other two cancers that you

NOTE Confidence: 0.841994937142857

00:24:28.868 --> 00:24:31.466 mentioned at the top of the show

NOTE Confidence: 0.841994937142857

00:24:31.466 --> 00:24:33.421 were vulvar and vaginal cancers.

NOTE Confidence: 0.841994937142857

00:24:33.421 --> 00:24:35.360 Anything on the horizon

NOTE Confidence: 0.841994937142857

00:24:35.360 --> 00:24:37.526 for screening in those two cancers?

NOTE Confidence: 0.818138478571428

00:24:38.040 --> 00:24:40.938 For vulvar cancer which is really

NOTE Confidence: 0.818138478571428

00:24:40.938 --> 00:24:43.600 a skin cancer and it's on the

NOTE Confidence: 0.818138478571428

00:24:43.600 --> 00:24:44.845 external part,

NOTE Confidence: 0.818138478571428

00:24:44.845 --> 00:24:48.450 and so the most important thing for that is

NOTE Confidence: 0.818138478571428

00:24:48.450 --> 00:24:49.770 going to be education.

NOTE Confidence: 0.818138478571428

00:24:49.770 --> 00:24:51.936 And it's education of not only

NOTE Confidence: 0.818138478571428

00:24:51.936 --> 00:24:54.090 patients but primary care providers.

NOTE Confidence: 0.818138478571428

00:24:54.090 --> 00:24:56.813 Because when a woman complains the

NOTE Confidence: 0.818138478571428

00:24:56.813 --> 00:24:58.709 typical complaints for vulvar

NOTE Confidence: 0.818138478571428

00:24:58.710 --> 00:25:02.054 cancer are itching, dryness,

NOTE Confidence: 0.818138478571428

00:25:02.054 --> 00:25:05.580 cracking skin and

NOTE Confidence: 0.818138478571428

00:25:05.580 --> 00:25:07.488 those are often ignored where

NOTE Confidence: 0.818138478571428

00:25:07.488 --> 00:25:09.654 somebody will say go to the

NOTE Confidence: 0.818138478571428

00:25:09.654 --> 00:25:11.328 drugstore and put on some cortisone

NOTE Confidence: 0.818138478571428

00:25:11.328 --> 00:25:13.259 cream and that will make it better.

NOTE Confidence: 0.818138478571428

00:25:13.260 --> 00:25:15.100 But the key thing is that if

NOTE Confidence: 0.818138478571428

00:25:15.100 --> 00:25:16.526 somebody has these symptoms and

NOTE Confidence: 0.818138478571428

00:25:16.526 --> 00:25:18.338 their lasting greater than a month,

NOTE Confidence: 0.818138478571428

00:25:18.340 --> 00:25:20.608 you should see a specialist and

NOTE Confidence: 0.818138478571428

00:25:20.608 --> 00:25:23.311 we will then look at their skin

NOTE Confidence: 0.818138478571428

00:25:23.311 --> 00:25:25.800 with a microscope or the colposcope.

NOTE Confidence: 0.818138478571428

00:25:25.800 --> 00:25:27.928 And more often than not we will

NOTE Confidence: 0.818138478571428

00:25:27.928 --> 00:25:30.186 always take a small skin biopsy to

NOTE Confidence: 0.818138478571428

00:25:30.186 --> 00:25:32.577 make sure that there is no malignancy

NOTE Confidence: 0.818138478571428

00:25:32.577 --> 00:25:35.475 because if all cancer is caught early,

NOTE Confidence: 0.818138478571428

00:25:35.480 --> 00:25:38.460 it becomes also curable.

NOTE Confidence: 0.818138478571428

00:25:38.460 --> 00:25:40.301 And so most

NOTE Confidence: 0.818138478571428

00:25:40.301 --> 00:25:41.999 cases we see are advanced,

NOTE Confidence: 0.818138478571428

00:25:42.000 --> 00:25:44.490 the advanced cases are where women

00:25:44.490 --> 00:25:47.440 have lived for years on these salves,

00:25:47.440 --> 00:25:51.008 creams and so forth that they just keep

00:25:51.008 --> 00:25:52.710 getting and nobody's thought,

00:25:52.710 --> 00:25:54.642 well wait a minute, you know

00:25:54.926 --> 00:25:57.244 there's got to be a reason for this

00:25:57.244 --> 00:25:59.148 and the emphasis really is to

00:25:59.148 --> 00:26:01.378 to take a biopsy and primary care

00:26:01.378 --> 00:26:03.262 doctors are more than capable of

00:26:03.884 --> 00:26:05.750 taking the biopsy because it's just

00:26:05.804 --> 00:26:07.550 looking at the skin and the lesions.

00:26:09.450 --> 00:26:11.350 Very easy to identify.

00:26:11.350 --> 00:26:13.185 Vaginal cancers now are also

00:26:13.185 --> 00:26:15.020 going to be picked up with

00:26:16.780 --> 00:26:19.754 A Pap test also because the Pap

00:26:19.754 --> 00:26:21.623 test can pick up the same kinds

00:26:21.623 --> 00:26:23.432 of precancerous cells that we

00:26:23.432 --> 00:26:25.646 see in cervical cancer can also

NOTE Confidence: 0.818138478571428

00:26:25.709 --> 00:26:27.297 occur in vaginal cancers.

NOTE Confidence: 0.818138478571428

00:26:27.300 --> 00:26:29.736 So the PAP tests can be very

NOTE Confidence: 0.818138478571428

00:26:29.736 --> 00:26:31.539 effective in that way also.

NOTE Confidence: 0.818138478571428

00:26:31.540 --> 00:26:32.395 So you know,

00:26:32.680 --> 00:26:34.105 it's really a matter

NOTE Confidence: 0.818138478571428

00:26:34.105 --> 00:26:36.091 of getting people to

NOTE Confidence: 0.818138478571428

00:26:36.091 --> 00:26:37.731 understand their bodies and always

NOTE Confidence: 0.818138478571428

00:26:37.794 --> 00:26:39.488 to ask that question or you know

NOTE Confidence: 0.818138478571428

00:26:39.488 --> 00:26:41.402 I tell my patients for

NOTE Confidence: 0.818138478571428

00:26:41.402 --> 00:26:42.978 specifically for ovarian cancer

NOTE Confidence: 0.818138478571428

00:26:42.978 --> 00:26:45.127 if they have this constellation

NOTE Confidence: 0.818138478571428

00:26:45.127 --> 00:26:47.377 of symptoms of early satiety,

NOTE Confidence: 0.818138478571428

00:26:47.380 --> 00:26:49.414 a little bit of abdominal swelling

NOTE Confidence: 0.818138478571428

00:26:49.414 --> 00:26:50.770 or discomfort or whatever,

NOTE Confidence: 0.818138478571428

00:26:50.770 --> 00:26:52.653 and if pain or discomfort

NOTE Confidence: 0.818138478571428

00:26:52.653 --> 00:26:54.358 lasts more than four weeks,

NOTE Confidence: 0.818138478571428

00:26:54.360 --> 00:26:56.304 go to your doctor and you say,

NOTE Confidence: 0.818138478571428

00:26:56.310 --> 00:27:00.720 prove to me that I don't have ovary cancer.

NOTE Confidence: 0.818138478571428

00:27:00.720 --> 00:27:03.066 Rather than just continue to live

NOTE Confidence: 0.818138478571428

00:27:03.066 --> 00:27:05.478 with the the symptoms get multiple

NOTE Confidence: 0.818138478571428

00:27:05.478 --> 00:27:08.187 urine cultures and the like and

NOTE Confidence: 0.818138478571428

00:27:08.190 --> 00:27:09.060 two months later,

NOTE Confidence: 0.818138478571428

00:27:09.060 --> 00:27:10.800 you'll find out that those symptoms

NOTE Confidence: 0.818138478571428

00:27:10.800 --> 00:27:12.647 were really of a developing cancer,

NOTE Confidence: 0.818138478571428

00:27:12.650 --> 00:27:13.739 which is unfortunate.

NOTE Confidence: 0.881643385

00:27:14.570 --> 00:27:16.862 Yeah, I think that you know

NOTE Confidence: 0.881643385

00:27:16.862 --> 00:27:18.390 very often those symptoms,

NOTE Confidence: 0.881643385

00:27:18.390 --> 00:27:22.158 right feeling of bloatedness.

NOTE Confidence: 0.881643385

00:27:22.160 --> 00:27:24.688 You know, a little bit of urinary frequency,

NOTE Confidence: 0.881643385

00:27:24.690 --> 00:27:27.426 a little bit of abdominal pain.

NOTE Confidence: 0.881643385

00:27:27.430 --> 00:27:30.069 There can be so many other things

NOTE Confidence: 0.881643385

00:27:30.069 --> 00:27:32.316 and many patients think that the

NOTE Confidence: 0.881643385

00:27:32.316 --> 00:27:34.745 last thing on their mind is that

NOTE Confidence: 0.881643385

00:27:34.824 --> 00:27:37.188 this could be an ovarian cancer,

NOTE Confidence: 0.881643385

00:27:37.190 --> 00:27:38.838 particularly if they don't

NOTE Confidence: 0.881643385

00:27:38.838 --> 00:27:40.486 have a family history,

NOTE Confidence: 0.881643385

00:27:40.490 --> 00:27:44.228 they don't have a genetic mutation.

NOTE Confidence: 0.881643385

00:27:44.230 --> 00:27:46.414 And so they tend to put that at

NOTE Confidence: 0.881643385

00:27:46.414 --> 00:27:48.130 the bottom of the list.

NOTE Confidence: 0.821246385

00:27:49.020 --> 00:27:50.540 Right. And we need to move it up.

NOTE Confidence: 0.821246385

00:27:50.540 --> 00:27:52.178 Because if we think about it right,

NOTE Confidence: 0.821246385

00:27:52.180 --> 00:27:53.845 the genetic mutations,

NOTE Confidence: 0.821246385

00:27:53.845 --> 00:27:56.620 particularly the BRCA genes,

NOTE Confidence: 0.821246385

00:27:56.620 --> 00:27:59.076 those are going to account for roughly about

NOTE Confidence: 0.821246385

00:27:59.076 --> 00:28:02.058 15 to 18% of people who get ovarian cancer.

NOTE Confidence: 0.821246385

00:28:02.060 --> 00:28:04.006 So that means 85% of these are

NOTE Confidence: 0.821246385

00:28:04.006 --> 00:28:06.160 going to people going to be in

44

NOTE Confidence: 0.821246385

00:28:06.160 --> 00:28:07.735 people without a family history,

NOTE Confidence: 0.821246385

00:28:07.740 --> 00:28:09.784 without a genetic mutation

NOTE Confidence: 0.821246385

00:28:09.784 --> 00:28:12.339 that we hardly can identify.

NOTE Confidence: 0.821246385

00:28:12.340 --> 00:28:15.448 And so it behooves us,

NOTE Confidence: 0.821246385

00:28:15.450 --> 00:28:17.564 again, it's like when we

NOTE Confidence: 0.821246385

00:28:17.564 --> 00:28:19.590 all taught our medical students.

NOTE Confidence: 0.821246385

00:28:19.590 --> 00:28:22.204 If somebody has pelvic pain, you know,

NOTE Confidence: 0.821246385

00:28:22.204 --> 00:28:24.739 give me a differential diagnosis.

NOTE Confidence: 0.821246385

00:28:24.740 --> 00:28:26.190 And not three things,

NOTE Confidence: 0.821246385

00:28:26.190 --> 00:28:27.640 give me 15 things,

NOTE Confidence: 0.821246385

00:28:27.640 --> 00:28:28.930 because if you don't think

NOTE Confidence: 0.821246385

00:28:28.930 --> 00:28:30.220 about it as a possibility,

NOTE Confidence: 0.821246385

00:28:30.220 --> 00:28:31.129 you'll never find it.

NOTE Confidence: 0.830541822222222

00:28:31.140 --> 00:28:33.552 Doctor Peter Dottino is a

NOTE Confidence: 0.830541822222222

00:28:33.552 --> 00:28:35.184 professor of obstetrics, gynecology,

NOTE Confidence: 0.830541822222222

00:28:35.184 --> 00:28:36.880 and reproductive sciences at

00:28:36.880 --> 00:28:39.000 the Yale School of Medicine.

00:28:39.000 --> 00:28:41.032 If you have questions,

00:28:41.032 --> 00:28:43.017 the address is canceranswers@yale.edu,

00:28:43.017 --> 00:28:45.759 and past editions of the program

00:28:45.759 --> 00:28:48.133 are available in audio and written

00:28:48.133 --> 00:28:49.062 form at yalecancercenter.org.

00:28:49.062 --> 00:28:51.478 We hope you'll join us next week to

00:28:51.478 --> 00:28:53.315 learn more about the fight against

00:28:53.315 --> 00:28:55.140 cancer here on Connecticut Public Radio.

00:28:55.140 --> 00:28:57.636 Funding for Yale Cancer Answers is

00:28:57.636 --> 00:29:00.000 provided by Smilow Cancer Hospital.