

WEBVTT

NOTE duration:"01:25:40"

NOTE recognizability:0.876

NOTE language:en-us

NOTE Confidence: 0.71522055

00:00:00.000 --> 00:00:01.420 We can thank you.

NOTE Confidence: 0.71522055

00:00:01.420 --> 00:00:02.840 Thank you very much.

NOTE Confidence: 0.71522055

00:00:02.840 --> 00:00:05.960 Welcome everybody here this evening

NOTE Confidence: 0.71522055

00:00:05.960 --> 00:00:09.428 and like to introduce ourselves.

NOTE Confidence: 0.71522055

00:00:09.428 --> 00:00:11.398 My name is Peter Ditino.

NOTE Confidence: 0.71522055

00:00:11.400 --> 00:00:13.355 I'm AG1 oncologist practiced in

NOTE Confidence: 0.71522055

00:00:13.355 --> 00:00:15.680 Manhattan for 30 years and moved

NOTE Confidence: 0.71522055

00:00:15.680 --> 00:00:18.072 to Yale about the year and a half,

NOTE Confidence: 0.71522055

00:00:18.080 --> 00:00:22.704 two years ago and work in Greenwich and in

NOTE Confidence: 0.71522055

00:00:22.704 --> 00:00:26.600 New Haven as does Doctor Papadla Hope Walden.

NOTE Confidence: 0.71522055

00:00:26.600 --> 00:00:30.590 Our APN joined us and we now have a

NOTE Confidence: 0.71522055

00:00:30.590 --> 00:00:33.176 Jew in oncologist at Greenwich five

NOTE Confidence: 0.71522055

00:00:33.176 --> 00:00:36.872 days a week available to see patients,

NOTE Confidence: 0.71522055

00:00:36.880 --> 00:00:38.752 available for phone consults  
NOTE Confidence: 0.71522055

00:00:38.752 --> 00:00:40.156 or just questions.  
NOTE Confidence: 0.71522055

00:00:40.160 --> 00:00:42.848 If you have any questions about any  
NOTE Confidence: 0.71522055

00:00:42.848 --> 00:00:44.320 management issues in gynecologic  
NOTE Confidence: 0.71522055

00:00:44.320 --> 00:00:46.838 cancer that you want to run by US,  
NOTE Confidence: 0.71522055

00:00:46.840 --> 00:00:49.873 one of us was always available to do that.  
NOTE Confidence: 0.71522055

00:00:49.880 --> 00:00:50.900 We've done this,  
NOTE Confidence: 0.71522055

00:00:50.900 --> 00:00:53.280 put this together really in two ways,  
NOTE Confidence: 0.71522055

00:00:53.280 --> 00:00:56.017 is just to bring you some basic  
NOTE Confidence: 0.71522055

00:00:56.017 --> 00:00:58.833 knowledge and also as an opportunity  
NOTE Confidence: 0.71522055

00:00:58.833 --> 00:01:01.242 to introduce ourselves to you  
NOTE Confidence: 0.71522055

00:01:01.242 --> 00:01:04.189 and bring you some of the update  
NOTE Confidence: 0.71522055

00:01:04.189 --> 00:01:06.465 information in our field as it may  
NOTE Confidence: 0.71522055

00:01:06.465 --> 00:01:09.217 be useful to you as you look around  
NOTE Confidence: 0.71522055

00:01:09.217 --> 00:01:11.678 and see what patients would be  
NOTE Confidence: 0.71522055

00:01:11.680 --> 00:01:14.130 appropriate for referrals or things

NOTE Confidence: 0.71522055

00:01:14.130 --> 00:01:16.880 that you may need clarification on.

NOTE Confidence: 0.71522055

00:01:16.880 --> 00:01:18.960 And like I say, we will be available,

NOTE Confidence: 0.71522055

00:01:18.960 --> 00:01:22.914 we're available five days a week at Granite.

NOTE Confidence: 0.71522055

00:01:22.914 --> 00:01:26.113 So please don't hesitate to reach out.

NOTE Confidence: 0.71522055

00:01:26.120 --> 00:01:28.584 My charge this evening is to give you

NOTE Confidence: 0.71522055

00:01:28.584 --> 00:01:31.826 some of the basics of where we are in

NOTE Confidence: 0.71522055

00:01:31.826 --> 00:01:35.839 endometrial Cancer Diagnosis management now.

NOTE Confidence: 0.71522055

00:01:35.840 --> 00:01:37.140 And that's what I'd like

NOTE Confidence: 0.71522055

00:01:37.140 --> 00:01:38.440 to give a start with.

NOTE Confidence: 0.768095681666667

00:01:39.000 --> 00:01:40.158 All right, I'm going to share.

NOTE Confidence: 0.768095681666667

00:01:40.160 --> 00:01:41.640 You ready for your slides?

NOTE Confidence: 0.768095681666667

00:01:41.640 --> 00:01:46.658 I am ready. OK, Give me a second

NOTE Confidence: 0.768095681666667

00:01:46.658 --> 00:01:49.719 and I will get this going.

NOTE Confidence: 0.29170725

00:01:54.280 --> 00:01:57.625 Alrighty. Let me get it into

NOTE Confidence: 0.29170725

00:01:57.625 --> 00:01:59.040 presentation. There you go. There

NOTE Confidence: 0.955262143333333

00:01:59.040 --> 00:02:01.560 you go. Thank you very much.  
NOTE Confidence: 0.955262143333333

00:02:01.560 --> 00:02:04.776 No, I have no conflicts of  
NOTE Confidence: 0.955262143333333

00:02:04.776 --> 00:02:06.920 interest to report tonight.  
NOTE Confidence: 0.955262143333333

00:02:06.920 --> 00:02:08.796 It's not moving forward for some reason.  
NOTE Confidence: 0.911785448

00:02:09.760 --> 00:02:11.120 Hang on, how about now,  
NOTE Confidence: 0.442503835

00:02:13.320 --> 00:02:14.560 Now, Yes,  
NOTE Confidence: 0.707296975

00:02:16.400 --> 00:02:19.240 hold on. Let's say.  
NOTE Confidence: 0.5896485

00:02:22.240 --> 00:02:24.904 So tonight we we're going to be  
NOTE Confidence: 0.5896485

00:02:24.904 --> 00:02:26.280 talking about endometrial cancer,  
NOTE Confidence: 0.5896485

00:02:26.280 --> 00:02:29.640 early stage and also precancerous condition.  
NOTE Confidence: 0.5896485

00:02:29.640 --> 00:02:32.053 I'd like to run through epidemiology,  
NOTE Confidence: 0.5896485

00:02:32.053 --> 00:02:35.251 the disparities that exist in endometrial  
NOTE Confidence: 0.5896485

00:02:35.251 --> 00:02:37.640 cancer today, the risk factors,  
NOTE Confidence: 0.5896485

00:02:37.640 --> 00:02:38.960 prevention and treatment,  
NOTE Confidence: 0.5896485

00:02:38.960 --> 00:02:41.219 screening, early diagnosis,  
NOTE Confidence: 0.5896485

00:02:41.219 --> 00:02:43.478 prevention and treatment.

NOTE Confidence: 0.5896485  
00:02:43.480 --> 00:02:45.240 And if we get through that in time,  
NOTE Confidence: 0.5896485  
00:02:45.240 --> 00:02:47.368 I will go over a little bit  
NOTE Confidence: 0.5896485  
00:02:47.368 --> 00:02:49.071 about Lynch syndrome and its  
NOTE Confidence: 0.5896485  
00:02:49.071 --> 00:02:52.680 relationship to endometrial cancer.  
NOTE Confidence: 0.5896485  
00:02:52.680 --> 00:02:54.318 It's not letting me move forward.  
NOTE Confidence: 0.80785666  
00:02:54.720 --> 00:02:56.596 I'll move it forward for you.  
NOTE Confidence: 0.80785666  
00:02:56.600 --> 00:02:58.536 OK. So you just say next  
NOTE Confidence: 0.80785666  
00:02:58.536 --> 00:03:00.000 slide and I'll do it perfect.  
NOTE Confidence: 0.860730774444444  
00:03:00.000 --> 00:03:00.834 Endometrial cancer,  
NOTE Confidence: 0.860730774444444  
00:03:00.834 --> 00:03:03.753 as you may or might not know,  
NOTE Confidence: 0.860730774444444  
00:03:03.760 --> 00:03:05.130 it's estimated there's going to  
NOTE Confidence: 0.860730774444444  
00:03:05.130 --> 00:03:09.580 be about 66,000 cases in 2023.  
NOTE Confidence: 0.860730774444444  
00:03:09.580 --> 00:03:13.060 It's the third most common cancer  
NOTE Confidence: 0.860730774444444  
00:03:13.060 --> 00:03:15.200 that affects women, breast,  
NOTE Confidence: 0.860730774444444  
00:03:15.200 --> 00:03:18.000 lung and colon being the top three.  
NOTE Confidence: 0.860730774444444

00:03:18.000 --> 00:03:20.370 And what's been projected to happen

NOTE Confidence: 0.8607307744444444

00:03:20.370 --> 00:03:23.136 in the next three to five years

NOTE Confidence: 0.8607307744444444

00:03:23.136 --> 00:03:25.492 is it colon and and rectal cancer

NOTE Confidence: 0.8607307744444444

00:03:25.492 --> 00:03:27.745 are going to drop to the bottom

NOTE Confidence: 0.8607307744444444

00:03:27.745 --> 00:03:29.900 secondary to the extensive screening

NOTE Confidence: 0.8607307744444444

00:03:29.900 --> 00:03:32.310 programs that are are out there.

NOTE Confidence: 0.8607307744444444

00:03:32.310 --> 00:03:34.900 And what's going to be the third

NOTE Confidence: 0.8607307744444444

00:03:34.985 --> 00:03:37.480 most common cancer to affect

NOTE Confidence: 0.8607307744444444

00:03:37.480 --> 00:03:39.476 women is endometrial cancer.

NOTE Confidence: 0.8607307744444444

00:03:39.480 --> 00:03:41.244 7% of all new cancer cases are

NOTE Confidence: 0.8607307744444444

00:03:41.244 --> 00:03:42.960 going to be uterine cancer.

NOTE Confidence: 0.8607307744444444

00:03:42.960 --> 00:03:44.340 It's the first,

NOTE Confidence: 0.8607307744444444

00:03:44.340 --> 00:03:46.160 fourth most common currently

NOTE Confidence: 0.8607307744444444

00:03:46.160 --> 00:03:48.800 and it accounts for about 5%

NOTE Confidence: 0.8607307744444444

00:03:48.800 --> 00:03:51.960 of female related deaths.

NOTE Confidence: 0.8607307744444444

00:03:51.960 --> 00:03:55.120 The next slide please.

NOTE Confidence: 0.860730774444444  
00:03:55.120 --> 00:03:56.600 And as we as we can see here,  
NOTE Confidence: 0.860730774444444  
00:03:56.600 --> 00:03:59.198 both the incidence and the mortality  
NOTE Confidence: 0.860730774444444  
00:03:59.200 --> 00:04:02.400 of endometrial cancer are increasing.  
NOTE Confidence: 0.860730774444444  
00:04:02.400 --> 00:04:04.640 Mortality rates have been rising  
NOTE Confidence: 0.860730774444444  
00:04:04.640 --> 00:04:07.812 faster and this is most likely due  
NOTE Confidence: 0.860730774444444  
00:04:07.812 --> 00:04:10.368 to the increasing number of high  
NOTE Confidence: 0.860730774444444  
00:04:10.368 --> 00:04:12.670 risk subtypes which we're going to  
NOTE Confidence: 0.860730774444444  
00:04:12.670 --> 00:04:15.240 discuss as we go through the talk.  
NOTE Confidence: 0.860730774444444  
00:04:15.240 --> 00:04:17.679 Next slide please.  
NOTE Confidence: 0.860730774444444  
00:04:17.680 --> 00:04:19.620 There are two classifications  
NOTE Confidence: 0.860730774444444  
00:04:19.620 --> 00:04:22.045 of endometrial cancer that are  
NOTE Confidence: 0.860730774444444  
00:04:22.045 --> 00:04:24.043 are commonly used today.  
NOTE Confidence: 0.860730774444444  
00:04:24.043 --> 00:04:26.258 One is the traditional classification  
NOTE Confidence: 0.860730774444444  
00:04:26.258 --> 00:04:29.160 and the 2nd is the molecular.  
NOTE Confidence: 0.860730774444444  
00:04:29.160 --> 00:04:31.944 The traditional classification has  
NOTE Confidence: 0.860730774444444

00:04:31.944 --> 00:04:35.800 two subtypes, a type one and a type 2.  
NOTE Confidence: 0.8607307744444444

00:04:35.800 --> 00:04:38.299 And the way we distinguish that is  
NOTE Confidence: 0.8607307744444444

00:04:38.299 --> 00:04:40.199 really phenotypically type one patients,  
NOTE Confidence: 0.8607307744444444

00:04:40.200 --> 00:04:42.237 as we'll see tend to be obese.  
NOTE Confidence: 0.8607307744444444

00:04:42.240 --> 00:04:45.106 Type 2 patients tend to be very thin.  
NOTE Confidence: 0.8607307744444444

00:04:45.106 --> 00:04:46.636 So there's a clear difference.  
NOTE Confidence: 0.8607307744444444

00:04:46.640 --> 00:04:48.836 There's been an ongoing move over  
NOTE Confidence: 0.8607307744444444

00:04:48.836 --> 00:04:52.162 the last 10 years and a lot of it's  
NOTE Confidence: 0.8607307744444444

00:04:52.162 --> 00:04:53.952 been driven by the investigators  
NOTE Confidence: 0.8607307744444444

00:04:53.960 --> 00:04:56.925 here at Yale and Smilow towards  
NOTE Confidence: 0.8607307744444444

00:04:56.925 --> 00:04:58.620 a molecular classification  
NOTE Confidence: 0.8607307744444444

00:04:58.620 --> 00:05:00.315 of endometrial cancer.  
NOTE Confidence: 0.8607307744444444

00:05:00.320 --> 00:05:01.505 And I will,  
NOTE Confidence: 0.8607307744444444

00:05:01.505 --> 00:05:03.875 I will go over that with  
NOTE Confidence: 0.8607307744444444

00:05:03.875 --> 00:05:06.637 you also next slide please.  
NOTE Confidence: 0.8607307744444444

00:05:06.640 --> 00:05:07.627 So again the,

NOTE Confidence: 0.860730774444444  
00:05:07.627 --> 00:05:09.930 the profile of type 1 which is  
NOTE Confidence: 0.860730774444444  
00:05:10.012 --> 00:05:12.794 going to make up 70 to 80% of all  
NOTE Confidence: 0.860730774444444  
00:05:12.794 --> 00:05:14.879 new cases of endometrial cancer,  
NOTE Confidence: 0.860730774444444  
00:05:14.880 --> 00:05:16.520 They're going to be obesity,  
NOTE Confidence: 0.860730774444444  
00:05:16.520 --> 00:05:18.604 slightly younger aged women,  
NOTE Confidence: 0.860730774444444  
00:05:18.604 --> 00:05:21.730 some women that have polycystic ovary  
NOTE Confidence: 0.860730774444444  
00:05:21.809 --> 00:05:24.702 disease, unopposed estrogen syndromes,  
NOTE Confidence: 0.860730774444444  
00:05:24.702 --> 00:05:29.284 which will lead to endometrial cancer,  
NOTE Confidence: 0.860730774444444  
00:05:29.284 --> 00:05:31.630 precast precancerous conditions  
NOTE Confidence: 0.860730774444444  
00:05:31.630 --> 00:05:33.984 called hyperplasia, endometrial,  
NOTE Confidence: 0.860730774444444  
00:05:33.984 --> 00:05:37.120 hyperplasia or atypical hyperplasia.  
NOTE Confidence: 0.860730774444444  
00:05:37.120 --> 00:05:41.404 These are commonly referred to as EIN  
NOTE Confidence: 0.860730774444444  
00:05:41.404 --> 00:05:44.476 or AEA endometrial atypical hyperplasia.  
NOTE Confidence: 0.860730774444444  
00:05:44.476 --> 00:05:47.566 Endometrioid cancer is the most  
NOTE Confidence: 0.860730774444444  
00:05:47.566 --> 00:05:50.860 common pathology and the type ones  
NOTE Confidence: 0.860730774444444

00:05:50.860 --> 00:05:53.566 are going to be associated with  
NOTE Confidence: 0.8607307744444444

00:05:53.566 --> 00:05:56.280 estrogen and progesterone receptors,  
NOTE Confidence: 0.8607307744444444

00:05:56.280 --> 00:05:58.800 positive K RASP,  
NOTE Confidence: 0.8607307744444444

00:05:58.800 --> 00:06:02.186 P10 mutations and occasional  
NOTE Confidence: 0.8607307744444444

00:06:02.186 --> 00:06:05.598 mismatch repair gene deficits.  
NOTE Confidence: 0.8607307744444444

00:06:05.600 --> 00:06:08.678 Next slide please.  
NOTE Confidence: 0.8607307744444444

00:06:08.680 --> 00:06:11.081 Type 2 cancer which is making up  
NOTE Confidence: 0.8607307744444444

00:06:11.081 --> 00:06:14.093 between 10 and now almost 25% of all  
NOTE Confidence: 0.8607307744444444

00:06:14.093 --> 00:06:16.439 the new cases of endometrial cancer.  
NOTE Confidence: 0.8607307744444444

00:06:16.440 --> 00:06:18.358 And again these are going to be  
NOTE Confidence: 0.8607307744444444

00:06:18.358 --> 00:06:20.724 women who are very thin and they  
NOTE Confidence: 0.8607307744444444

00:06:20.724 --> 00:06:23.034 will have high grade endometrioid  
NOTE Confidence: 0.8607307744444444

00:06:23.034 --> 00:06:25.828 cancers or non endometrioid cancers  
NOTE Confidence: 0.8607307744444444

00:06:25.828 --> 00:06:28.264 which would be clear cell type or  
NOTE Confidence: 0.8607307744444444

00:06:28.264 --> 00:06:30.958 what we call UPSC which is uterine,  
NOTE Confidence: 0.8607307744444444

00:06:30.960 --> 00:06:33.976 papillary serous cancers or

NOTE Confidence: 0.860730774444444  
00:06:33.976 --> 00:06:36.238 possibly even carcinosarcomas.  
NOTE Confidence: 0.860730774444444  
00:06:36.240 --> 00:06:39.636 These are not hormonally driven cancers.  
NOTE Confidence: 0.860730774444444  
00:06:39.640 --> 00:06:43.426 These arise from an endometrial intra  
NOTE Confidence: 0.860730774444444  
00:06:43.426 --> 00:06:46.680 epithelial carcinoma referred to as EIC,  
NOTE Confidence: 0.860730774444444  
00:06:46.680 --> 00:06:49.344 which is a precursor for specifically  
NOTE Confidence: 0.860730774444444  
00:06:49.344 --> 00:06:51.606 for the papillary serous carcinoma  
NOTE Confidence: 0.860730774444444  
00:06:51.606 --> 00:06:55.440 which is the most common cell type  
NOTE Confidence: 0.872695799333333  
00:06:55.440 --> 00:06:57.883 in type 2. And again most often  
NOTE Confidence: 0.872695799333333  
00:06:57.883 --> 00:07:00.733 type 2 will arise in a background  
NOTE Confidence: 0.872695799333333  
00:07:00.733 --> 00:07:03.313 of atrophic endometrium on on a  
NOTE Confidence: 0.872695799333333  
00:07:03.397 --> 00:07:06.757 sonogram as opposed to a thickened  
NOTE Confidence: 0.872695799333333  
00:07:06.757 --> 00:07:08.997 irregular endometrium on sonogram.  
NOTE Confidence: 0.872695799333333  
00:07:09.000 --> 00:07:12.440 For type one patients,  
NOTE Confidence: 0.872695799333333  
00:07:12.440 --> 00:07:15.278 these will pursue an aggressive clinical  
NOTE Confidence: 0.872695799333333  
00:07:15.278 --> 00:07:17.959 course with metastasis at about 60%.  
NOTE Confidence: 0.872695799333333

00:07:17.960 --> 00:07:20.634 Recurrence rates are high in stage 1,  
NOTE Confidence: 0.8726957993333333

00:07:20.640 --> 00:07:24.420 about 23 to 25% and again these are an  
NOTE Confidence: 0.8726957993333333

00:07:24.420 --> 00:07:29.965 elderly, non obese menopausal women.  
NOTE Confidence: 0.8726957993333333

00:07:29.965 --> 00:07:32.635 These are going to be treated  
NOTE Confidence: 0.8726957993333333

00:07:32.640 --> 00:07:36.198 much like we treat ovarian cancer.  
NOTE Confidence: 0.8726957993333333

00:07:36.200 --> 00:07:38.264 These will get surgical staging and  
NOTE Confidence: 0.8726957993333333

00:07:38.264 --> 00:07:41.248 they will be followed with dose intense  
NOTE Confidence: 0.8726957993333333

00:07:41.248 --> 00:07:43.392 chemotherapy and vaginal brachytherapy  
NOTE Confidence: 0.8726957993333333

00:07:43.392 --> 00:07:46.120 as we'll see next slide please, Oops,  
NOTE Confidence: 0.92770875

00:07:48.480 --> 00:07:53.030 sorry, it's OK. There we go, there we go.  
NOTE Confidence: 0.92770875

00:07:53.030 --> 00:07:55.792 So again the type one or the OR the  
NOTE Confidence: 0.92770875

00:07:55.792 --> 00:07:58.900 estrogen driven, they tend to be low  
NOTE Confidence: 0.92770875

00:07:58.900 --> 00:08:01.040 grade tumors diagnosed very early.  
NOTE Confidence: 0.92770875

00:08:01.040 --> 00:08:04.040 They have an excellent prognosis.  
NOTE Confidence: 0.92770875

00:08:04.040 --> 00:08:07.214 Only 20% on presentation will have  
NOTE Confidence: 0.92770875

00:08:07.214 --> 00:08:10.040 local regional spread and only 8%

NOTE Confidence: 0.92770875

00:08:10.040 --> 00:08:12.720 distant metastasis. The type 2.

NOTE Confidence: 0.92770875

00:08:12.720 --> 00:08:16.480 Again higher risk aggressive histologies,

NOTE Confidence: 0.92770875

00:08:16.480 --> 00:08:19.186 more common to have extra uterine

NOTE Confidence: 0.92770875

00:08:19.186 --> 00:08:21.120 disease at the time of diagnosis.

NOTE Confidence: 0.92770875

00:08:21.120 --> 00:08:23.718 They carry worse prognosis and again

NOTE Confidence: 0.92770875

00:08:23.718 --> 00:08:27.301 those are going to be a grade 3

NOTE Confidence: 0.92770875

00:08:27.301 --> 00:08:29.506 endometrioid or or uterine papillary

NOTE Confidence: 0.92770875

00:08:29.506 --> 00:08:32.399 serous cancers or clear cell cancers.

NOTE Confidence: 0.92770875

00:08:32.400 --> 00:08:35.358 Next slide please.

NOTE Confidence: 0.92770875

00:08:35.360 --> 00:08:38.306 When we look at the molecular

NOTE Confidence: 0.92770875

00:08:38.306 --> 00:08:39.496 classifications, this was,

NOTE Confidence: 0.92770875

00:08:39.496 --> 00:08:42.280 this was based on TCGA data and again

NOTE Confidence: 0.92770875

00:08:42.361 --> 00:08:44.748 Yale was a participant in this and

NOTE Confidence: 0.92770875

00:08:44.748 --> 00:08:47.568 this was an effort to they sequenced

NOTE Confidence: 0.92770875

00:08:47.568 --> 00:08:49.945 over 350 cases of endometrial cancer

NOTE Confidence: 0.92770875

00:08:49.945 --> 00:08:52.919 and they were able to put them into  
NOTE Confidence: 0.92770875

00:08:52.920 --> 00:08:57.020 four different categories and predict  
NOTE Confidence: 0.92770875

00:08:57.020 --> 00:08:59.368 outcome based on these categories.  
NOTE Confidence: 0.92770875

00:08:59.368 --> 00:09:01.278 And these are just names,  
NOTE Confidence: 0.92770875

00:09:01.280 --> 00:09:03.716 but type in category one we have  
NOTE Confidence: 0.92770875

00:09:03.716 --> 00:09:07.560 what we call whole ultra mutated #2  
NOTE Confidence: 0.92770875

00:09:07.560 --> 00:09:11.060 is microstate satellite in stable  
NOTE Confidence: 0.92770875

00:09:11.060 --> 00:09:13.540 hypermutated #3 is copy number,  
NOTE Confidence: 0.92770875

00:09:13.540 --> 00:09:16.210 mutation copy number low and #4  
NOTE Confidence: 0.92770875

00:09:16.300 --> 00:09:18.080 is copy number high.  
NOTE Confidence: 0.92770875

00:09:18.080 --> 00:09:21.475 And you again typically with the Cirrus  
NOTE Confidence: 0.92770875

00:09:21.480 --> 00:09:25.519 and we'll take the next slide please  
NOTE Confidence: 0.92770875

00:09:25.520 --> 00:09:28.215 and again why this is important as  
NOTE Confidence: 0.92770875

00:09:28.215 --> 00:09:31.096 we know that those patients that have  
NOTE Confidence: 0.92770875

00:09:31.096 --> 00:09:34.310 a a pull mutation have an excellent  
NOTE Confidence: 0.92770875

00:09:34.310 --> 00:09:37.314 prognosis with rare recurrences and

NOTE Confidence: 0.92770875

00:09:37.314 --> 00:09:39.512 we know that those patients with a

NOTE Confidence: 0.92770875

00:09:39.512 --> 00:09:42.079 high copy number like the serious

NOTE Confidence: 0.92770875

00:09:42.079 --> 00:09:45.037 types have a very poor prognosis.

NOTE Confidence: 0.92770875

00:09:45.040 --> 00:09:47.713 Those we now know can as I said we're

NOTE Confidence: 0.92770875

00:09:47.713 --> 00:09:50.061 treated with chemotherapy like ovarian

NOTE Confidence: 0.92770875

00:09:50.061 --> 00:09:53.031 cancer which includes Taxol and carboplatin.

NOTE Confidence: 0.92770875

00:09:53.040 --> 00:09:55.038 We've now added if they have

NOTE Confidence: 0.92770875

00:09:55.038 --> 00:09:56.558 a her to positivity,

NOTE Confidence: 0.92770875

00:09:56.558 --> 00:10:00.184 we use Herceptin as part of their

NOTE Confidence: 0.92770875

00:10:00.184 --> 00:10:03.119 treatments and the two middle types,

NOTE Confidence: 0.92770875

00:10:03.120 --> 00:10:07.320 the MSI high and copy number low

NOTE Confidence: 0.92770875

00:10:07.320 --> 00:10:09.852 are also now a treatments are

NOTE Confidence: 0.92770875

00:10:09.852 --> 00:10:12.128 available for these and this is

NOTE Confidence: 0.92770875

00:10:12.128 --> 00:10:14.144 where immunotherapy has come in to

NOTE Confidence: 0.92770875

00:10:14.144 --> 00:10:16.400 play a a very large role in this.

NOTE Confidence: 0.92770875

00:10:16.400 --> 00:10:18.998 So this is a new classification,  
NOTE Confidence: 0.92770875

00:10:19.000 --> 00:10:21.664 some centers very few in the  
NOTE Confidence: 0.92770875

00:10:21.664 --> 00:10:24.000 US have yet adopted this.  
NOTE Confidence: 0.92770875

00:10:24.000 --> 00:10:26.408 Then they most people in most centers  
NOTE Confidence: 0.92770875

00:10:26.408 --> 00:10:28.919 stay with a type one and type 2.  
NOTE Confidence: 0.92770875

00:10:28.920 --> 00:10:30.980 But ultimately the molecular  
NOTE Confidence: 0.92770875

00:10:30.980 --> 00:10:33.337 classifications for all cancers are  
NOTE Confidence: 0.92770875

00:10:33.337 --> 00:10:35.713 are going to be the way patients are  
NOTE Confidence: 0.92770875

00:10:35.713 --> 00:10:37.600 treated not based on the Histology  
NOTE Confidence: 0.92770875

00:10:37.600 --> 00:10:39.120 or the site of origin,  
NOTE Confidence: 0.92770875

00:10:39.120 --> 00:10:41.388 but they're going to be treated most  
NOTE Confidence: 0.92770875

00:10:41.388 --> 00:10:44.237 likely based on their their genomic analysis.  
NOTE Confidence: 0.92770875

00:10:44.240 --> 00:10:45.638 Next slide please.  
NOTE Confidence: 0.835946513333333

00:10:48.120 --> 00:10:50.912 So again the the Type 1 low grade  
NOTE Confidence: 0.835946513333333

00:10:50.912 --> 00:10:54.038 is is preceded by a pre invasive  
NOTE Confidence: 0.835946513333333

00:10:54.040 --> 00:10:57.118 condition called hyperplasia

NOTE Confidence: 0.835946513333333  
00:10:57.120 --> 00:11:00.360 classification of by the The Who.  
NOTE Confidence: 0.835946513333333  
00:11:00.360 --> 00:11:03.000 You can have hyperplasia without atypia,  
NOTE Confidence: 0.835946513333333  
00:11:03.000 --> 00:11:04.680 which is a benign,  
NOTE Confidence: 0.835946513333333  
00:11:04.680 --> 00:11:07.200 very benign condition which very rarely  
NOTE Confidence: 0.835946513333333  
00:11:07.275 --> 00:11:10.238 progresses to endometrial cancer.  
NOTE Confidence: 0.835946513333333  
00:11:10.238 --> 00:11:13.112 And then you have atypical hyperplasia  
NOTE Confidence: 0.835946513333333  
00:11:13.112 --> 00:11:16.580 which is a direct precursor to that.  
NOTE Confidence: 0.835946513333333  
00:11:16.580 --> 00:11:20.000 About 8% of benign hyperplasia will  
NOTE Confidence: 0.835946513333333  
00:11:20.000 --> 00:11:23.390 progress over a period of about eight  
NOTE Confidence: 0.835946513333333  
00:11:23.390 --> 00:11:26.585 years or so to endometrial cancer.  
NOTE Confidence: 0.835946513333333  
00:11:26.585 --> 00:11:29.760 And when these are identified  
NOTE Confidence: 0.835946513333333  
00:11:29.760 --> 00:11:31.892 in type 1 hyperplasias,  
NOTE Confidence: 0.835946513333333  
00:11:31.892 --> 00:11:35.428 the vast majority of these can have  
NOTE Confidence: 0.835946513333333  
00:11:35.428 --> 00:11:38.466 a chance to be reversed with with  
NOTE Confidence: 0.835946513333333  
00:11:38.466 --> 00:11:41.120 hormonal therapy and in many cases  
NOTE Confidence: 0.835946513333333

00:11:41.120 --> 00:11:44.936 avoiding his safely hysterectomies.  
NOTE Confidence: 0.835946513333333

00:11:44.936 --> 00:11:48.706 Next slide please and a type,  
NOTE Confidence: 0.835946513333333

00:11:48.706 --> 00:11:51.440 this is a slide to give you an idea  
NOTE Confidence: 0.835946513333333

00:11:51.440 --> 00:11:54.347 on the the left hand side this is a  
NOTE Confidence: 0.835946513333333

00:11:54.347 --> 00:11:57.842 a normal endometrium and type on the  
NOTE Confidence: 0.835946513333333

00:11:57.842 --> 00:12:00.008 right hand side that you're seeing  
NOTE Confidence: 0.835946513333333

00:12:00.008 --> 00:12:02.085 hyperplasia and what happens is the  
NOTE Confidence: 0.835946513333333

00:12:02.085 --> 00:12:04.378 glands that form begin to crowd on  
NOTE Confidence: 0.835946513333333

00:12:04.378 --> 00:12:06.706 each other and you lose some of the  
NOTE Confidence: 0.835946513333333

00:12:06.706 --> 00:12:09.120 stromal component here and that's how  
NOTE Confidence: 0.835946513333333

00:12:09.120 --> 00:12:12.024 the the the the diagnosis is made  
NOTE Confidence: 0.835946513333333

00:12:12.024 --> 00:12:14.376 and the risk for developing cancer  
NOTE Confidence: 0.835946513333333

00:12:14.376 --> 00:12:17.728 in the in the in the non atypical  
NOTE Confidence: 0.835946513333333

00:12:17.728 --> 00:12:20.966 hyperplasia is 4 to 8% and again  
NOTE Confidence: 0.835946513333333

00:12:20.966 --> 00:12:23.144 those women can be easily treated  
NOTE Confidence: 0.835946513333333

00:12:23.144 --> 00:12:25.230 with either D&C where the lining

NOTE Confidence: 0.835946513333333  
00:12:25.230 --> 00:12:27.200 is scraped or with progestins.  
NOTE Confidence: 0.835946513333333  
00:12:27.200 --> 00:12:29.240 Next slide please  
NOTE Confidence: 0.898753450833333  
00:12:31.640 --> 00:12:33.842 as we as this hyperplasia progresses  
NOTE Confidence: 0.898753450833333  
00:12:33.842 --> 00:12:36.320 you can see what's happened here.  
NOTE Confidence: 0.898753450833333  
00:12:36.320 --> 00:12:38.210 The glands have essentially crowded  
NOTE Confidence: 0.898753450833333  
00:12:38.210 --> 00:12:41.066 out all of the stroma and you can  
NOTE Confidence: 0.898753450833333  
00:12:41.066 --> 00:12:43.152 see how thick the glands are with  
NOTE Confidence: 0.898753450833333  
00:12:43.160 --> 00:12:45.736 cytologic abnormalities in the hands  
NOTE Confidence: 0.898753450833333  
00:12:45.736 --> 00:12:49.178 and that's what makes a diagnosis of  
NOTE Confidence: 0.898753450833333  
00:12:49.178 --> 00:12:51.744 the complex hyperplasia with atypia.  
NOTE Confidence: 0.898753450833333  
00:12:51.744 --> 00:12:53.280 Next slide please.  
NOTE Confidence: 0.967180595555555  
00:12:56.440 --> 00:12:58.624 And So what we know about  
NOTE Confidence: 0.967180595555555  
00:12:58.624 --> 00:13:01.192 these is that the EIN,  
NOTE Confidence: 0.967180595555555  
00:13:01.192 --> 00:13:03.400 the atypical hyperplasia,  
NOTE Confidence: 0.967180595555555  
00:13:03.400 --> 00:13:06.620 you know if not treated can progress  
NOTE Confidence: 0.967180595555555

00:13:06.620 --> 00:13:09.320 to endometrial cancer within about  
NOTE Confidence: 0.967180595555555

00:13:09.320 --> 00:13:11.960 estimated about 12 months.  
NOTE Confidence: 0.967180595555555

00:13:11.960 --> 00:13:14.410 We also know that when we do  
NOTE Confidence: 0.967180595555555

00:13:14.410 --> 00:13:16.848 hysterectomies on women in the menopausal  
NOTE Confidence: 0.967180595555555

00:13:16.848 --> 00:13:19.038 time who have atypical hyperplasia  
NOTE Confidence: 0.967180595555555

00:13:19.040 --> 00:13:20.992 30 to 40% of the time when the  
NOTE Confidence: 0.967180595555555

00:13:20.992 --> 00:13:23.200 uterus is removed and it's sectioned,  
NOTE Confidence: 0.967180595555555

00:13:23.200 --> 00:13:26.314 we will find a very early grade one cancer  
NOTE Confidence: 0.967180595555555

00:13:26.314 --> 00:13:29.520 at the time of definitive hysterectomy,  
NOTE Confidence: 0.967180595555555

00:13:29.520 --> 00:13:32.404 which in most cases will be cured  
NOTE Confidence: 0.967180595555555

00:13:32.404 --> 00:13:35.399 just with the hysterectomy alone.  
NOTE Confidence: 0.967180595555555

00:13:35.400 --> 00:13:37.640 And the again the EIN and the  
NOTE Confidence: 0.967180595555555

00:13:37.640 --> 00:13:39.075 type 1 endometrial cancers  
NOTE Confidence: 0.967180595555555

00:13:39.075 --> 00:13:41.080 both share the risk factors,  
NOTE Confidence: 0.967180595555555

00:13:41.080 --> 00:13:43.798 symptoms and signs of irregular bleeding,  
NOTE Confidence: 0.967180595555555

00:13:43.800 --> 00:13:46.920 heavy bleeding or postmenopausal bleeding.

NOTE Confidence: 0.967180595555555

00:13:46.920 --> 00:13:48.966 And again the management is going

NOTE Confidence: 0.967180595555555

00:13:48.966 --> 00:13:50.865 to be treated with hysterectomy

NOTE Confidence: 0.967180595555555

00:13:50.865 --> 00:13:53.195 with potential exceptions in in

NOTE Confidence: 0.967180595555555

00:13:53.195 --> 00:13:56.295 very young patients where we can

NOTE Confidence: 0.967180595555555

00:13:56.295 --> 00:13:58.555 actually preserve their fertility.

NOTE Confidence: 0.967180595555555

00:13:58.560 --> 00:14:01.599 Next slide please.

NOTE Confidence: 0.967180595555555

00:14:01.600 --> 00:14:04.960 And this is endometrial

NOTE Confidence: 0.967180595555555

00:14:04.960 --> 00:14:06.640 intraepithelial carcinoma.

NOTE Confidence: 0.967180595555555

00:14:06.640 --> 00:14:10.438 Now this is a precursor to the Type 2

NOTE Confidence: 0.967180595555555

00:14:10.440 --> 00:14:14.556 aggressive form of of endometrial cancer.

NOTE Confidence: 0.967180595555555

00:14:14.560 --> 00:14:14.864 OK.

NOTE Confidence: 0.967180595555555

00:14:14.864 --> 00:14:16.992 And you can see from the slide

NOTE Confidence: 0.967180595555555

00:14:16.992 --> 00:14:18.819 here that this actually has

NOTE Confidence: 0.967180595555555

00:14:18.819 --> 00:14:20.664 some hob nailing appearance.

NOTE Confidence: 0.967180595555555

00:14:20.664 --> 00:14:23.592 This tends to be stained for

NOTE Confidence: 0.967180595555555

00:14:23.600 --> 00:14:27.070 P53 and this is a precursor  
NOTE Confidence: 0.9671805955555555

00:14:27.070 --> 00:14:29.496 directly to the serious type of  
NOTE Confidence: 0.9671805955555555

00:14:29.496 --> 00:14:31.200 aggressive endometrial cancer,  
NOTE Confidence: 0.9671805955555555

00:14:31.200 --> 00:14:34.590 but it does have a defined  
NOTE Confidence: 0.9671805955555555

00:14:34.590 --> 00:14:35.720 precancerous condition.  
NOTE Confidence: 0.9671805955555555

00:14:35.720 --> 00:14:36.758 Next slide please.  
NOTE Confidence: 0.9172041

00:14:40.840 --> 00:14:44.366 So again, this word that we're talking  
NOTE Confidence: 0.9172041

00:14:44.366 --> 00:14:47.426 about 9 hereditary types of type 1  
NOTE Confidence: 0.9172041

00:14:47.426 --> 00:14:49.398 endometrial cancer, risk factors,  
NOTE Confidence: 0.9172041

00:14:49.400 --> 00:14:51.239 nulliparity, irregular menses,  
NOTE Confidence: 0.9172041

00:14:51.239 --> 00:14:53.691 polycystic ovary syndrome as  
NOTE Confidence: 0.9172041

00:14:53.691 --> 00:14:56.879 a three times increased lift,  
NOTE Confidence: 0.9172041

00:14:56.880 --> 00:14:58.952 lifetime risk endometrial cancer.  
NOTE Confidence: 0.9172041

00:14:58.952 --> 00:15:01.542 The mechanisms are believed to  
NOTE Confidence: 0.9172041

00:15:01.542 --> 00:15:05.008 be through hypersecretion of LH,  
NOTE Confidence: 0.9172041

00:15:05.008 --> 00:15:07.320 increased glucose, hyperinsulinemia,

NOTE Confidence: 0.9172041

00:15:07.320 --> 00:15:08.840 insulin resistance,

NOTE Confidence: 0.9172041

00:15:08.840 --> 00:15:11.120 insulin growth factor,

NOTE Confidence: 0.9172041

00:15:11.120 --> 00:15:12.608 inflammatory responses,

NOTE Confidence: 0.9172041

00:15:12.608 --> 00:15:16.328 exogenous estrogen where women are

NOTE Confidence: 0.9172041

00:15:16.328 --> 00:15:19.680 given post menopausal hormone therapy,

NOTE Confidence: 0.9172041

00:15:19.680 --> 00:15:23.040 but they're just given estrogen without

NOTE Confidence: 0.9172041

00:15:23.040 --> 00:15:25.580 progesterone to balance it drastically

NOTE Confidence: 0.9172041

00:15:25.580 --> 00:15:28.680 increases the risk for endometrial cancer.

NOTE Confidence: 0.9172041

00:15:28.680 --> 00:15:30.354 Tamoxifen can also,

NOTE Confidence: 0.9172041

00:15:30.354 --> 00:15:33.144 if used for prolonged prolonged

NOTE Confidence: 0.9172041

00:15:33.144 --> 00:15:35.476 experiences is reported to

NOTE Confidence: 0.9172041

00:15:35.476 --> 00:15:37.300 actually cause endometrial cancer.

NOTE Confidence: 0.9172041

00:15:37.300 --> 00:15:40.240 Also in addition to a whole host

NOTE Confidence: 0.9172041

00:15:40.317 --> 00:15:43.840 of benign endometrial changes,

NOTE Confidence: 0.9172041

00:15:43.840 --> 00:15:46.865 endogenous estrogen come can come

NOTE Confidence: 0.9172041

00:15:46.865 --> 00:15:49.256 from estrogen producing ovarian  
NOTE Confidence: 0.9172041

00:15:49.256 --> 00:15:52.244 tumors called granulosa cell tumors,  
NOTE Confidence: 0.9172041

00:15:52.244 --> 00:15:54.980 ovarian stromal hyperthecosis or  
NOTE Confidence: 0.9172041

00:15:54.980 --> 00:15:58.400 prolonged in ovulation without periods,  
NOTE Confidence: 0.9172041

00:15:58.400 --> 00:16:01.478 which is not uncommon in in  
NOTE Confidence: 0.9172041

00:16:01.480 --> 00:16:02.950 polycystic ovary cancer.  
NOTE Confidence: 0.9172041

00:16:02.950 --> 00:16:05.400 Driving the base of this,  
NOTE Confidence: 0.9172041

00:16:05.400 --> 00:16:08.559 as we alluded to is going to be obesity  
NOTE Confidence: 0.9172041

00:16:08.559 --> 00:16:11.075 because in obesity in the fat cells,  
NOTE Confidence: 0.9172041

00:16:11.080 --> 00:16:14.160 particularly on the abdominal side,  
NOTE Confidence: 0.9172041

00:16:14.160 --> 00:16:16.245 you get peripheral conversion of  
NOTE Confidence: 0.9172041

00:16:16.245 --> 00:16:17.868 other hormones into estrogen.  
NOTE Confidence: 0.9172041

00:16:17.868 --> 00:16:21.507 And you can see in the bottom that as  
NOTE Confidence: 0.9172041

00:16:21.507 --> 00:16:23.880 the BMI increases goes from 29.25 to  
NOTE Confidence: 0.935011628888889

00:16:25.920 --> 00:16:29.280 29.25 to 29, you get a 2 to 3% increase risk.  
NOTE Confidence: 0.935011628888889

00:16:29.280 --> 00:16:34.180 When you go BMI to 30 to 39 the the,

NOTE Confidence: 0.935011628888889  
00:16:34.180 --> 00:16:39.800 the risk goes up to 3.7 / 40, it's 13 times.  
NOTE Confidence: 0.935011628888889  
00:16:39.800 --> 00:16:42.515 So there's no question that the, the,  
NOTE Confidence: 0.935011628888889  
00:16:42.515 --> 00:16:44.890 the driver behind increasing frequency  
NOTE Confidence: 0.935011628888889  
00:16:44.890 --> 00:16:47.897 and endometrial cancer moving to the third  
NOTE Confidence: 0.935011628888889  
00:16:47.897 --> 00:16:49.967 most common cancer that affects women  
NOTE Confidence: 0.935011628888889  
00:16:49.967 --> 00:16:53.020 in in this country and worldwide is the  
NOTE Confidence: 0.935011628888889  
00:16:53.020 --> 00:16:55.400 obesity epidemic that we now live with.  
NOTE Confidence: 0.935011628888889  
00:16:55.400 --> 00:16:58.046 And as you plot the number of cases  
NOTE Confidence: 0.935011628888889  
00:16:58.046 --> 00:17:00.820 versus the increasing BMI that  
NOTE Confidence: 0.935011628888889  
00:17:00.820 --> 00:17:03.240 they're directly directly related.  
NOTE Confidence: 0.935011628888889  
00:17:03.240 --> 00:17:04.398 Next slide please.  
NOTE Confidence: 0.810795305  
00:17:08.560 --> 00:17:11.758 So endometrial cancer, you know prevention,  
NOTE Confidence: 0.810795305  
00:17:11.760 --> 00:17:14.883 again we can use progestin use and that could  
NOTE Confidence: 0.810795305  
00:17:14.883 --> 00:17:18.197 be in the form of oral contraceptive pills.  
NOTE Confidence: 0.810795305  
00:17:18.200 --> 00:17:20.180 We have oral progestins.  
NOTE Confidence: 0.810795305

00:17:20.180 --> 00:17:24.480 We have Depo Provera which is given as a IM

NOTE Confidence: 0.810795305

00:17:24.480 --> 00:17:27.040 injection and last for a number of months.

NOTE Confidence: 0.810795305

00:17:27.040 --> 00:17:28.594 We now have what's called a Mirena,

NOTE Confidence: 0.810795305

00:17:28.600 --> 00:17:30.128 which is an IUD,

NOTE Confidence: 0.810795305

00:17:30.128 --> 00:17:32.038 which is impregnated with progesterone

NOTE Confidence: 0.810795305

00:17:32.038 --> 00:17:34.676 which is placed directly into the uterus.

NOTE Confidence: 0.810795305

00:17:34.680 --> 00:17:37.459 It not only prevents conception,

NOTE Confidence: 0.810795305

00:17:37.459 --> 00:17:40.392 but it also the progesterone is absorbed

NOTE Confidence: 0.810795305

00:17:40.392 --> 00:17:43.160 directly into the lining of the uterus and

NOTE Confidence: 0.810795305

00:17:43.160 --> 00:17:45.499 is very effective at reversing hyperplasia.

NOTE Confidence: 0.810795305

00:17:45.499 --> 00:17:48.253 And the effects of these also

NOTE Confidence: 0.810795305

00:17:48.253 --> 00:17:50.880 persist after we stop treatment.

NOTE Confidence: 0.810795305

00:17:50.880 --> 00:17:53.918 We know that bariatric surgery weight loss

NOTE Confidence: 0.810795305

00:17:53.918 --> 00:17:56.060 is consistently demonstrated to decrease

NOTE Confidence: 0.810795305

00:17:56.060 --> 00:17:58.394 the risk of getting endometrial cancer.

NOTE Confidence: 0.810795305

00:17:58.400 --> 00:18:00.674 We now know that the there's evidence

NOTE Confidence: 0.810795305

00:18:00.674 --> 00:18:03.873 in in rodent studies that the GLP,

NOTE Confidence: 0.810795305

00:18:03.880 --> 00:18:05.340 one antagonist,

NOTE Confidence: 0.810795305

00:18:05.340 --> 00:18:09.720 the Ozempic Jaro and so forth,

NOTE Confidence: 0.810795305

00:18:09.720 --> 00:18:12.858 these also actually potentiate in these

NOTE Confidence: 0.810795305

00:18:12.858 --> 00:18:16.480 animal studies the effect of a progesterone.

NOTE Confidence: 0.810795305

00:18:16.480 --> 00:18:18.972 So when you're looking in younger women

NOTE Confidence: 0.810795305

00:18:18.972 --> 00:18:21.826 that are obese that have either early

NOTE Confidence: 0.810795305

00:18:21.826 --> 00:18:24.400 endometrial cancer type one or precursors,

NOTE Confidence: 0.810795305

00:18:24.400 --> 00:18:27.300 which is the atypical hyperplasia with

NOTE Confidence: 0.810795305

00:18:27.300 --> 00:18:29.120 that we're treating either with an IUD,

NOTE Confidence: 0.810795305

00:18:29.120 --> 00:18:31.718 progestins or both.

NOTE Confidence: 0.810795305

00:18:31.720 --> 00:18:35.452 Adding one of these GLP one antagonist

NOTE Confidence: 0.810795305

00:18:35.452 --> 00:18:40.285 Ozempic or the like can also add to the

NOTE Confidence: 0.810795305

00:18:40.285 --> 00:18:43.328 likelihood of reversing their hyperplasia.

NOTE Confidence: 0.810795305

00:18:43.328 --> 00:18:45.440 Next slide please.

NOTE Confidence: 0.935869651666667

00:18:48.320 --> 00:18:50.459 Endometrial cancer treatment.  
NOTE Confidence: 0.935869651666667

00:18:50.459 --> 00:18:53.520 Endometrial cancer is a surgically  
NOTE Confidence: 0.935869651666667

00:18:53.520 --> 00:18:56.280 staged disease much like breast cancer.  
NOTE Confidence: 0.935869651666667

00:18:56.280 --> 00:18:59.094 So we don't assign a stage until  
NOTE Confidence: 0.935869651666667

00:18:59.094 --> 00:19:01.839 after the surgery has been completed  
NOTE Confidence: 0.935869651666667

00:19:01.840 --> 00:19:03.532 and the surgery is going to  
NOTE Confidence: 0.935869651666667

00:19:03.532 --> 00:19:05.359 consist of removal of the uterus.  
NOTE Confidence: 0.935869651666667

00:19:05.360 --> 00:19:07.957 A simple hysterectomy is all that's required.  
NOTE Confidence: 0.935869651666667

00:19:07.960 --> 00:19:10.263 We remove the fallopian tubes in the  
NOTE Confidence: 0.935869651666667

00:19:10.263 --> 00:19:13.068 ovaries and we do a lymph node evaluation  
NOTE Confidence: 0.935869651666667

00:19:13.068 --> 00:19:15.613 and usually that's going to be a  
NOTE Confidence: 0.935869651666667

00:19:15.613 --> 00:19:17.516 bilateral Sentinel lymph node biopsies.  
NOTE Confidence: 0.935869651666667

00:19:17.516 --> 00:19:20.132 These are surgeries that the the  
NOTE Confidence: 0.935869651666667

00:19:20.132 --> 00:19:23.327 standard of care for is now minimally  
NOTE Confidence: 0.935869651666667

00:19:23.327 --> 00:19:26.033 invasive and that could be laparoscopic,  
NOTE Confidence: 0.935869651666667

00:19:26.040 --> 00:19:28.128 it could be robotic.

NOTE Confidence: 0.935869651666667  
00:19:28.128 --> 00:19:31.771 These are same day surgeries with a  
NOTE Confidence: 0.935869651666667  
00:19:31.771 --> 00:19:35.035 recovery time of about 7 to 10 days.  
NOTE Confidence: 0.935869651666667  
00:19:35.040 --> 00:19:38.424 There is no place in the treatment of  
NOTE Confidence: 0.935869651666667  
00:19:38.424 --> 00:19:40.560 endometrial cancer for musculation,  
NOTE Confidence: 0.935869651666667  
00:19:40.560 --> 00:19:42.000 for cutting the uterus up  
NOTE Confidence: 0.837181812222222  
00:19:44.160 --> 00:19:46.215 or what's called a supracervical  
NOTE Confidence: 0.837181812222222  
00:19:46.215 --> 00:19:48.643 hysterectomy where you remove the top  
NOTE Confidence: 0.837181812222222  
00:19:48.643 --> 00:19:50.778 of the uterus and leave the cervix  
NOTE Confidence: 0.837181812222222  
00:19:50.778 --> 00:19:52.871 inside too because the lymphatic  
NOTE Confidence: 0.837181812222222  
00:19:52.871 --> 00:19:54.759 drainage in endometrial cancer.  
NOTE Confidence: 0.837181812222222  
00:19:54.760 --> 00:19:57.001 Not only this goes up through the the fundus  
NOTE Confidence: 0.837181812222222  
00:19:57.001 --> 00:19:59.159 to the fallopian tubes in the ovaries,  
NOTE Confidence: 0.837181812222222  
00:19:59.160 --> 00:20:05.560 but it can go down towards the cervix, so.  
NOTE Confidence: 0.837181812222222  
00:20:05.560 --> 00:20:09.488 Again, it's there are standards of  
NOTE Confidence: 0.837181812222222  
00:20:09.488 --> 00:20:12.883 care that are proven to work and  
NOTE Confidence: 0.837181812222222

00:20:12.883 --> 00:20:15.984 then low low risk disease when we  
NOTE Confidence: 0.837181812222222

00:20:15.984 --> 00:20:17.897 preoperatively assess these patients  
NOTE Confidence: 0.837181812222222

00:20:17.897 --> 00:20:20.735 and a pelvic ultrasound is usually  
NOTE Confidence: 0.837181812222222

00:20:20.735 --> 00:20:23.040 sufficient in type one disease,  
NOTE Confidence: 0.837181812222222

00:20:23.040 --> 00:20:25.560 some people prefer to do a baseline  
NOTE Confidence: 0.837181812222222

00:20:25.560 --> 00:20:29.130 CAT scan which is not wrong and in  
NOTE Confidence: 0.837181812222222

00:20:29.130 --> 00:20:31.632 type 2 disease because of the high  
NOTE Confidence: 0.837181812222222

00:20:31.632 --> 00:20:33.840 percentage of metastatic disease,  
NOTE Confidence: 0.837181812222222

00:20:33.840 --> 00:20:36.558 those patients are referred for CT  
NOTE Confidence: 0.837181812222222

00:20:36.558 --> 00:20:39.911 imaging to rule out distant metastatic  
NOTE Confidence: 0.837181812222222

00:20:39.911 --> 00:20:43.440 disease before we do surgical staging.  
NOTE Confidence: 0.837181812222222

00:20:43.440 --> 00:20:44.520 Next slide please,  
NOTE Confidence: 0.896511716666667

00:20:47.240 --> 00:20:49.400 we do the Sentinel lymph nodes.  
NOTE Confidence: 0.896511716666667

00:20:49.400 --> 00:20:52.640 In the past, going back about 10 years ago,  
NOTE Confidence: 0.896511716666667

00:20:52.640 --> 00:20:55.948 we used to do lymphadenectomies or selective  
NOTE Confidence: 0.896511716666667

00:20:55.948 --> 00:20:59.236 lymph node samplings on both sides,

NOTE Confidence: 0.896511716666667  
00:20:59.240 --> 00:21:01.879 but that was associated with anywhere from  
NOTE Confidence: 0.896511716666667  
00:21:01.879 --> 00:21:06.918 a a 15 to 25% development of lymphedema.  
NOTE Confidence: 0.896511716666667  
00:21:06.920 --> 00:21:10.024 And much like in in breast cancer treatment  
NOTE Confidence: 0.896511716666667  
00:21:10.024 --> 00:21:12.360 where they went from removing all the  
NOTE Confidence: 0.896511716666667  
00:21:12.360 --> 00:21:14.320 lymph nodes to just a Sentinel node,  
NOTE Confidence: 0.896511716666667  
00:21:14.320 --> 00:21:15.800 that's what we currently  
NOTE Confidence: 0.896511716666667  
00:21:15.800 --> 00:21:17.280 do for endometrial cancer.  
NOTE Confidence: 0.896511716666667  
00:21:17.280 --> 00:21:19.464 They receive a dye right before  
NOTE Confidence: 0.896511716666667  
00:21:19.464 --> 00:21:20.556 we do surgery.  
NOTE Confidence: 0.896511716666667  
00:21:20.560 --> 00:21:22.295 It identifies the Sentinel lymph  
NOTE Confidence: 0.896511716666667  
00:21:22.295 --> 00:21:24.954 node that allows us to take out one,  
NOTE Confidence: 0.896511716666667  
00:21:24.954 --> 00:21:27.786 usually one or two lymph nodes on each  
NOTE Confidence: 0.896511716666667  
00:21:27.786 --> 00:21:30.756 side and lymphedema has just not heard of.  
NOTE Confidence: 0.896511716666667  
00:21:30.760 --> 00:21:32.608 Since that is done,  
NOTE Confidence: 0.896511716666667  
00:21:32.608 --> 00:21:36.332 the test has been proven to be  
NOTE Confidence: 0.896511716666667

00:21:36.332 --> 00:21:39.440 effective and it does not miss disease.  
NOTE Confidence: 0.896511716666667

00:21:39.440 --> 00:21:40.478 Next slide please.  
NOTE Confidence: 0.9345672

00:21:44.120 --> 00:21:46.596 OK, so where's this give us here.  
NOTE Confidence: 0.9345672

00:21:46.600 --> 00:21:48.980 So the in treatment the majority of  
NOTE Confidence: 0.9345672

00:21:48.980 --> 00:21:51.011 patients because they're going to have  
NOTE Confidence: 0.9345672

00:21:51.011 --> 00:21:52.913 low or intermediate risk surgery alone  
NOTE Confidence: 0.9345672

00:21:52.913 --> 00:21:55.070 and most of those patients are going  
NOTE Confidence: 0.9345672

00:21:55.070 --> 00:21:57.840 to be curative in a small percentage of  
NOTE Confidence: 0.9345672

00:21:57.840 --> 00:22:00.180 them adjuvant radiation in the vagina  
NOTE Confidence: 0.9345672

00:22:00.180 --> 00:22:02.794 will be all that's required to give  
NOTE Confidence: 0.9345672

00:22:02.794 --> 00:22:05.740 them a low risk of recurrent disease.  
NOTE Confidence: 0.9345672

00:22:05.740 --> 00:22:08.890 Advanced stage disease systemic therapy  
NOTE Confidence: 0.9345672

00:22:08.890 --> 00:22:12.530 is used including chemotherapy and  
NOTE Confidence: 0.9345672

00:22:12.530 --> 00:22:14.704 immunotherapy and increasing populations  
NOTE Confidence: 0.9345672

00:22:14.704 --> 00:22:18.525 of of of patients of now being identified  
NOTE Confidence: 0.9345672

00:22:18.525 --> 00:22:21.960 who will benefit enormously from the

NOTE Confidence: 0.9345672

00:22:21.960 --> 00:22:24.170 addition of immunotherapy specifically

NOTE Confidence: 0.9345672

00:22:24.170 --> 00:22:29.370 pembro that is sometimes can even be the

NOTE Confidence: 0.9345672

00:22:29.370 --> 00:22:32.720 independent of the biomarkers present.

NOTE Confidence: 0.9345672

00:22:32.720 --> 00:22:35.704 And I think I'm going to I think

NOTE Confidence: 0.9345672

00:22:35.704 --> 00:22:39.840 we're it's I have 628 is that right?

NOTE Confidence: 0.9345672

00:22:39.840 --> 00:22:41.360 You are correct. OK.

NOTE Confidence: 0.9345672

00:22:41.360 --> 00:22:43.664 So I'm going to think I'm going to

NOTE Confidence: 0.9345672

00:22:43.664 --> 00:22:47.377 hold here and if there any quick

NOTE Confidence: 0.9345672

00:22:47.377 --> 00:22:48.919 questions that I can answer that.

NOTE Confidence: 0.9345672

00:22:48.920 --> 00:22:51.160 If not, we'll hold it for the end

NOTE Confidence: 0.9345672

00:22:51.160 --> 00:22:53.599 and I'll introduce the next speaker,

NOTE Confidence: 0.970924855

00:22:56.800 --> 00:23:00.320 nothing yet, so you can go ahead

NOTE Confidence: 0.970924855

00:23:00.320 --> 00:23:02.160 and introduce. OK. The next

NOTE Confidence: 0.635105434545455

00:23:05.440 --> 00:23:07.816 colleague that it's my pleasure to

NOTE Confidence: 0.635105434545455

00:23:07.816 --> 00:23:10.000 introduce is Doctor Katya Papadla.

NOTE Confidence: 0.635105434545455

00:23:10.000 --> 00:23:13.010 She comes to us having finished her  
NOTE Confidence: 0.635105434545455

00:23:13.010 --> 00:23:14.782 fellowship in Gynecologic Oncology  
NOTE Confidence: 0.635105434545455

00:23:14.782 --> 00:23:17.944 at Mount Sinai and she's joined me  
NOTE Confidence: 0.635105434545455

00:23:17.944 --> 00:23:20.604 at Greenwich along with Hope and  
NOTE Confidence: 0.635105434545455

00:23:20.604 --> 00:23:23.716 we're happy to have her and she's  
NOTE Confidence: 0.635105434545455

00:23:23.716 --> 00:23:26.638 available also five days a week.  
NOTE Confidence: 0.635105434545455

00:23:26.640 --> 00:23:28.800 So I'm going to turn it over to her.  
NOTE Confidence: 0.966874306666667

00:23:32.920 --> 00:23:34.318 Hi, everyone. Thank  
NOTE Confidence: 0.880472228333333

00:23:34.320 --> 00:23:36.996 you Doctor Tina for that introduction.  
NOTE Confidence: 0.880472228333333

00:23:37.000 --> 00:23:41.000 I'm super happy to be here and to  
NOTE Confidence: 0.880472228333333

00:23:41.000 --> 00:23:43.296 discuss with all of you today.  
NOTE Confidence: 0.880472228333333

00:23:43.296 --> 00:23:46.768 I'm going to be talking about management  
NOTE Confidence: 0.880472228333333

00:23:46.768 --> 00:23:50.535 of annexal masses and kind of what to do,  
NOTE Confidence: 0.880472228333333

00:23:50.535 --> 00:23:51.840 how to triage them. Let me  
NOTE Confidence: 0.966698468

00:23:54.800 --> 00:23:55.960 just see if I can.  
NOTE Confidence: 0.8637927

00:23:58.520 --> 00:24:00.600 Can you all see that?

NOTE Confidence: 0.8637927

00:24:00.600 --> 00:24:05.240 OK, so indefla masses management and

NOTE Confidence: 0.8637927

00:24:05.240 --> 00:24:08.200 management of and malignancy risk assessment,

NOTE Confidence: 0.8637927

00:24:08.200 --> 00:24:09.284 I have no disclosures.

NOTE Confidence: 0.8637927

00:24:09.284 --> 00:24:11.559 I just want to say that I'll be

NOTE Confidence: 0.8637927

00:24:11.559 --> 00:24:13.323 using the term female here for

NOTE Confidence: 0.8637927

00:24:13.323 --> 00:24:15.038 the purpose of our discussion,

NOTE Confidence: 0.8637927

00:24:15.040 --> 00:24:16.635 with the acknowledgement that many

NOTE Confidence: 0.8637927

00:24:16.635 --> 00:24:18.230 individuals have ovaries and that

NOTE Confidence: 0.8637927

00:24:18.285 --> 00:24:19.740 gender expression may be different

NOTE Confidence: 0.8637927

00:24:19.740 --> 00:24:21.195 from assigned sex at birth.

NOTE Confidence: 0.8637927

00:24:21.200 --> 00:24:23.181 And EOC will be used to describe

NOTE Confidence: 0.8637927

00:24:23.181 --> 00:24:24.999 cancers of the fallopian tube,

NOTE Confidence: 0.8637927

00:24:25.000 --> 00:24:27.919 ovary and peritoneum.

NOTE Confidence: 0.8637927

00:24:27.920 --> 00:24:31.118 So some background on anexal masses.

NOTE Confidence: 0.8637927

00:24:31.120 --> 00:24:33.100 Approximately 10% of females will undergo

NOTE Confidence: 0.8637927

00:24:33.100 --> 00:24:35.678 surgery for an anexal mass in their lifetime,

NOTE Confidence: 0.8637927

00:24:35.680 --> 00:24:38.592 so in the US this number amounts to

NOTE Confidence: 0.8637927

00:24:38.592 --> 00:24:41.996 about 200 to 300,000 females a year.

NOTE Confidence: 0.8637927

00:24:42.000 --> 00:24:44.260 However, less than 20% of

NOTE Confidence: 0.8637927

00:24:44.260 --> 00:24:46.520 these masses will be malignant,

NOTE Confidence: 0.8637927

00:24:46.520 --> 00:24:48.230 so you know the large majority

NOTE Confidence: 0.8637927

00:24:48.230 --> 00:24:50.560 of them are benign.

NOTE Confidence: 0.8637927

00:24:50.560 --> 00:24:52.964 The prevalence of epithelial

NOTE Confidence: 0.8637927

00:24:52.964 --> 00:24:55.368 ovarian cancers are approximately

NOTE Confidence: 0.8637927

00:24:55.368 --> 00:24:59.600 1 case per 2500 females per year.

NOTE Confidence: 0.8637927

00:24:59.600 --> 00:25:01.775 The cumulative lifetime risk of

NOTE Confidence: 0.8637927

00:25:01.775 --> 00:25:04.365 an average aged woman in this

NOTE Confidence: 0.8637927

00:25:04.365 --> 00:25:07.073 country is about one in 78 or 1.3%.

NOTE Confidence: 0.8637927

00:25:07.073 --> 00:25:09.824 The median age and onset is 63

NOTE Confidence: 0.8637927

00:25:09.824 --> 00:25:12.349 years old and a large majority

NOTE Confidence: 0.8637927

00:25:12.349 --> 00:25:14.880 70% are diagnosed after age 55.

NOTE Confidence: 0.962311865

00:25:17.240 --> 00:25:18.840 As you all know there are no

NOTE Confidence: 0.962311865

00:25:18.840 --> 00:25:21.648 validated screening methods for

NOTE Confidence: 0.962311865

00:25:21.648 --> 00:25:23.754 epithelial ovarian carcinomas.

NOTE Confidence: 0.962311865

00:25:23.760 --> 00:25:26.100 Often times these patients present

NOTE Confidence: 0.962311865

00:25:26.100 --> 00:25:28.440 with non specific symptoms and

NOTE Confidence: 0.962311865

00:25:28.512 --> 00:25:30.500 many many females would not become

NOTE Confidence: 0.962311865

00:25:30.500 --> 00:25:32.200 symptomatic until late stage disease.

NOTE Confidence: 0.962311865

00:25:32.200 --> 00:25:35.280 So some of these symptoms are abdominal pain,

NOTE Confidence: 0.962311865

00:25:35.280 --> 00:25:36.304 constitutional symptoms,

NOTE Confidence: 0.962311865

00:25:36.304 --> 00:25:37.840 increasing abdominal size,

NOTE Confidence: 0.962311865

00:25:37.840 --> 00:25:39.415 bloating, urinary urgency.

NOTE Confidence: 0.962311865

00:25:39.415 --> 00:25:42.040 There have been various symptom

NOTE Confidence: 0.962311865

00:25:42.040 --> 00:25:44.624 indices developed in order to sort

NOTE Confidence: 0.962311865

00:25:44.624 --> 00:25:46.454 of standardize how we evaluate

NOTE Confidence: 0.962311865

00:25:46.454 --> 00:25:48.479 these symptoms and what this,

NOTE Confidence: 0.962311865

00:25:48.480 --> 00:25:50.880 you know, what each symptom,  
NOTE Confidence: 0.962311865

00:25:50.880 --> 00:25:52.959 what the risk of each symptom being  
NOTE Confidence: 0.962311865

00:25:52.959 --> 00:25:54.960 associated with an A carcinoma can be.  
NOTE Confidence: 0.962311865

00:25:54.960 --> 00:25:58.390 But the outcomes were really varied  
NOTE Confidence: 0.962311865

00:25:58.390 --> 00:26:01.118 with these indices and so it was  
NOTE Confidence: 0.962311865

00:26:01.118 --> 00:26:02.878 not recommended to use these.  
NOTE Confidence: 0.962311865

00:26:02.880 --> 00:26:03.280 Like I  
NOTE Confidence: 0.75544243

00:26:03.360 --> 00:26:04.640 said, sorry to interrupt you.  
NOTE Confidence: 0.75544243

00:26:04.640 --> 00:26:06.295 Can you just click somehow  
NOTE Confidence: 0.75544243

00:26:06.295 --> 00:26:07.638 your presenter mode went off.  
NOTE Confidence: 0.75544243

00:26:07.640 --> 00:26:09.680 Can you click on your  
NOTE Confidence: 0.75544243

00:26:09.680 --> 00:26:11.480 screen share share again?  
NOTE Confidence: 0.6995813925

00:26:12.240 --> 00:26:14.980 Yeah. One second. Bottom. Yeah.  
NOTE Confidence: 0.6995813925

00:26:14.980 --> 00:26:18.720 Yeah, that's odd. Let me see. Yeah, we  
NOTE Confidence: 0.902348915

00:26:18.720 --> 00:26:19.800 could see your presentation,  
NOTE Confidence: 0.902348915

00:26:19.800 --> 00:26:22.680 but you were still in your.

NOTE Confidence: 0.902348915

00:26:22.680 --> 00:26:25.000 You weren't in the presenting mode.

NOTE Confidence: 0.902348915

00:26:25.000 --> 00:26:28.000 Oh, there you go. Oh,

NOTE Confidence: 0.879456325

00:26:33.040 --> 00:26:35.480 how's that? Perfect. OK.

NOTE Confidence: 0.83869279625

00:26:36.560 --> 00:26:38.030 Yeah. No, thank you for pointing

NOTE Confidence: 0.83869279625

00:26:38.030 --> 00:26:43.160 that out. Let's see what was I so,

NOTE Confidence: 0.8166773875

00:26:46.960 --> 00:26:49.480 so 70 to 80% because of these non,

NOTE Confidence: 0.8166773875

00:26:49.480 --> 00:26:52.120 non specific symptoms 70 to 80%

NOTE Confidence: 0.8166773875

00:26:52.120 --> 00:26:54.000 of patients with epithelial brain

NOTE Confidence: 0.8166773875

00:26:54.000 --> 00:26:55.880 carcinoma are diagnosed late stage.

NOTE Confidence: 0.8166773875

00:26:55.880 --> 00:26:58.280 And we know you know from years of

NOTE Confidence: 0.8166773875

00:26:58.280 --> 00:27:00.025 gathering data and from treating

NOTE Confidence: 0.8166773875

00:27:00.025 --> 00:27:01.830 these patients that the five

NOTE Confidence: 0.8166773875

00:27:01.830 --> 00:27:03.535 year overall survival in these

NOTE Confidence: 0.8166773875

00:27:03.535 --> 00:27:05.677 patients is for about 20 to 30%.

NOTE Confidence: 0.8166773875

00:27:05.680 --> 00:27:07.640 In contrast, those that are

NOTE Confidence: 0.8166773875

00:27:07.640 --> 00:27:09.877 diagnosed with stage 1 disease have  
NOTE Confidence: 0.8166773875

00:27:09.877 --> 00:27:13.517 a 90 to a 95% probability of cure.  
NOTE Confidence: 0.8166773875

00:27:13.520 --> 00:27:15.960 So therefore a thorough preoperative  
NOTE Confidence: 0.8166773875

00:27:15.960 --> 00:27:17.950 risk assessment assessment is really  
NOTE Confidence: 0.8166773875

00:27:17.950 --> 00:27:20.626 critical in order to triage those the  
NOTE Confidence: 0.8166773875

00:27:20.626 --> 00:27:23.114 highest risk of cancer and refer them to  
NOTE Confidence: 0.8166773875

00:27:23.178 --> 00:27:25.478 gynecologic oncologists if indicated.  
NOTE Confidence: 0.917048583076923

00:27:29.480 --> 00:27:31.296 So I wanted to.  
NOTE Confidence: 0.917048583076923

00:27:31.296 --> 00:27:34.020 This table is actually taken from  
NOTE Confidence: 0.917048583076923

00:27:34.113 --> 00:27:37.032 one of the American Academy of  
NOTE Confidence: 0.917048583076923

00:27:37.032 --> 00:27:38.986 Family Practitioners resources  
NOTE Confidence: 0.917048583076923

00:27:38.986 --> 00:27:42.116 on management of annexal masses.  
NOTE Confidence: 0.917048583076923

00:27:42.120 --> 00:27:43.278 Because you know we have many,  
NOTE Confidence: 0.917048583076923

00:27:43.280 --> 00:27:44.745 many primary care providers that  
NOTE Confidence: 0.917048583076923

00:27:44.745 --> 00:27:46.680 we do NS family medicine doctors,  
NOTE Confidence: 0.917048583076923

00:27:46.680 --> 00:27:50.537 internists at CDs patients and are the

NOTE Confidence: 0.917048583076923  
00:27:50.537 --> 00:27:53.790 first line people who are hearing the  
NOTE Confidence: 0.917048583076923  
00:27:53.790 --> 00:27:57.080 complaint about pain or an annexal mass.  
NOTE Confidence: 0.917048583076923  
00:27:57.080 --> 00:27:59.180 And so this table just looks with  
NOTE Confidence: 0.917048583076923  
00:27:59.180 --> 00:28:01.130 the sensitivity and specificity of  
NOTE Confidence: 0.917048583076923  
00:28:01.130 --> 00:28:03.350 the presenting symptoms in order to  
NOTE Confidence: 0.917048583076923  
00:28:03.350 --> 00:28:05.440 identify patients with ovarian cancer.  
NOTE Confidence: 0.917048583076923  
00:28:05.440 --> 00:28:08.608 And you can see that you know sensitivity  
NOTE Confidence: 0.917048583076923  
00:28:08.608 --> 00:28:11.040 which really really it refers to  
NOTE Confidence: 0.917048583076923  
00:28:11.040 --> 00:28:13.472 the tech's ability to note somebody  
NOTE Confidence: 0.917048583076923  
00:28:13.472 --> 00:28:16.244 with who has disease as positive is  
NOTE Confidence: 0.917048583076923  
00:28:16.244 --> 00:28:18.877 quite low for all of these symptoms.  
NOTE Confidence: 0.917048583076923  
00:28:18.880 --> 00:28:21.266 It really only becomes high when  
NOTE Confidence: 0.917048583076923  
00:28:21.266 --> 00:28:23.760 patients are coming in with you  
NOTE Confidence: 0.917048583076923  
00:28:23.760 --> 00:28:26.560 know three or four symptoms,  
NOTE Confidence: 0.917048583076923  
00:28:26.560 --> 00:28:29.434 you know and similarly really the  
NOTE Confidence: 0.917048583076923

00:28:29.434 --> 00:28:32.298 only ones that have the high positive  
NOTE Confidence: 0.917048583076923

00:28:32.298 --> 00:28:34.032 likelihood ratios that here in that  
NOTE Confidence: 0.917048583076923

00:28:34.032 --> 00:28:35.734 third column are the four or more  
NOTE Confidence: 0.917048583076923

00:28:35.734 --> 00:28:37.280 symptoms or three or more symptoms.  
NOTE Confidence: 0.917048583076923

00:28:37.280 --> 00:28:39.638 And this kind of explains why  
NOTE Confidence: 0.917048583076923

00:28:39.640 --> 00:28:40.516 you know a lot of times,  
NOTE Confidence: 0.917048583076923

00:28:40.520 --> 00:28:42.144 a lot of times these patients do  
NOTE Confidence: 0.917048583076923

00:28:42.144 --> 00:28:43.975 end up kind of not really being  
NOTE Confidence: 0.917048583076923

00:28:43.975 --> 00:28:45.275 diagnosed until later stage.  
NOTE Confidence: 0.85479934

00:28:47.880 --> 00:28:50.517 OK. So how do we assess the pelvic mass?  
NOTE Confidence: 0.85479934

00:28:50.520 --> 00:28:53.355 Pelvic ultrasound is typically what I think  
NOTE Confidence: 0.85479934

00:28:53.355 --> 00:28:56.598 many of us put in as our first order.  
NOTE Confidence: 0.85479934

00:28:56.600 --> 00:28:58.365 The sensitivity and sensitivity for  
NOTE Confidence: 0.85479934

00:28:58.365 --> 00:29:00.478 the for the pelvic ultrasound in  
NOTE Confidence: 0.85479934

00:29:00.478 --> 00:29:02.473 effecting A pelvic mass is pretty good,  
NOTE Confidence: 0.85479934

00:29:02.480 --> 00:29:07.394 86 to 84% sensitive and 94 to 96 specific.

NOTE Confidence: 0.85479934

00:29:07.400 --> 00:29:10.501 However it does have a relatively low

NOTE Confidence: 0.85479934

00:29:10.501 --> 00:29:12.585 positive predictive value for malignancy

NOTE Confidence: 0.85479934

00:29:12.585 --> 00:29:15.464 35 to 40% And the pelvic ultrasound

NOTE Confidence: 0.85479934

00:29:15.464 --> 00:29:18.676 is also really subject to you know

NOTE Confidence: 0.85479934

00:29:18.676 --> 00:29:19.990 ultrasonographer subjectivity scale

NOTE Confidence: 0.85479934

00:29:19.990 --> 00:29:23.000 as well as inter observer variability.

NOTE Confidence: 0.85479934

00:29:23.000 --> 00:29:25.240 SO1 Ultrasonographer may not read

NOTE Confidence: 0.85479934

00:29:25.240 --> 00:29:27.480 it the same as another.

NOTE Confidence: 0.85479934

00:29:27.480 --> 00:29:29.640 If the ultrasound is really,

NOTE Confidence: 0.85479934

00:29:29.640 --> 00:29:30.837 you know, it's not a good exam,

NOTE Confidence: 0.85479934

00:29:30.840 --> 00:29:32.316 you're not able to characterize it,

NOTE Confidence: 0.85479934

00:29:32.320 --> 00:29:34.080 then the next step would be an MRI.

NOTE Confidence: 0.85479934

00:29:34.080 --> 00:29:37.163 Pelvis characteristics on ultrasound

NOTE Confidence: 0.85479934

00:29:37.163 --> 00:29:39.970 or MRI that are suggestive of a

NOTE Confidence: 0.85479934

00:29:40.045 --> 00:29:42.680 malignancy include cystic solid lesions,

NOTE Confidence: 0.85479934

00:29:42.680 --> 00:29:45.040 lesions that have thick temptations,  
NOTE Confidence: 0.85479934

00:29:45.040 --> 00:29:46.216 papillary expressedances,  
NOTE Confidence: 0.85479934

00:29:46.216 --> 00:29:49.156 neural nodules, increased Doppler flow,  
NOTE Confidence: 0.85479934

00:29:49.160 --> 00:29:52.042 especially increased Doppler flow  
NOTE Confidence: 0.85479934

00:29:52.042 --> 00:29:54.046 at the area of the temptation  
NOTE Confidence: 0.85479934

00:29:54.046 --> 00:29:55.878 and the presence of ascites.  
NOTE Confidence: 0.948538235

00:29:58.880 --> 00:30:00.720 So interestingly, even though you  
NOTE Confidence: 0.948538235

00:30:00.720 --> 00:30:03.512 know we talked about this sort of  
NOTE Confidence: 0.948538235

00:30:03.512 --> 00:30:05.892 low positive predictive value for  
NOTE Confidence: 0.948538235

00:30:05.892 --> 00:30:08.298 a pelvic ultrasound as per ACOG,  
NOTE Confidence: 0.948538235

00:30:08.298 --> 00:30:09.928 there's quote no alternative imaging  
NOTE Confidence: 0.948538235

00:30:09.928 --> 00:30:11.544 modality that has demonstrated  
NOTE Confidence: 0.948538235

00:30:11.544 --> 00:30:12.909 sufficient superiority to  
NOTE Confidence: 0.948538235

00:30:12.909 --> 00:30:14.274 transcendental ultracide stenography  
NOTE Confidence: 0.948538235

00:30:14.274 --> 00:30:16.637 in order to justify its routine use.  
NOTE Confidence: 0.948538235

00:30:16.640 --> 00:30:18.621 So really it is the best thing

NOTE Confidence: 0.948538235

00:30:18.621 --> 00:30:21.092 we have as the first step for

NOTE Confidence: 0.948538235

00:30:21.092 --> 00:30:23.480 assessing these patients. And

NOTE Confidence: 0.9556101425

00:30:23.480 --> 00:30:24.680 I just wanted to

NOTE Confidence: 0.930841772857143

00:30:26.080 --> 00:30:30.670 show you some examples of ultrasound

NOTE Confidence: 0.930841772857143

00:30:30.670 --> 00:30:33.012 images in different scenarios and

NOTE Confidence: 0.930841772857143

00:30:33.012 --> 00:30:36.114 why why this isn't the best and why

NOTE Confidence: 0.930841772857143

00:30:36.114 --> 00:30:38.438 you know why it can be confusing.

NOTE Confidence: 0.930841772857143

00:30:38.440 --> 00:30:41.360 So you know on the left side we have a 67,

NOTE Confidence: 0.930841772857143

00:30:41.360 --> 00:30:43.970 sorry, left upper corner we have a 67 year

NOTE Confidence: 0.930841772857143

00:30:43.970 --> 00:30:46.543 old female with a mucinous cystadenoma

NOTE Confidence: 0.930841772857143

00:30:46.543 --> 00:30:48.753 on her final peptiologic diagnosis.

NOTE Confidence: 0.930841772857143

00:30:48.760 --> 00:30:50.920 You can see on her imaging that she has

NOTE Confidence: 0.930841772857143

00:30:50.920 --> 00:30:53.520 a thick septation here with Doppler flow.

NOTE Confidence: 0.930841772857143

00:30:53.520 --> 00:30:56.195 She has a possible posterior

NOTE Confidence: 0.930841772857143

00:30:56.195 --> 00:30:58.648 mirror nodule and you know,

NOTE Confidence: 0.930841772857143

00:30:58.648 --> 00:31:00.550 ultimately she's 67, she's post menopausal.

NOTE Confidence: 0.930841772857143

00:31:00.550 --> 00:31:02.312 So this to me it would be a

NOTE Confidence: 0.930841772857143

00:31:02.312 --> 00:31:03.517 high risk ultrasound she under.

NOTE Confidence: 0.930841772857143

00:31:03.520 --> 00:31:05.360 She undergoes surgery and

NOTE Confidence: 0.930841772857143

00:31:05.360 --> 00:31:07.200 the pathology is benign.

NOTE Confidence: 0.816936065555555

00:31:09.600 --> 00:31:11.322 On the right hand side you

NOTE Confidence: 0.816936065555555

00:31:11.322 --> 00:31:13.222 have a patient 25 year old

NOTE Confidence: 0.816936065555555

00:31:13.222 --> 00:31:15.274 presenting with a night NAL cyst.

NOTE Confidence: 0.816936065555555

00:31:15.280 --> 00:31:17.200 She has really this kind of,

NOTE Confidence: 0.816936065555555

00:31:17.200 --> 00:31:20.730 you know, fairly large papillary

NOTE Confidence: 0.816936065555555

00:31:20.730 --> 00:31:22.524 expresses within a simple cyst.

NOTE Confidence: 0.816936065555555

00:31:22.524 --> 00:31:24.150 And for her this is a

NOTE Confidence: 0.816936065555555

00:31:24.220 --> 00:31:25.798 serious borderline tumor.

NOTE Confidence: 0.925634726666667

00:31:28.080 --> 00:31:31.214 In the lower left hand corner, you know,

NOTE Confidence: 0.925634726666667

00:31:31.214 --> 00:31:34.343 you can see another ultrasound with a

NOTE Confidence: 0.925634726666667

00:31:34.343 --> 00:31:36.840 neuronodule and nonvascular septation,

NOTE Confidence: 0.925634726666667  
00:31:36.840 --> 00:31:39.040 some posterior acoustic shadowings, and  
NOTE Confidence: 0.925634726666667  
00:31:39.040 --> 00:31:42.399 this patient had a mature cystic teratoma.  
NOTE Confidence: 0.925634726666667  
00:31:42.400 --> 00:31:45.011 And then finally on the bottom right  
NOTE Confidence: 0.925634726666667  
00:31:45.011 --> 00:31:48.220 hand side, there's a 68 year old  
NOTE Confidence: 0.925634726666667  
00:31:48.220 --> 00:31:50.680 with again these thin septations.  
NOTE Confidence: 0.925634726666667  
00:31:50.680 --> 00:31:52.840 She has some, you know,  
NOTE Confidence: 0.925634726666667  
00:31:52.840 --> 00:31:55.115 cystic and solid lesions at the top,  
NOTE Confidence: 0.925634726666667  
00:31:55.120 --> 00:31:58.155 at the top of her ultrasound here and  
NOTE Confidence: 0.925634726666667  
00:31:58.155 --> 00:32:00.675 this patient did indeed have a high grade  
NOTE Confidence: 0.925634726666667  
00:32:00.675 --> 00:32:02.720 papillary sears carcinoma of the ovary.  
NOTE Confidence: 0.925634726666667  
00:32:02.720 --> 00:32:06.832 So you know, I think my point here is  
NOTE Confidence: 0.925634726666667  
00:32:06.832 --> 00:32:09.040 just that ultrasounds are very varied.  
NOTE Confidence: 0.925634726666667  
00:32:09.040 --> 00:32:11.340 If you're ever concerned, you know,  
NOTE Confidence: 0.925634726666667  
00:32:11.340 --> 00:32:13.880 I think pelvic MRI is a good next step,  
NOTE Confidence: 0.925634726666667  
00:32:13.880 --> 00:32:15.506 but there's also other tools that  
NOTE Confidence: 0.925634726666667

00:32:15.506 --> 00:32:17.520 we can use in order to assess  
NOTE Confidence: 0.925634726666667

00:32:17.520 --> 00:32:20.880 somebody's risk for cancer.  
NOTE Confidence: 0.925634726666667

00:32:20.880 --> 00:32:21.726 If there's a,  
NOTE Confidence: 0.925634726666667

00:32:21.726 --> 00:32:24.048 if you do have a suspicious complex mass  
NOTE Confidence: 0.925634726666667

00:32:24.048 --> 00:32:25.800 then you can combine the transnational  
NOTE Confidence: 0.925634726666667

00:32:25.800 --> 00:32:27.728 ultrasound with the CA-125 in order  
NOTE Confidence: 0.925634726666667

00:32:27.728 --> 00:32:29.720 to help with the risk assessment.  
NOTE Confidence: 0.925634726666667

00:32:29.720 --> 00:32:30.860 So and we'll talk about this  
NOTE Confidence: 0.925634726666667

00:32:30.860 --> 00:32:31.960 in a little more detail,  
NOTE Confidence: 0.925634726666667

00:32:31.960 --> 00:32:34.396 but just to note that this method  
NOTE Confidence: 0.925634726666667

00:32:34.396 --> 00:32:36.410 is not recommended as cleaning  
NOTE Confidence: 0.925634726666667

00:32:36.410 --> 00:32:38.198 in average risk populations.  
NOTE Confidence: 0.925634726666667

00:32:38.200 --> 00:32:40.320 There's a large trial for the prostate lung,  
NOTE Confidence: 0.925634726666667

00:32:40.320 --> 00:32:41.716 colorectal ovarian cancer screening  
NOTE Confidence: 0.925634726666667

00:32:41.716 --> 00:32:43.810 trial who's the US based randomized  
NOTE Confidence: 0.925634726666667

00:32:43.862 --> 00:32:45.746 control trial that had about 34,000

NOTE Confidence: 0.925634726666667  
00:32:45.746 --> 00:32:47.770 average risk females enrolled  
NOTE Confidence: 0.925634726666667  
00:32:47.770 --> 00:32:51.204 between the ages of 7055 and 74.  
NOTE Confidence: 0.925634726666667  
00:32:51.204 --> 00:32:54.012 They underwent annual say 125 and  
NOTE Confidence: 0.925634726666667  
00:32:54.012 --> 00:32:55.988 transcendental ultrasound versus just  
NOTE Confidence: 0.925634726666667  
00:32:55.988 --> 00:32:58.844 the usual care with annual pelvic  
NOTE Confidence: 0.925634726666667  
00:32:58.844 --> 00:33:00.760 exams and the positive curiosity  
NOTE Confidence: 0.925634726666667  
00:33:00.760 --> 00:33:02.920 value for you know the ultimate  
NOTE Confidence: 0.925634726666667  
00:33:02.987 --> 00:33:05.261 diagnosis of an ovarian carcinoma in  
NOTE Confidence: 0.925634726666667  
00:33:05.261 --> 00:33:07.399 this population was just about 1%.  
NOTE Confidence: 0.925634726666667  
00:33:07.400 --> 00:33:09.504 So this is not something that you would  
NOTE Confidence: 0.925634726666667  
00:33:09.504 --> 00:33:12.163 do in you know the average risk patient  
NOTE Confidence: 0.925634726666667  
00:33:12.163 --> 00:33:14.484 who's not presenting with you know  
NOTE Confidence: 0.925634726666667  
00:33:14.484 --> 00:33:16.240 really concerning clinical symptoms.  
NOTE Confidence: 0.925634726666667  
00:33:16.240 --> 00:33:18.240 So just to back up for a second,  
NOTE Confidence: 0.925634726666667  
00:33:18.240 --> 00:33:19.540 what is CA 1.5,  
NOTE Confidence: 0.925634726666667

00:33:19.540 --> 00:33:21.490 this is a monoclonal antibody to  
NOTE Confidence: 0.925634726666667

00:33:21.559 --> 00:33:24.120 the Ocarian cancer antigen OC 125.  
NOTE Confidence: 0.925634726666667

00:33:24.120 --> 00:33:26.810 It is elevated in 80% of patients  
NOTE Confidence: 0.925634726666667

00:33:26.810 --> 00:33:29.266 with advanced disease but only 50% of  
NOTE Confidence: 0.925634726666667

00:33:29.266 --> 00:33:31.196 patients with early stage disease.  
NOTE Confidence: 0.925634726666667

00:33:31.200 --> 00:33:32.200 So the way that I,  
NOTE Confidence: 0.925634726666667

00:33:32.200 --> 00:33:35.399 you know tell my patients is that  
NOTE Confidence: 0.925634726666667

00:33:35.400 --> 00:33:36.960 if I'm concerned enough to be  
NOTE Confidence: 0.925634726666667

00:33:36.960 --> 00:33:38.731 ordering a CA-125 for you,  
NOTE Confidence: 0.925634726666667

00:33:38.731 --> 00:33:40.399 even if it's negative,  
NOTE Confidence: 0.925634726666667

00:33:40.400 --> 00:33:41.670 you know it doesn't necessarily  
NOTE Confidence: 0.925634726666667

00:33:41.670 --> 00:33:43.400 mean that you don't have anything.  
NOTE Confidence: 0.925634726666667

00:33:43.400 --> 00:33:46.160 It is poorly sensitive and specific  
NOTE Confidence: 0.925634726666667

00:33:46.160 --> 00:33:48.000 for early stage detection.  
NOTE Confidence: 0.925634726666667

00:33:48.000 --> 00:33:50.000 Specificity does increase with  
NOTE Confidence: 0.925634726666667

00:33:50.000 --> 00:33:51.000 menopausal status.

NOTE Confidence: 0.925634726666667  
00:33:51.000 --> 00:33:54.087 So post menopausal women have an increased  
NOTE Confidence: 0.925634726666667  
00:33:54.087 --> 00:33:56.878 specificity compared to pre menopausal women.  
NOTE Confidence: 0.925634726666667  
00:33:56.880 --> 00:33:59.050 However, there are many false  
NOTE Confidence: 0.925634726666667  
00:33:59.050 --> 00:34:01.360 positive causes including fibroids,  
NOTE Confidence: 0.925634726666667  
00:34:01.360 --> 00:34:02.800 PID, endometriosis,  
NOTE Confidence: 0.925634726666667  
00:34:02.800 --> 00:34:03.868 adenomyosis, pregnancy,  
NOTE Confidence: 0.925634726666667  
00:34:03.868 --> 00:34:06.304 menstruation and even things that are not  
NOTE Confidence: 0.925634726666667  
00:34:06.304 --> 00:34:08.239 associated with the gynecologic organs.  
NOTE Confidence: 0.925634726666667  
00:34:08.240 --> 00:34:09.896 So kidney disease,  
NOTE Confidence: 0.925634726666667  
00:34:09.896 --> 00:34:11.000 CHF, cirrhosis,  
NOTE Confidence: 0.925634726666667  
00:34:11.000 --> 00:34:13.688 infections or inflammatory diseases,  
NOTE Confidence: 0.925634726666667  
00:34:13.688 --> 00:34:15.704 patients with tuberculosis  
NOTE Confidence: 0.925634726666667  
00:34:15.704 --> 00:34:17.720 and other malignancies.  
NOTE Confidence: 0.925634726666667  
00:34:17.720 --> 00:34:19.688 So it's always something to keep  
NOTE Confidence: 0.925634726666667  
00:34:19.688 --> 00:34:21.636 in mind when ordering this value  
NOTE Confidence: 0.925634726666667

00:34:21.636 --> 00:34:23.390 and overall like a one time  
NOTE Confidence: 0.925634726666667

00:34:23.390 --> 00:34:25.276 measurement is not as helpful as  
NOTE Confidence: 0.925634726666667

00:34:25.276 --> 00:34:27.076 measuring multiple values over time.  
NOTE Confidence: 0.96114794

00:34:31.840 --> 00:34:35.160 Before we move on, I just wanted to like  
NOTE Confidence: 0.96114794

00:34:35.160 --> 00:34:38.088 again include what the AAFP recommends  
NOTE Confidence: 0.96114794

00:34:38.088 --> 00:34:40.598 for assessing an enactable mass.  
NOTE Confidence: 0.96114794

00:34:40.600 --> 00:34:43.379 And I think my point of including  
NOTE Confidence: 0.96114794

00:34:43.379 --> 00:34:46.460 this here is that the only A level  
NOTE Confidence: 0.96114794

00:34:46.460 --> 00:34:47.760 evidence rating that they really  
NOTE Confidence: 0.96114794

00:34:47.760 --> 00:34:50.560 were able to to give was that  
NOTE Confidence: 0.96114794

00:34:50.560 --> 00:34:52.372 they that they recommend against  
NOTE Confidence: 0.96114794

00:34:52.372 --> 00:34:54.137 the routine screening for ovarian  
NOTE Confidence: 0.96114794

00:34:54.137 --> 00:34:57.160 cancer with ultrasound C-125.  
NOTE Confidence: 0.96114794

00:34:57.160 --> 00:34:58.225 We really don't have a  
NOTE Confidence: 0.96114794

00:34:58.225 --> 00:34:59.480 good way to screen for it.  
NOTE Confidence: 0.959865125

00:35:01.920 --> 00:35:05.852 Moving on, in addition to CA-125,

NOTE Confidence: 0.959865125

00:35:05.852 --> 00:35:10.000 there is a molecule called HE4 that

NOTE Confidence: 0.959865125

00:35:10.000 --> 00:35:12.430 I think we're using more frequently

NOTE Confidence: 0.959865125

00:35:12.430 --> 00:35:14.598 now when assessing in an exile mask.

NOTE Confidence: 0.959865125

00:35:14.600 --> 00:35:17.440 So this is the human epididymis protein four.

NOTE Confidence: 0.959865125

00:35:17.440 --> 00:35:19.510 It is primarily released by malignant

NOTE Confidence: 0.959865125

00:35:19.510 --> 00:35:21.744 ovarian cells and thus is less

NOTE Confidence: 0.959865125

00:35:21.744 --> 00:35:23.719 frequently elevated in benign neoplasms.

NOTE Confidence: 0.959865125

00:35:23.720 --> 00:35:26.536 It's also thought to be a marker of

NOTE Confidence: 0.959865125

00:35:26.536 --> 00:35:29.296 metastasis and chemo resistance and it

NOTE Confidence: 0.959865125

00:35:29.296 --> 00:35:31.661 has good utility in complementing CA-125.

NOTE Confidence: 0.959865125

00:35:31.661 --> 00:35:33.429 So if you think that a patient is

NOTE Confidence: 0.959865125

00:35:33.429 --> 00:35:35.182 at risk for a false positive CA-125,

NOTE Confidence: 0.959865125

00:35:35.182 --> 00:35:36.958 let's say you have some of the Nyxomas,

NOTE Confidence: 0.959865125

00:35:36.960 --> 00:35:39.504 but she also has chronic kidney disease and

NOTE Confidence: 0.959865125

00:35:39.504 --> 00:35:42.196 she has reason to have a false positive.

NOTE Confidence: 0.959865125

00:35:42.200 --> 00:35:44.312 This adding HD four can improve  
NOTE Confidence: 0.959865125

00:35:44.312 --> 00:35:46.120 the specificity of the test.  
NOTE Confidence: 0.959865125

00:35:46.120 --> 00:35:48.990 It's also useful in those patients who  
NOTE Confidence: 0.959865125

00:35:48.990 --> 00:35:51.914 do not express ACA 125 and studies have  
NOTE Confidence: 0.959865125

00:35:51.914 --> 00:35:54.420 found that it has greater sensitivity in  
NOTE Confidence: 0.959865125

00:35:54.486 --> 00:35:56.840 early stage disease compared with CA-125.  
NOTE Confidence: 0.889331418888889

00:35:59.480 --> 00:36:00.920 OK, So what are our options  
NOTE Confidence: 0.889331418888889

00:36:00.920 --> 00:36:01.640 for risk assessment?  
NOTE Confidence: 0.889331418888889

00:36:01.640 --> 00:36:04.837 There are there have been various sort  
NOTE Confidence: 0.889331418888889

00:36:04.837 --> 00:36:06.622 of algorithms or calculators created  
NOTE Confidence: 0.889331418888889

00:36:06.622 --> 00:36:09.408 in order to help us as a field really  
NOTE Confidence: 0.889331418888889

00:36:09.408 --> 00:36:11.786 triage who we need to be worried about  
NOTE Confidence: 0.889331418888889

00:36:11.786 --> 00:36:14.159 since we can't really screen for them.  
NOTE Confidence: 0.889331418888889

00:36:14.160 --> 00:36:16.761 So one of the first ones is called the  
NOTE Confidence: 0.889331418888889

00:36:16.761 --> 00:36:19.199 risk of malignancy index of the RMI.  
NOTE Confidence: 0.889331418888889

00:36:19.200 --> 00:36:20.480 This was developed by Dr.

NOTE Confidence: 0.889331418888889  
00:36:20.480 --> 00:36:23.574 Ian Jacobs in 1990 in Australia and  
NOTE Confidence: 0.889331418888889  
00:36:23.574 --> 00:36:26.258 had been validated in separate studies  
NOTE Confidence: 0.889331418888889  
00:36:26.258 --> 00:36:29.233 in the late 90s and early 2000s.  
NOTE Confidence: 0.889331418888889  
00:36:29.240 --> 00:36:31.670 So this the RMI uses a formula to assist  
NOTE Confidence: 0.889331418888889  
00:36:31.670 --> 00:36:34.156 the rest the risk score of the patient.  
NOTE Confidence: 0.889331418888889  
00:36:34.160 --> 00:36:36.806 So the RMI formula is the menopausal  
NOTE Confidence: 0.889331418888889  
00:36:36.806 --> 00:36:38.816 status that you get three points  
NOTE Confidence: 0.889331418888889  
00:36:38.816 --> 00:36:39.680 if you're postmenopausal,  
NOTE Confidence: 0.889331418888889  
00:36:39.680 --> 00:36:41.680 one point if you're premenopausal  
NOTE Confidence: 0.889331418888889  
00:36:41.680 --> 00:36:42.480 or perimenopausal.  
NOTE Confidence: 0.889331418888889  
00:36:42.480 --> 00:36:45.287 So that that point number multiplied by  
NOTE Confidence: 0.889331418888889  
00:36:45.287 --> 00:36:47.598 the ultrasound score which is assigned  
NOTE Confidence: 0.889331418888889  
00:36:47.598 --> 00:36:50.523 based on a number of features like we  
NOTE Confidence: 0.889331418888889  
00:36:50.523 --> 00:36:52.638 discussed like solid areas ascites,  
NOTE Confidence: 0.889331418888889  
00:36:52.640 --> 00:36:53.664 intraepdotal meths,  
NOTE Confidence: 0.889331418888889

00:36:53.664 --> 00:36:55.712 multiloculated cysts and then  
NOTE Confidence: 0.889331418888889

00:36:55.712 --> 00:36:58.360 also multiplied by the CA-125  
NOTE Confidence: 0.889331418888889

00:36:58.360 --> 00:37:01.360 in units per minute later.  
NOTE Confidence: 0.889331418888889

00:37:01.360 --> 00:37:07.680 So here I want this over here.  
NOTE Confidence: 0.889331418888889

00:37:07.680 --> 00:37:09.696 I played around with it a little  
NOTE Confidence: 0.889331418888889

00:37:09.696 --> 00:37:11.440 bit and what I found is that  
NOTE Confidence: 0.889331418888889

00:37:11.440 --> 00:37:12.973 it's very dependent on the CA-125  
NOTE Confidence: 0.889331418888889

00:37:12.973 --> 00:37:14.838 level and the menopausal status.  
NOTE Confidence: 0.889331418888889

00:37:14.840 --> 00:37:16.580 So in this case you can see  
NOTE Confidence: 0.889331418888889

00:37:16.580 --> 00:37:18.128 these two patients side by side.  
NOTE Confidence: 0.889331418888889

00:37:18.128 --> 00:37:21.096 I kind of plugged in the same cyst  
NOTE Confidence: 0.889331418888889

00:37:21.096 --> 00:37:23.788 characteristics and the same CA-125.  
NOTE Confidence: 0.889331418888889

00:37:23.788 --> 00:37:25.931 Both of them have a low CA-125 of 12.  
NOTE Confidence: 0.889331418888889

00:37:25.931 --> 00:37:27.473 The only thing that was different  
NOTE Confidence: 0.889331418888889

00:37:27.473 --> 00:37:29.235 is that on the left this patient  
NOTE Confidence: 0.889331418888889

00:37:29.235 --> 00:37:30.836 has a pre menopausal status and on

NOTE Confidence: 0.889331418888889  
00:37:30.836 --> 00:37:32.280 the right she's post menopausal.  
NOTE Confidence: 0.834001772857143  
00:37:34.280 --> 00:37:35.197 And so you can see that the  
NOTE Confidence: 0.947875390909091  
00:37:35.200 --> 00:37:36.859 patient on the left has a low  
NOTE Confidence: 0.947875390909091  
00:37:36.859 --> 00:37:38.510 risk score of 36, but anything  
NOTE Confidence: 0.947875390909091  
00:37:38.510 --> 00:37:40.640 under 200 is considered low risk.  
NOTE Confidence: 0.947875390909091  
00:37:40.640 --> 00:37:41.984 And the patient on the left  
NOTE Confidence: 0.947875390909091  
00:37:41.984 --> 00:37:43.680 has sort of an indeterminate,  
NOTE Confidence: 0.947875390909091  
00:37:43.680 --> 00:37:45.410 you know, intermediate I should  
NOTE Confidence: 0.947875390909091  
00:37:45.410 --> 00:37:48.598 say risk score not not above 200,  
NOTE Confidence: 0.947875390909091  
00:37:48.600 --> 00:37:50.450 but I wouldn't say it's, you know,  
NOTE Confidence: 0.947875390909091  
00:37:50.450 --> 00:37:52.280 low enough that I would be  
NOTE Confidence: 0.947875390909091  
00:37:52.280 --> 00:37:54.278 OK to just watch this person.  
NOTE Confidence: 0.947875390909091  
00:37:54.280 --> 00:37:56.261 So that was kind of the number  
NOTE Confidence: 0.947875390909091  
00:37:56.261 --> 00:37:57.999 one thing that I noted here.  
NOTE Confidence: 0.713942588333333  
00:38:00.160 --> 00:38:01.792 What I also was interesting was  
NOTE Confidence: 0.713942588333333

00:38:01.792 --> 00:38:03.680 like if I change this patient,  
NOTE Confidence: 0.713942588333333

00:38:03.680 --> 00:38:12.185 so now I kept everything the same except  
NOTE Confidence: 0.713942588333333

00:38:12.185 --> 00:38:15.220 I included yes to inter abdominal  
NOTE Confidence: 0.713942588333333

00:38:15.220 --> 00:38:18.337 meths and increased the CA-125 to 45.  
NOTE Confidence: 0.713942588333333

00:38:18.337 --> 00:38:21.830 This patient still had a score of  
NOTE Confidence: 0.713942588333333

00:38:21.937 --> 00:38:24.635 135 and this is in the presence  
NOTE Confidence: 0.713942588333333

00:38:24.635 --> 00:38:26.199 of inter abdominal meths.  
NOTE Confidence: 0.713942588333333

00:38:26.200 --> 00:38:28.288 So you know, I think that this is  
NOTE Confidence: 0.713942588333333

00:38:28.288 --> 00:38:30.479 a study that was probably better,  
NOTE Confidence: 0.713942588333333

00:38:30.480 --> 00:38:33.456 better used when we had less information,  
NOTE Confidence: 0.713942588333333

00:38:33.456 --> 00:38:35.400 less markers available.  
NOTE Confidence: 0.713942588333333

00:38:35.400 --> 00:38:39.204 For example, has a large range  
NOTE Confidence: 0.713942588333333

00:38:39.204 --> 00:38:40.909 in terms of suspicious numbers  
NOTE Confidence: 0.713942588333333

00:38:40.909 --> 00:38:42.680 versus non suspicious values.  
NOTE Confidence: 0.713942588333333

00:38:42.680 --> 00:38:44.831 And you know I'm not sure like I said  
NOTE Confidence: 0.713942588333333

00:38:44.831 --> 00:38:46.990 that I would ignore a postmenopausal

NOTE Confidence: 0.713942588333333  
00:38:46.990 --> 00:38:48.474 woman with multilocular cysts  
NOTE Confidence: 0.713942588333333  
00:38:48.474 --> 00:38:50.734 and cystic and solid areas with a  
NOTE Confidence: 0.713942588333333  
00:38:50.734 --> 00:38:52.743 score of 108 even though it's well  
NOTE Confidence: 0.713942588333333  
00:38:52.743 --> 00:38:55.038 under sort of what they call the  
NOTE Confidence: 0.713942588333333  
00:38:55.038 --> 00:38:56.640 threshold is concerning of 200.  
NOTE Confidence: 0.728715629444444  
00:39:00.160 --> 00:39:03.037 So the RMI in its validation studies  
NOTE Confidence: 0.728715629444444  
00:39:03.037 --> 00:39:05.430 it did relatively well with the  
NOTE Confidence: 0.728715629444444  
00:39:05.430 --> 00:39:07.672 sensitivity of 71 to 88% asbestosity  
NOTE Confidence: 0.728715629444444  
00:39:07.672 --> 00:39:10.630 of 74 to 97% for identifying cancer.  
NOTE Confidence: 0.728715629444444  
00:39:10.630 --> 00:39:12.680 These again are their recommendations.  
NOTE Confidence: 0.728715629444444  
00:39:12.680 --> 00:39:14.786 So they're saying you know above  
NOTE Confidence: 0.728715629444444  
00:39:14.786 --> 00:39:16.600 200 immediately referred to GYNAC.  
NOTE Confidence: 0.728715629444444  
00:39:16.600 --> 00:39:18.616 Between 25 and 200 the intermediate  
NOTE Confidence: 0.728715629444444  
00:39:18.616 --> 00:39:21.228 score you can obtain an MRI to further  
NOTE Confidence: 0.728715629444444  
00:39:21.228 --> 00:39:23.468 characterize and below 25 is low risk  
NOTE Confidence: 0.728715629444444

00:39:23.468 --> 00:39:25.366 related to its observation repeat  
NOTE Confidence: 0.728715629444444

00:39:25.366 --> 00:39:27.396 the clinical assessment as imaging.  
NOTE Confidence: 0.728715629444444

00:39:27.400 --> 00:39:28.954 And I think what's also interesting  
NOTE Confidence: 0.728715629444444

00:39:28.954 --> 00:39:30.816 about this and note about this is  
NOTE Confidence: 0.728715629444444

00:39:30.816 --> 00:39:32.358 that the ultrasound is really here.  
NOTE Confidence: 0.728715629444444

00:39:32.360 --> 00:39:35.062 So if you don't have an autophonographer  
NOTE Confidence: 0.728715629444444

00:39:35.062 --> 00:39:38.000 who is able to, who has high volume,  
NOTE Confidence: 0.728715629444444

00:39:38.000 --> 00:39:39.850 high expertise in commenting on  
NOTE Confidence: 0.728715629444444

00:39:39.850 --> 00:39:41.760 these architectural features,  
NOTE Confidence: 0.728715629444444

00:39:41.760 --> 00:39:43.797 it really makes it that you cannot  
NOTE Confidence: 0.728715629444444

00:39:43.800 --> 00:39:45.822 calculate the score and it reduces  
NOTE Confidence: 0.728715629444444

00:39:45.822 --> 00:39:47.560 the reproducibility of the score.  
NOTE Confidence: 0.8697926375

00:39:49.840 --> 00:39:51.544 The next training method, which I  
NOTE Confidence: 0.8697926375

00:39:51.544 --> 00:39:53.716 think is much more accepted now today,  
NOTE Confidence: 0.8697926375

00:39:53.716 --> 00:39:55.928 is called the ROBA or risk of  
NOTE Confidence: 0.8697926375

00:39:55.928 --> 00:39:57.200 ovarian malignancy algorithm.

NOTE Confidence: 0.8697926375

00:39:57.200 --> 00:40:00.398 So this uses the menopausal status,

NOTE Confidence: 0.8697926375

00:40:00.400 --> 00:40:03.096 the CA-125 and the HE4 to stratify patients

NOTE Confidence: 0.8697926375

00:40:03.096 --> 00:40:05.520 into low risk and high risk groups.

NOTE Confidence: 0.8697926375

00:40:05.520 --> 00:40:07.557 The nice thing about this is that

NOTE Confidence: 0.8697926375

00:40:07.557 --> 00:40:09.569 it is something that is easily

NOTE Confidence: 0.8697926375

00:40:09.569 --> 00:40:11.354 repetitive or easily repeated because

NOTE Confidence: 0.8697926375

00:40:11.354 --> 00:40:13.559 it does not incorporate imaging.

NOTE Confidence: 0.8697926375

00:40:13.560 --> 00:40:15.360 And it does give you a score ultimately

NOTE Confidence: 0.8697926375

00:40:15.360 --> 00:40:16.960 to risk stratify your patients.

NOTE Confidence: 0.8697926375

00:40:16.960 --> 00:40:19.582 And there have been multiple prospective

NOTE Confidence: 0.8697926375

00:40:19.582 --> 00:40:21.330 and retrospective studies demonstrating

NOTE Confidence: 0.8697926375

00:40:21.390 --> 00:40:23.118 the effectiveness of this method.

NOTE Confidence: 0.911305848

00:40:28.000 --> 00:40:30.624 So one validation study in 2011 by

NOTE Confidence: 0.911305848

00:40:30.624 --> 00:40:33.012 More ET al, they had 472 patients

NOTE Confidence: 0.911305848

00:40:33.012 --> 00:40:35.424 of which 383 had benign disease

NOTE Confidence: 0.911305848

00:40:35.424 --> 00:40:37.064 and 8989 patients had cancer.

NOTE Confidence: 0.911305848

00:40:37.064 --> 00:40:38.644 The patients presented to either

NOTE Confidence: 0.911305848

00:40:38.644 --> 00:40:40.358 their gynecology and their family

NOTE Confidence: 0.911305848

00:40:40.358 --> 00:40:42.038 practitioner or a general surgeon

NOTE Confidence: 0.911305848

00:40:42.038 --> 00:40:44.232 within Mexil Mass and you can see

NOTE Confidence: 0.911305848

00:40:44.232 --> 00:40:46.200 here that the sensitivity was really

NOTE Confidence: 0.911305848

00:40:46.266 --> 00:40:48.534 excellent in both the post menopausal

NOTE Confidence: 0.911305848

00:40:48.534 --> 00:40:50.560 and the pre menopausal groups.

NOTE Confidence: 0.911305848

00:40:50.560 --> 00:40:52.390 There were actually no epithelial

NOTE Confidence: 0.911305848

00:40:52.390 --> 00:40:53.854 ovarian depression was missed

NOTE Confidence: 0.911305848

00:40:53.854 --> 00:40:55.556 in the pre menopausal group

NOTE Confidence: 0.911305848

00:40:55.556 --> 00:40:57.156 with a sensitivity of 100%.

NOTE Confidence: 0.911305848

00:40:57.160 --> 00:40:58.558 If you look at every group,

NOTE Confidence: 0.911305848

00:40:58.560 --> 00:41:00.060 all women combined,

NOTE Confidence: 0.911305848

00:41:00.060 --> 00:41:02.488 the sensitivity was 93.8% and

NOTE Confidence: 0.911305848

00:41:02.488 --> 00:41:04.626 specificity about 75% with a

NOTE Confidence: 0.911305848  
00:41:04.626 --> 00:41:06.466 negative predictive value of 99.0,  
NOTE Confidence: 0.911305848  
00:41:06.466 --> 00:41:08.888 meaning that it's very good at trashing  
NOTE Confidence: 0.911305848  
00:41:08.888 --> 00:41:11.407 out the patients that you are confident  
NOTE Confidence: 0.911305848  
00:41:11.407 --> 00:41:14.039 do not have cancer and it maintained  
NOTE Confidence: 0.911305848  
00:41:14.039 --> 00:41:16.439 a high negative predictive value of  
NOTE Confidence: 0.911305848  
00:41:16.440 --> 00:41:19.398 99% even in early stage disease.  
NOTE Confidence: 0.911305848  
00:41:19.400 --> 00:41:21.848 So this was these were excellent  
NOTE Confidence: 0.911305848  
00:41:21.848 --> 00:41:24.650 findings and this study went on to  
NOTE Confidence: 0.911305848  
00:41:24.650 --> 00:41:26.834 outperform RMI in multiple head to  
NOTE Confidence: 0.911305848  
00:41:26.840 --> 00:41:30.328 What you can do to improve upon this  
NOTE Confidence: 0.911305848  
00:41:30.328 --> 00:41:33.077 is combining the Romas score with  
NOTE Confidence: 0.911305848  
00:41:33.080 --> 00:41:34.680 your own clinical risk assessment.  
NOTE Confidence: 0.911305848  
00:41:34.680 --> 00:41:36.493 So really the question here is how  
NOTE Confidence: 0.911305848  
00:41:36.493 --> 00:41:38.057 can the initial clinical assessment  
NOTE Confidence: 0.911305848  
00:41:38.057 --> 00:41:40.235 by a patient's gynecologist or primary  
NOTE Confidence: 0.911305848

00:41:40.235 --> 00:41:42.317 provider be optimized using the Rama.  
NOTE Confidence: 0.911305848

00:41:42.320 --> 00:41:44.392 So a 2015 study looked at this  
NOTE Confidence: 0.911305848

00:41:44.392 --> 00:41:45.745 combination of the clinical  
NOTE Confidence: 0.911305848

00:41:45.745 --> 00:41:47.760 assessment with the Rama score.  
NOTE Confidence: 0.911305848

00:41:47.760 --> 00:41:50.040 This was a retrospective cohort study.  
NOTE Confidence: 0.911305848

00:41:50.040 --> 00:41:53.160 Patients who had had surgery from  
NOTE Confidence: 0.911305848

00:41:53.160 --> 00:41:55.848 22,009 to 2013 for a pelvic mass were  
NOTE Confidence: 0.911305848

00:41:55.848 --> 00:41:57.478 retrospectively looked at in the study.  
NOTE Confidence: 0.911305848

00:41:57.480 --> 00:41:59.832 So essentially what they did is they had  
NOTE Confidence: 0.911305848

00:41:59.832 --> 00:42:02.787 a sort of a tumor board process where  
NOTE Confidence: 0.911305848

00:42:02.787 --> 00:42:04.586 they prospectively implemented the Romas,  
NOTE Confidence: 0.911305848

00:42:04.586 --> 00:42:06.296 Romas score as well as  
NOTE Confidence: 0.911305848

00:42:06.296 --> 00:42:07.999 incorporated to patients imaging.  
NOTE Confidence: 0.911305848

00:42:08.000 --> 00:42:10.296 So that was part of the clinical  
NOTE Confidence: 0.911305848

00:42:10.296 --> 00:42:12.416 risk risk assessment to see how well  
NOTE Confidence: 0.911305848

00:42:12.416 --> 00:42:14.120 they did in terms of predicting

NOTE Confidence: 0.911305848

00:42:14.187 --> 00:42:15.639 cancer versus no cancer.

NOTE Confidence: 0.911305848

00:42:15.640 --> 00:42:17.670 So they had about 500 patients of

NOTE Confidence: 0.911305848

00:42:17.670 --> 00:42:20.264 which 79% had benign neoplasms,

NOTE Confidence: 0.911305848

00:42:20.264 --> 00:42:23.760 4% had low malignant potential neoplasms,

NOTE Confidence: 0.911305848

00:42:23.760 --> 00:42:26.595 6% had stage one to two EOC and 7%

NOTE Confidence: 0.911305848

00:42:26.600 --> 00:42:31.840 had stage 3 to 4 and 4% had a non GYN cancer.

NOTE Confidence: 0.968097198333333

00:42:33.960 --> 00:42:36.190 They recommended based on their

NOTE Confidence: 0.968097198333333

00:42:36.190 --> 00:42:38.790 study and using this combination they

NOTE Confidence: 0.968097198333333

00:42:38.790 --> 00:42:42.360 recommended observation in 38% of women.

NOTE Confidence: 0.968097198333333

00:42:42.360 --> 00:42:44.525 All patients with invasive disease

NOTE Confidence: 0.968097198333333

00:42:44.525 --> 00:42:46.690 had actually been recommended for

NOTE Confidence: 0.968097198333333

00:42:46.754 --> 00:42:48.872 surgery by using this algorithm.

NOTE Confidence: 0.968097198333333

00:42:48.872 --> 00:42:52.156 So they were really able to successfully

NOTE Confidence: 0.968097198333333

00:42:52.156 --> 00:42:55.636 identify which patients needed surgery.

NOTE Confidence: 0.968097198333333

00:42:55.640 --> 00:42:58.958 Of the 315 patients that had surgery,

NOTE Confidence: 0.968097198333333

00:42:58.960 --> 00:43:01.640 212 had benign disease and 84 had cancer.

NOTE Confidence: 0.968097198333333

00:43:01.640 --> 00:43:03.664 And ultimately the sensitivity

NOTE Confidence: 0.968097198333333

00:43:03.664 --> 00:43:07.360 for this method was 100% with a

NOTE Confidence: 0.968097198333333

00:43:07.360 --> 00:43:09.200 negative predictive value of 100%.

NOTE Confidence: 0.91133653

00:43:11.840 --> 00:43:15.345 And if you would look at the, the,

NOTE Confidence: 0.91133653

00:43:15.345 --> 00:43:18.450 if you take out sort of the low malignant

NOTE Confidence: 0.91133653

00:43:18.534 --> 00:43:21.174 potentials and other cancers for stage

NOTE Confidence: 0.91133653

00:43:21.174 --> 00:43:23.729 one through 4 are so kind of all comers

NOTE Confidence: 0.91133653

00:43:23.729 --> 00:43:25.484 with epithelial ovarian carcinomas.

NOTE Confidence: 0.91133653

00:43:25.484 --> 00:43:29.095 The Roma alone had a sensitivity of 95.3%.

NOTE Confidence: 0.91133653

00:43:29.095 --> 00:43:31.440 So really the point here is that

NOTE Confidence: 0.91133653

00:43:31.440 --> 00:43:33.350 combining that Roma score with your

NOTE Confidence: 0.91133653

00:43:33.350 --> 00:43:35.000 clinical risk assessment in the office,

NOTE Confidence: 0.91133653

00:43:35.000 --> 00:43:38.776 so exam pelvic ultrasound gives you kind of

NOTE Confidence: 0.91133653

00:43:38.776 --> 00:43:42.320 the best method to triage these patients.

NOTE Confidence: 0.91133653

00:43:42.320 --> 00:43:44.400 So here's the bottom line.

NOTE Confidence: 0.91133653

00:43:44.400 --> 00:43:46.062 Roma plus clinical risk assessment with

NOTE Confidence: 0.91133653

00:43:46.062 --> 00:43:48.233 an exam and or ultrasound allowed for

NOTE Confidence: 0.91133653

00:43:48.233 --> 00:43:50.237 a highly sensitive triage of patients

NOTE Confidence: 0.91133653

00:43:50.237 --> 00:43:52.118 with epithelial ovarian carcinoma,

NOTE Confidence: 0.91133653

00:43:52.120 --> 00:43:53.650 no invasive epithelial ovarian carcinoma

NOTE Confidence: 0.91133653

00:43:53.650 --> 00:43:55.705 Patients were assigned to the low risk

NOTE Confidence: 0.91133653

00:43:55.705 --> 00:43:57.593 group in the study and were therefore missed.

NOTE Confidence: 0.91133653

00:43:57.600 --> 00:43:59.714 So none of these patients were missed

NOTE Confidence: 0.91133653

00:43:59.714 --> 00:44:01.904 and also 37% of low risk patients were

NOTE Confidence: 0.91133653

00:44:01.904 --> 00:44:03.400 able to avoid unwarranted surgery,

NOTE Confidence: 0.91133653

00:44:03.400 --> 00:44:04.588 which is is excellent.

NOTE Confidence: 0.91133653

00:44:04.588 --> 00:44:07.160 I mean that's our goal right is to reduce

NOTE Confidence: 0.91133653

00:44:07.160 --> 00:44:09.360 unnecessary procedures in patients and

NOTE Confidence: 0.91133653

00:44:09.360 --> 00:44:12.520 to not miss those who really need it.

NOTE Confidence: 0.91133653

00:44:12.520 --> 00:44:15.278 This is the algorithm for this study.

NOTE Confidence: 0.91133653

00:44:15.280 --> 00:44:17.720 So I apologize it's a little bit small,  
NOTE Confidence: 0.91133653

00:44:17.720 --> 00:44:18.880 but on the left side,  
NOTE Confidence: 0.91133653

00:44:18.880 --> 00:44:20.788 this is the algorithm of just  
NOTE Confidence: 0.91133653

00:44:20.788 --> 00:44:22.440 clinical risk risk assessment alone.  
NOTE Confidence: 0.91133653

00:44:22.440 --> 00:44:26.744 So you can see here that you know it,  
NOTE Confidence: 0.91133653

00:44:26.744 --> 00:44:28.062 it doesn't, you know,  
NOTE Confidence: 0.91133653

00:44:28.062 --> 00:44:28.917 I'll go back to it.  
NOTE Confidence: 0.91133653

00:44:28.920 --> 00:44:29.976 I'll do more of a comparison  
NOTE Confidence: 0.91133653

00:44:29.976 --> 00:44:30.680 on the right side,  
NOTE Confidence: 0.91133653

00:44:30.680 --> 00:44:31.990 you have the clinical risk  
NOTE Confidence: 0.91133653

00:44:31.990 --> 00:44:33.038 assessment with the Rama.  
NOTE Confidence: 0.91133653

00:44:33.040 --> 00:44:36.240 And so the point here is that when you get  
NOTE Confidence: 0.91133653

00:44:36.316 --> 00:44:39.438 to this place where surgery is indicated,  
NOTE Confidence: 0.91133653

00:44:39.440 --> 00:44:41.240 you're then able to use that  
NOTE Confidence: 0.91133653

00:44:41.240 --> 00:44:42.843 Roma and clinical risk assessment  
NOTE Confidence: 0.91133653

00:44:42.843 --> 00:44:44.558 to triage into low risk.

NOTE Confidence: 0.91133653

00:44:44.560 --> 00:44:46.528 So those patients that could have

NOTE Confidence: 0.91133653

00:44:46.528 --> 00:44:48.237 surgery done with their gynecologist

NOTE Confidence: 0.91133653

00:44:48.237 --> 00:44:50.271 versus high risk were then referred

NOTE Confidence: 0.91133653

00:44:50.271 --> 00:44:52.570 to a gynec and can have surgery

NOTE Confidence: 0.91133653

00:44:52.570 --> 00:44:54.400 you know with or without staging

NOTE Confidence: 0.91133653

00:44:54.400 --> 00:44:57.400 depending dependent on the findings.

NOTE Confidence: 0.91133653

00:44:57.400 --> 00:44:59.087 And again the point here is that

NOTE Confidence: 0.91133653

00:44:59.087 --> 00:45:00.819 you know you A avoid unnecessary

NOTE Confidence: 0.91133653

00:45:00.819 --> 00:45:03.031 surgeries in the benign patients and B,

NOTE Confidence: 0.91133653

00:45:03.040 --> 00:45:04.940 you also could avoid patients

NOTE Confidence: 0.91133653

00:45:04.940 --> 00:45:06.840 having to undergo second surgery.

NOTE Confidence: 0.91133653

00:45:06.840 --> 00:45:07.770 So they have,

NOTE Confidence: 0.91133653

00:45:07.770 --> 00:45:09.940 they have their anecsa taken out with

NOTE Confidence: 0.91133653

00:45:10.001 --> 00:45:12.180 their benign gynecologist and then you

NOTE Confidence: 0.91133653

00:45:12.180 --> 00:45:13.720 get the surprise path that it's cancer,

NOTE Confidence: 0.91133653

00:45:13.720 --> 00:45:15.637 you send it to the guide on and then  
NOTE Confidence: 0.91133653

00:45:15.637 --> 00:45:17.704 you have a second surgery for a  
NOTE Confidence: 0.91133653

00:45:17.704 --> 00:45:19.468 completion staging which may or may  
NOTE Confidence: 0.91133653

00:45:19.468 --> 00:45:21.260 not be more challenging based on you  
NOTE Confidence: 0.91133653

00:45:21.260 --> 00:45:24.838 know the recent surgery that they just had.  
NOTE Confidence: 0.91133653

00:45:24.840 --> 00:45:27.276 There was also study that did a  
NOTE Confidence: 0.91133653

00:45:27.276 --> 00:45:29.320 cost analysis of this combined  
NOTE Confidence: 0.91133653

00:45:29.320 --> 00:45:31.160 clinical and Roma score.  
NOTE Confidence: 0.91133653

00:45:31.160 --> 00:45:33.220 So essentially they basically looked  
NOTE Confidence: 0.91133653

00:45:33.220 --> 00:45:35.280 at this clinical assessment alone,  
NOTE Confidence: 0.91133653

00:45:35.280 --> 00:45:36.915 Roma alone versus the combination  
NOTE Confidence: 0.91133653

00:45:36.915 --> 00:45:39.705 and it looks to see if ordering the  
NOTE Confidence: 0.91133653

00:45:39.705 --> 00:45:41.520 Roma test would increase costs.  
NOTE Confidence: 0.91133653

00:45:41.520 --> 00:45:44.016 And the bottom line for that is that  
NOTE Confidence: 0.91133653

00:45:44.016 --> 00:45:45.950 although the lab costs for Roma  
NOTE Confidence: 0.91133653

00:45:45.950 --> 00:45:47.210 did increase by 55%,

NOTE Confidence: 0.91133653

00:45:47.210 --> 00:45:48.860 this was completely offset by

NOTE Confidence: 0.91133653

00:45:48.860 --> 00:45:50.640 a decrease in OR costs.

NOTE Confidence: 0.91133653

00:45:50.640 --> 00:45:52.754 So there was a decrease in 3%

NOTE Confidence: 0.91133653

00:45:52.760 --> 00:45:54.150 laparotomy costs,

NOTE Confidence: 0.91133653

00:45:54.150 --> 00:45:57.625 4% laparoscopic costs when you

NOTE Confidence: 0.91133653

00:45:57.625 --> 00:46:01.564 compared the Roma alone with the Roma

NOTE Confidence: 0.91133653

00:46:01.564 --> 00:46:03.319 plus the clinical risk assessment.

NOTE Confidence: 0.91133653

00:46:03.320 --> 00:46:05.852 And overall the total cost decreased

NOTE Confidence: 0.91133653

00:46:05.852 --> 00:46:07.118 by almost 4%.

NOTE Confidence: 0.899340636

00:46:07.120 --> 00:46:09.862 They also had a 63% reduction in

NOTE Confidence: 0.899340636

00:46:09.862 --> 00:46:12.217 repeat surgery secondary to false

NOTE Confidence: 0.899340636

00:46:12.217 --> 00:46:14.520 negative clinical risk assessments.

NOTE Confidence: 0.899340636

00:46:14.520 --> 00:46:16.788 So Roma plus clinical assessment is really

NOTE Confidence: 0.899340636

00:46:16.788 --> 00:46:19.080 good to identify those who need surgery,

NOTE Confidence: 0.899340636

00:46:19.080 --> 00:46:21.082 to identify those who don't need surgery

NOTE Confidence: 0.899340636

00:46:21.082 --> 00:46:23.597 and it does also cost savings in the end,  
NOTE Confidence: 0.899340636

00:46:23.600 --> 00:46:25.196 some of the pitfalls of Roma.  
NOTE Confidence: 0.899340636

00:46:25.200 --> 00:46:26.950 I think really the most important thing  
NOTE Confidence: 0.899340636

00:46:26.950 --> 00:46:29.092 you know any of us can order it because any  
NOTE Confidence: 0.899340636

00:46:29.092 --> 00:46:31.232 of us can order this A-125 and the HE4.  
NOTE Confidence: 0.899340636

00:46:31.232 --> 00:46:33.258 So it does not have to just  
NOTE Confidence: 0.899340636

00:46:33.258 --> 00:46:34.918 be a gynecologic oncologist.  
NOTE Confidence: 0.899340636

00:46:34.920 --> 00:46:36.960 However the important thing to note  
NOTE Confidence: 0.899340636

00:46:36.960 --> 00:46:39.156 is that there are different platforms  
NOTE Confidence: 0.899340636

00:46:39.156 --> 00:46:41.867 for these assays which can lead to  
NOTE Confidence: 0.899340636

00:46:41.867 --> 00:46:43.880 different results or cut off points.  
NOTE Confidence: 0.899340636

00:46:43.880 --> 00:46:46.080 So for example in the pilot trial they  
NOTE Confidence: 0.899340636

00:46:46.080 --> 00:46:48.238 reported these cut off points in percentages.  
NOTE Confidence: 0.899340636

00:46:48.240 --> 00:46:52.184 So a role model less than 13.1% with low  
NOTE Confidence: 0.899340636

00:46:52.184 --> 00:46:54.760 risk for pre menopausal and less than  
NOTE Confidence: 0.899340636

00:46:54.760 --> 00:46:57.000 27.7% with low risk and post menopausal.

NOTE Confidence: 0.899340636

00:46:57.000 --> 00:46:58.800 But every individual health system or

NOTE Confidence: 0.899340636

00:46:58.800 --> 00:47:01.270 hospital has their own lab that they use

NOTE Confidence: 0.899340636

00:47:01.270 --> 00:47:02.795 that report these values differently.

NOTE Confidence: 0.899340636

00:47:02.800 --> 00:47:04.613 So for example I put here another

NOTE Confidence: 0.899340636

00:47:04.613 --> 00:47:06.752 platform that I found online for a

NOTE Confidence: 0.899340636

00:47:06.752 --> 00:47:08.387 different individual health system and

NOTE Confidence: 0.899340636

00:47:08.387 --> 00:47:10.680 here they just kind of reported a number.

NOTE Confidence: 0.899340636

00:47:10.680 --> 00:47:12.100 So for pre menopausal,

NOTE Confidence: 0.899340636

00:47:12.100 --> 00:47:16.022 a score less than 1.14 is low risk and less

NOTE Confidence: 0.899340636

00:47:16.022 --> 00:47:18.799 than 2.99 is low risk for post menopausal.

NOTE Confidence: 0.899340636

00:47:18.800 --> 00:47:20.648 So essentially if you are ordering

NOTE Confidence: 0.899340636

00:47:20.648 --> 00:47:23.086 this task like you if you're in a

NOTE Confidence: 0.899340636

00:47:23.086 --> 00:47:25.121 institution that you can order the Roma

NOTE Confidence: 0.899340636

00:47:25.121 --> 00:47:27.479 and put that into your EMR and order it,

NOTE Confidence: 0.899340636

00:47:27.480 --> 00:47:30.000 it will show you the result based on your

NOTE Confidence: 0.899340636

00:47:30.000 --> 00:47:32.000 platform's specific biomarker cut offs.  
NOTE Confidence: 0.899340636

00:47:32.000 --> 00:47:34.065 But if you're calculating yourself  
NOTE Confidence: 0.899340636

00:47:34.065 --> 00:47:35.672 with CA-125 and HE4 values,  
NOTE Confidence: 0.899340636

00:47:35.672 --> 00:47:37.934 which we can all do because there  
NOTE Confidence: 0.899340636

00:47:37.934 --> 00:47:39.558 are Roma calculators online,  
NOTE Confidence: 0.899340636

00:47:39.560 --> 00:47:41.485 just make sure that you look at  
NOTE Confidence: 0.899340636

00:47:41.485 --> 00:47:42.810 the calculator specific to the  
NOTE Confidence: 0.899340636

00:47:42.810 --> 00:47:44.160 method that your lab is using  
NOTE Confidence: 0.8755957496

00:47:46.640 --> 00:47:48.698 almost done. I just really wanted to  
NOTE Confidence: 0.8755957496

00:47:48.698 --> 00:47:50.862 touch quickly on the ROCA which is  
NOTE Confidence: 0.8755957496

00:47:50.862 --> 00:47:52.387 the risk ovarian cancer algorithm  
NOTE Confidence: 0.8755957496

00:47:52.387 --> 00:47:54.200 for people that are high risk.  
NOTE Confidence: 0.8755957496

00:47:54.200 --> 00:47:56.536 So these are patients that are age 35  
NOTE Confidence: 0.8755957496

00:47:56.536 --> 00:47:58.837 with the BRCA one and two mutation.  
NOTE Confidence: 0.8755957496

00:47:58.840 --> 00:48:00.868 This is a two stage screening  
NOTE Confidence: 0.8755957496

00:48:00.868 --> 00:48:02.587 strategy using age and change

NOTE Confidence: 0.8755957496  
00:48:02.587 --> 00:48:04.770 in C-125 over time to assess the  
NOTE Confidence: 0.8755957496  
00:48:04.770 --> 00:48:06.480 risk of epithelial ovarian cancer.  
NOTE Confidence: 0.8755957496  
00:48:06.480 --> 00:48:09.744 And high risk scores are then  
NOTE Confidence: 0.8755957496  
00:48:09.744 --> 00:48:11.920 referred for transvaginal ultrasounds.  
NOTE Confidence: 0.8755957496  
00:48:11.920 --> 00:48:15.838 Really in the initial pilot study,  
NOTE Confidence: 0.8755957496  
00:48:15.840 --> 00:48:19.270 the patients were triaged based on  
NOTE Confidence: 0.8755957496  
00:48:19.270 --> 00:48:23.000 the CA-125 level to whether or not  
NOTE Confidence: 0.8755957496  
00:48:23.000 --> 00:48:24.537 they should just get a repeat CA-125  
NOTE Confidence: 0.8755957496  
00:48:24.537 --> 00:48:26.056 in a year versus in three months  
NOTE Confidence: 0.8755957496  
00:48:26.056 --> 00:48:27.739 or to get a transmission ultrasound  
NOTE Confidence: 0.8755957496  
00:48:27.739 --> 00:48:29.239 and be referred to Gynong.  
NOTE Confidence: 0.9056266333333333  
00:48:33.400 --> 00:48:37.036 Overall they had about 400 patients.  
NOTE Confidence: 0.9056266333333333  
00:48:37.040 --> 00:48:39.217 The rate of the three month follow  
NOTE Confidence: 0.9056266333333333  
00:48:39.217 --> 00:48:42.054 up for AC125 was 5.8% and the rate  
NOTE Confidence: 0.9056266333333333  
00:48:42.054 --> 00:48:43.530 of the transnational ultrasound  
NOTE Confidence: 0.9056266333333333

00:48:43.597 --> 00:48:45.595 and GYNAC referral was about 1%.

NOTE Confidence: 0.905626633333333

00:48:45.600 --> 00:48:48.456 Ultimately they were able to identify

NOTE Confidence: 0.905626633333333

00:48:48.456 --> 00:48:50.824 patent patients that had suspicious

NOTE Confidence: 0.905626633333333

00:48:50.824 --> 00:48:52.680 masses that required surgery.

NOTE Confidence: 0.839329192142857

00:48:55.360 --> 00:48:57.026 So the rope guide is really not

NOTE Confidence: 0.839329192142857

00:48:57.026 --> 00:48:58.427 as helpful in the setting of

NOTE Confidence: 0.839329192142857

00:48:58.427 --> 00:48:59.708 a existing and maxilla mass,

NOTE Confidence: 0.839329192142857

00:48:59.708 --> 00:49:01.840 but where it does come in to be

NOTE Confidence: 0.839329192142857

00:49:01.840 --> 00:49:03.492 helpful is in patients that you might

NOTE Confidence: 0.839329192142857

00:49:03.492 --> 00:49:05.279 be following for BRCA mutations.

NOTE Confidence: 0.839329192142857

00:49:05.280 --> 00:49:07.597 I know a lot of those patients

NOTE Confidence: 0.839329192142857

00:49:07.600 --> 00:49:08.824 ultimately establish care with

NOTE Confidence: 0.839329192142857

00:49:08.824 --> 00:49:10.354 gynec and see us regularly,

NOTE Confidence: 0.839329192142857

00:49:10.360 --> 00:49:12.810 but I have had patients that you

NOTE Confidence: 0.839329192142857

00:49:12.810 --> 00:49:14.438 know see me and then six months

NOTE Confidence: 0.839329192142857

00:49:14.438 --> 00:49:15.524 they see their gynecologist and

NOTE Confidence: 0.839329192142857

00:49:15.524 --> 00:49:16.840 six months after that they see me.

NOTE Confidence: 0.839329192142857

00:49:16.840 --> 00:49:19.312 So it's kind of an alternating Co

NOTE Confidence: 0.839329192142857

00:49:19.312 --> 00:49:21.040 management with the gynecologist.

NOTE Confidence: 0.839329192142857

00:49:21.040 --> 00:49:23.749 And so you may still be somebody

NOTE Confidence: 0.839329192142857

00:49:23.749 --> 00:49:25.964 who orders this and really this

NOTE Confidence: 0.839329192142857

00:49:25.964 --> 00:49:28.136 is helpful in patients with BRCA

NOTE Confidence: 0.839329192142857

00:49:28.136 --> 00:49:30.830 mutations who are not ready to have

NOTE Confidence: 0.839329192142857

00:49:30.830 --> 00:49:32.354 definitive risk reducing surgery.

NOTE Confidence: 0.839329192142857

00:49:32.360 --> 00:49:34.362 So for patients that you know don't

NOTE Confidence: 0.839329192142857

00:49:34.362 --> 00:49:36.598 want to have their ovaries out yet,

NOTE Confidence: 0.839329192142857

00:49:36.600 --> 00:49:39.520 it could be useful to do the ROCA

NOTE Confidence: 0.839329192142857

00:49:39.520 --> 00:49:40.890 risk assessment just to really

NOTE Confidence: 0.839329192142857

00:49:40.890 --> 00:49:42.552 be able to counsel your patients

NOTE Confidence: 0.839329192142857

00:49:42.552 --> 00:49:44.239 on when it's time to do this.

NOTE Confidence: 0.806379620714286

00:49:47.600 --> 00:49:50.336 And lastly, I just wanted to touch on

NOTE Confidence: 0.806379620714286

00:49:50.336 --> 00:49:52.860 what the joint SGO and ACOG guidelines

NOTE Confidence: 0.806379620714286

00:49:52.860 --> 00:49:54.960 are for evaluating national masses.

NOTE Confidence: 0.806379620714286

00:49:54.960 --> 00:49:56.400 So these are direct quotes.

NOTE Confidence: 0.806379620714286

00:49:56.400 --> 00:49:58.395 Physicians should perform a physical

NOTE Confidence: 0.806379620714286

00:49:58.395 --> 00:50:00.390 examination including pelvic exam or

NOTE Confidence: 0.806379620714286

00:50:00.451 --> 00:50:02.603 rectovaginal examination may provide

NOTE Confidence: 0.806379620714286

00:50:02.603 --> 00:50:04.622 additional information and imaging

NOTE Confidence: 0.806379620714286

00:50:04.622 --> 00:50:06.035 studies especially transvaginal

NOTE Confidence: 0.806379620714286

00:50:06.035 --> 00:50:07.919 ultrasonography may be helpful.

NOTE Confidence: 0.806379620714286

00:50:07.920 --> 00:50:09.705 And once the exam and imaging have

NOTE Confidence: 0.806379620714286

00:50:09.705 --> 00:50:11.444 detected A pelvic mass that's suspicious

NOTE Confidence: 0.806379620714286

00:50:11.444 --> 00:50:13.280 for a malignant over a neoplasm,

NOTE Confidence: 0.806379620714286

00:50:13.280 --> 00:50:15.506 the present presence of at least one

NOTE Confidence: 0.806379620714286

00:50:15.506 --> 00:50:18.132 of the below warrants referral to

NOTE Confidence: 0.806379620714286

00:50:18.132 --> 00:50:20.070 gynecologic oncology postmenopausal women.

NOTE Confidence: 0.806379620714286

00:50:20.070 --> 00:50:22.680 So elevated C-125 ascites and nodular

NOTE Confidence: 0.806379620714286  
00:50:22.680 --> 00:50:25.511 fixed pelvic mass or evidence of abdominal  
NOTE Confidence: 0.806379620714286  
00:50:25.511 --> 00:50:27.840 or distant mass and premenopausal woman.  
NOTE Confidence: 0.806379620714286  
00:50:27.840 --> 00:50:30.381 A very elevated C-125 level ascites or  
NOTE Confidence: 0.806379620714286  
00:50:30.381 --> 00:50:32.438 evidence of abdominal or distant mass  
NOTE Confidence: 0.7568048292  
00:50:35.520 --> 00:50:37.405 patients with suspicious or persistent  
NOTE Confidence: 0.7568048292  
00:50:37.405 --> 00:50:39.777 complex and necal masses that are  
NOTE Confidence: 0.7568048292  
00:50:39.777 --> 00:50:41.485 requiring surgical evaluation should  
NOTE Confidence: 0.7568048292  
00:50:41.485 --> 00:50:43.620 be referred patients with suspicious  
NOTE Confidence: 0.7568048292  
00:50:43.679 --> 00:50:45.399 mass and strong family history.  
NOTE Confidence: 0.7568048292  
00:50:45.400 --> 00:50:48.142 And then like we reviewed today  
NOTE Confidence: 0.7568048292  
00:50:48.142 --> 00:50:50.784 patients who you have done like aroma  
NOTE Confidence: 0.7568048292  
00:50:50.784 --> 00:50:52.560 and clinical risk assessment for.  
NOTE Confidence: 0.7568048292  
00:50:52.560 --> 00:50:55.652 So again that's CA-125HE4 and menopausal  
NOTE Confidence: 0.7568048292  
00:50:55.652 --> 00:50:57.872 status in combination with your  
NOTE Confidence: 0.7568048292  
00:50:57.872 --> 00:51:00.159 symptoms exam and imaging findings.  
NOTE Confidence: 0.7568048292

00:51:00.160 --> 00:51:02.316 Those are patients that should be sent.

NOTE Confidence: 0.7568048292

00:51:02.320 --> 00:51:04.147 And you know I just I want to say

NOTE Confidence: 0.7568048292

00:51:04.147 --> 00:51:05.957 that in reality these exams are

NOTE Confidence: 0.7568048292

00:51:05.957 --> 00:51:07.800 often limited and are difficult and

NOTE Confidence: 0.7568048292

00:51:07.800 --> 00:51:09.445 it can be really hard to discern

NOTE Confidence: 0.7568048292

00:51:09.445 --> 00:51:11.295 what is a malignancy by an office

NOTE Confidence: 0.7568048292

00:51:11.295 --> 00:51:13.480 exam or imaging or lab values alone.

NOTE Confidence: 0.7568048292

00:51:13.480 --> 00:51:15.448 So the bottom line is that we are

NOTE Confidence: 0.7568048292

00:51:15.448 --> 00:51:17.440 happy to see anyone that you're

NOTE Confidence: 0.7568048292

00:51:17.440 --> 00:51:19.264 concerned or worried about regardless

NOTE Confidence: 0.7568048292

00:51:19.264 --> 00:51:22.424 of you know what SGO and ACOG say

NOTE Confidence: 0.7568048292

00:51:22.424 --> 00:51:25.800 is the the the rules for this.

NOTE Confidence: 0.7568048292

00:51:25.800 --> 00:51:28.800 So takeaways from my portion.

NOTE Confidence: 0.7568048292

00:51:28.800 --> 00:51:30.894 The pelvic exam alone has low

NOTE Confidence: 0.7568048292

00:51:30.894 --> 00:51:32.879 sensitivity for diagnosing and exo mass.

NOTE Confidence: 0.7568048292

00:51:32.880 --> 00:51:34.735 A normal exam should not rule out

NOTE Confidence: 0.7568048292

00:51:34.735 --> 00:51:36.840 further work up in symptomatic females.

NOTE Confidence: 0.7568048292

00:51:36.840 --> 00:51:38.295 Transventional ultrasound is the first

NOTE Confidence: 0.7568048292

00:51:38.295 --> 00:51:40.638 step As for ACOG but it isn't perfect.

NOTE Confidence: 0.7568048292

00:51:40.640 --> 00:51:43.888 So just remember that CA-125 and a

NOTE Confidence: 0.7568048292

00:51:43.888 --> 00:51:45.392 transventional ultrasound has low

NOTE Confidence: 0.7568048292

00:51:45.392 --> 00:51:47.760 utility in the average with women,

NOTE Confidence: 0.7568048292

00:51:47.760 --> 00:51:49.560 but it does have good utility,

NOTE Confidence: 0.7568048292

00:51:49.560 --> 00:51:52.948 I mean relatively good utility in

NOTE Confidence: 0.7568048292

00:51:52.948 --> 00:51:55.756 high risk like BRCA positive women.

NOTE Confidence: 0.7568048292

00:51:55.760 --> 00:51:58.406 The HE4 may help you in certain

NOTE Confidence: 0.7568048292

00:51:58.406 --> 00:52:01.076 situations with an indeterminate CA-125.

NOTE Confidence: 0.7568048292

00:52:01.076 --> 00:52:03.456 If you suspect A malignancy

NOTE Confidence: 0.7568048292

00:52:03.456 --> 00:52:05.360 considering or consider ordering

NOTE Confidence: 0.7568048292

00:52:05.439 --> 00:52:09.400 both the CA-125 and the HE4.

NOTE Confidence: 0.7568048292

00:52:09.400 --> 00:52:11.278 The Roma plus the clinical risk

NOTE Confidence: 0.7568048292

00:52:11.278 --> 00:52:12.530 assessment including imaging is  
NOTE Confidence: 0.7568048292

00:52:12.581 --> 00:52:14.146 excellent for triaging females with  
NOTE Confidence: 0.7568048292

00:52:14.146 --> 00:52:16.129 adnexal masses and helps to expedite  
NOTE Confidence: 0.7568048292

00:52:16.129 --> 00:52:18.331 referrals with Dynonc to provide to  
NOTE Confidence: 0.7568048292

00:52:18.331 --> 00:52:19.762 prevent unnecessary surgeries in  
NOTE Confidence: 0.7568048292

00:52:19.762 --> 00:52:21.694 patients with benign neoplasms and to  
NOTE Confidence: 0.7568048292

00:52:21.694 --> 00:52:23.718 avoid second surgery sympos with cancer.  
NOTE Confidence: 0.7568048292

00:52:23.720 --> 00:52:25.680 If your lab does not offer Roma,  
NOTE Confidence: 0.7568048292

00:52:25.680 --> 00:52:27.320 you can calculate it yourself  
NOTE Confidence: 0.7568048292

00:52:27.320 --> 00:52:28.632 using online Roma calculators,  
NOTE Confidence: 0.7568048292

00:52:28.640 --> 00:52:31.168 but just be sure to use those specific  
NOTE Confidence: 0.7568048292

00:52:31.168 --> 00:52:33.560 to your FDA approved lab values.  
NOTE Confidence: 0.87039949

00:52:36.200 --> 00:52:37.510 I just wanted to give  
NOTE Confidence: 0.87039949

00:52:37.510 --> 00:52:38.558 everyone my contact info.  
NOTE Confidence: 0.87039949

00:52:38.560 --> 00:52:40.600 If you have any questions,  
NOTE Confidence: 0.87039949

00:52:40.600 --> 00:52:42.560 this is my cell, this is our office.

NOTE Confidence: 0.87039949

00:52:42.560 --> 00:52:45.300 If you want to send patients or

NOTE Confidence: 0.87039949

00:52:45.300 --> 00:52:46.400 have questions about a patient,

NOTE Confidence: 0.87039949

00:52:46.400 --> 00:52:47.240 this is their office number.

NOTE Confidence: 0.87039949

00:52:47.240 --> 00:52:48.968 This is my e-mail.

NOTE Confidence: 0.87039949

00:52:48.968 --> 00:52:51.913 My full name is Katya Ani Katyayani

NOTE Confidence: 0.87039949

00:52:51.913 --> 00:52:54.238 but I go by Katya and you can

NOTE Confidence: 0.87039949

00:52:54.238 --> 00:52:55.354 also send me an epic message.

NOTE Confidence: 0.87039949

00:52:55.360 --> 00:52:57.030 I'm check that kind of

NOTE Confidence: 0.87039949

00:52:57.030 --> 00:52:59.160 like a little bit too much.

NOTE Confidence: 0.87039949

00:52:59.160 --> 00:53:03.252 So I will respond my references

NOTE Confidence: 0.87039949

00:53:03.252 --> 00:53:05.360 and I think probably we could

NOTE Confidence: 0.87039949

00:53:05.360 --> 00:53:06.520 save questions until the end.

NOTE Confidence: 0.87039949

00:53:06.520 --> 00:53:08.232 Unless somebody has something

NOTE Confidence: 0.87039949

00:53:08.232 --> 00:53:09.516 burning right now.

NOTE Confidence: 0.857791917777778

00:53:14.200 --> 00:53:19.040 I think we're good. We can go on to perfect.

NOTE Confidence: 0.938429966666667

00:53:19.120 --> 00:53:20.800 And then I guess I will.  
NOTE Confidence: 0.938429966666667

00:53:20.800 --> 00:53:22.672 I will do my introduction since  
NOTE Confidence: 0.938429966666667

00:53:22.672 --> 00:53:23.920 Doctor Tino introduced me.  
NOTE Confidence: 0.938429966666667

00:53:23.920 --> 00:53:26.206 I will introduce Hope Walden who  
NOTE Confidence: 0.938429966666667

00:53:26.206 --> 00:53:28.760 is our lovely nurse practitioner.  
NOTE Confidence: 0.938429966666667

00:53:28.760 --> 00:53:32.513 She is has a super cool combination of her  
NOTE Confidence: 0.938429966666667

00:53:32.513 --> 00:53:36.559 NP school and also a surgical fellowship.  
NOTE Confidence: 0.938429966666667

00:53:36.560 --> 00:53:39.016 So we are really lucky to have her  
NOTE Confidence: 0.938429966666667

00:53:39.016 --> 00:53:41.208 because she's able to really be helpful  
NOTE Confidence: 0.938429966666667

00:53:41.208 --> 00:53:43.999 in clinic and also in the operating room.  
NOTE Confidence: 0.938429966666667

00:53:44.000 --> 00:53:47.000 And so she will be talking to you  
NOTE Confidence: 0.938429966666667

00:53:47.000 --> 00:53:49.159 about cervical cancer screening.  
NOTE Confidence: 0.938429966666667

00:53:49.160 --> 00:53:49.480 Well, that  
NOTE Confidence: 0.963361976666667

00:53:49.480 --> 00:53:52.876 was lovely. Thank you so much.  
NOTE Confidence: 0.963361976666667

00:53:52.880 --> 00:53:56.634 I'm also saying now that the  
NOTE Confidence: 0.963361976666667

00:53:56.634 --> 00:53:59.238 vacuum is going in the office,

NOTE Confidence: 0.963361976666667  
00:53:59.240 --> 00:54:00.862 so if you hear that, I apologize.  
NOTE Confidence: 0.963361976666667  
00:54:00.862 --> 00:54:02.346 Hopefully it's pretty good  
NOTE Confidence: 0.963361976666667  
00:54:02.346 --> 00:54:04.479 and there won't be an issue.  
NOTE Confidence: 0.963361976666667  
00:54:04.480 --> 00:54:05.880 But just before I start,  
NOTE Confidence: 0.963361976666667  
00:54:05.880 --> 00:54:07.320 everyone can see my screen.  
NOTE Confidence: 0.963361976666667  
00:54:07.320 --> 00:54:10.680 There's no issues with my PowerPoints.  
NOTE Confidence: 0.963361976666667  
00:54:10.680 --> 00:54:12.198 You're good, good.  
NOTE Confidence: 0.963361976666667  
00:54:12.200 --> 00:54:13.202 OK, perfect.  
NOTE Confidence: 0.963361976666667  
00:54:13.202 --> 00:54:16.709 So Yep, I will be discussing cervical  
NOTE Confidence: 0.963361976666667  
00:54:16.709 --> 00:54:20.556 cancer and heavily focused obviously on HPV.  
NOTE Confidence: 0.963361976666667  
00:54:20.560 --> 00:54:22.198 And before we get into it,  
NOTE Confidence: 0.963361976666667  
00:54:22.200 --> 00:54:24.558 I always like to revert back to the basics.  
NOTE Confidence: 0.963361976666667  
00:54:24.560 --> 00:54:26.960 So this is a healthy cervix.  
NOTE Confidence: 0.963361976666667  
00:54:26.960 --> 00:54:28.885 It's derived from the Mullerian  
NOTE Confidence: 0.963361976666667  
00:54:28.885 --> 00:54:31.360 ducts which fused to form uterus,  
NOTE Confidence: 0.963361976666667

00:54:31.360 --> 00:54:33.076 cervix and upper vagina.  
NOTE Confidence: 0.963361976666667

00:54:33.076 --> 00:54:35.650 This explains the way in which  
NOTE Confidence: 0.963361976666667

00:54:35.728 --> 00:54:37.600 cervical cancer spreads.  
NOTE Confidence: 0.963361976666667

00:54:37.600 --> 00:54:39.892 Since the upper vagina and cervix  
NOTE Confidence: 0.963361976666667

00:54:39.892 --> 00:54:41.920 share a common embryological origin,  
NOTE Confidence: 0.963361976666667

00:54:41.920 --> 00:54:43.960 the upper vagina is affected  
NOTE Confidence: 0.963361976666667

00:54:43.960 --> 00:54:45.592 before the lower vagina.  
NOTE Confidence: 0.963361976666667

00:54:45.600 --> 00:54:47.310 It connects the vagina to the  
NOTE Confidence: 0.963361976666667

00:54:47.310 --> 00:54:49.444 uterine body and the cervix helps  
NOTE Confidence: 0.963361976666667

00:54:49.444 --> 00:54:51.008 prevent infection from ascending  
NOTE Confidence: 0.963361976666667

00:54:51.008 --> 00:54:53.560 into the uterus and fallopian tubes.  
NOTE Confidence: 0.963361976666667

00:54:53.560 --> 00:54:56.760 Here you can see the cervix.  
NOTE Confidence: 0.963361976666667

00:54:56.760 --> 00:54:58.782 It's a tubular structure composed of  
NOTE Confidence: 0.963361976666667

00:54:58.782 --> 00:55:01.320 stromal tissue lined by squamous epithelium.  
NOTE Confidence: 0.963361976666667

00:55:01.320 --> 00:55:03.342 The cervix is approximately 4 centimeters  
NOTE Confidence: 0.963361976666667

00:55:03.342 --> 00:55:06.078 in length and three centimeters in diameter.

NOTE Confidence: 0.963361976666667  
00:55:06.080 --> 00:55:07.160 This can vary by age,  
NOTE Confidence: 0.963361976666667  
00:55:07.160 --> 00:55:08.186 pregnancy,  
NOTE Confidence: 0.963361976666667  
00:55:08.186 --> 00:55:10.238 and menopause.  
NOTE Confidence: 0.963361976666667  
00:55:10.240 --> 00:55:12.148 In the picture to the right you can see  
NOTE Confidence: 0.963361976666667  
00:55:12.148 --> 00:55:14.079 or my screen I should see the right.  
NOTE Confidence: 0.963361976666667  
00:55:14.080 --> 00:55:16.195 But over here if you can see my arrow  
NOTE Confidence: 0.963361976666667  
00:55:16.200 --> 00:55:19.245 delineated by the blue line is the  
NOTE Confidence: 0.963361976666667  
00:55:19.245 --> 00:55:21.009 columnar glandular epithelia and  
NOTE Confidence: 0.963361976666667  
00:55:21.009 --> 00:55:23.319 that lines the endo cervical canal.  
NOTE Confidence: 0.963361976666667  
00:55:23.320 --> 00:55:25.960 Next in red you can see the squamous  
NOTE Confidence: 0.963361976666667  
00:55:25.960 --> 00:55:28.080 epithelia which lines the ecto cervix,  
NOTE Confidence: 0.963361976666667  
00:55:28.080 --> 00:55:31.136 and then you can see the squamo columnar  
NOTE Confidence: 0.963361976666667  
00:55:31.136 --> 00:55:33.920 junction, also known as the SCJ.  
NOTE Confidence: 0.963361976666667  
00:55:33.920 --> 00:55:36.928 And this is the point of which the  
NOTE Confidence: 0.963361976666667  
00:55:36.928 --> 00:55:38.815 columnar epithelia and squamous  
NOTE Confidence: 0.963361976666667

00:55:38.815 --> 00:55:39.879 epithelium needs.  
NOTE Confidence: 0.963361976666667

00:55:39.880 --> 00:55:42.967 The SCJ is dynamic and moves during  
NOTE Confidence: 0.963361976666667

00:55:42.967 --> 00:55:46.159 early adolescence and during first pregnancy.  
NOTE Confidence: 0.963361976666667

00:55:46.160 --> 00:55:49.598 The original SCJ originates in the  
NOTE Confidence: 0.963361976666667

00:55:49.598 --> 00:55:52.336 Endo cervical canal and as the cervix  
NOTE Confidence: 0.963361976666667

00:55:52.336 --> 00:55:54.440 diverts during the times I just mentioned,  
NOTE Confidence: 0.963361976666667

00:55:54.440 --> 00:55:57.581 the SCJ comes to lie on the Ecto cervix  
NOTE Confidence: 0.963361976666667

00:55:57.581 --> 00:56:00.520 and becomes a new SCJ and you can see  
NOTE Confidence: 0.963361976666667

00:56:00.520 --> 00:56:03.678 that with the dotted line versus the new.  
NOTE Confidence: 0.963361976666667

00:56:03.680 --> 00:56:05.180 And then next we have  
NOTE Confidence: 0.963361976666667

00:56:05.180 --> 00:56:06.080 the transformation zone.  
NOTE Confidence: 0.963361976666667

00:56:06.080 --> 00:56:08.384 So this is the epithelium between  
NOTE Confidence: 0.963361976666667

00:56:08.384 --> 00:56:10.280 the original and new SCJ.  
NOTE Confidence: 0.963361976666667

00:56:10.280 --> 00:56:12.584 It's the area where all nearly  
NOTE Confidence: 0.963361976666667

00:56:12.584 --> 00:56:14.120 all cervical neoplasia occurs.  
NOTE Confidence: 0.963361976666667

00:56:14.120 --> 00:56:16.530 Squamous metaplasia in the cervix

NOTE Confidence: 0.963361976666667  
00:56:16.530 --> 00:56:18.940 refers to the physiological replacement  
NOTE Confidence: 0.963361976666667  
00:56:19.008 --> 00:56:20.858 of the inverted columnar epithelia  
NOTE Confidence: 0.963361976666667  
00:56:20.858 --> 00:56:23.658 on the ecto cervix by newly formed  
NOTE Confidence: 0.963361976666667  
00:56:23.658 --> 00:56:25.868 squamous epithelia from the sub  
NOTE Confidence: 0.963361976666667  
00:56:25.868 --> 00:56:28.520 columnar reserve cells and that again  
NOTE Confidence: 0.963361976666667  
00:56:28.520 --> 00:56:32.360 averse within the transformation zone.  
NOTE Confidence: 0.963361976666667  
00:56:32.360 --> 00:56:36.146 So a brief history of HPV in 1949.  
NOTE Confidence: 0.963361976666667  
00:56:36.146 --> 00:56:38.744 The first description of HPV was  
NOTE Confidence: 0.963361976666667  
00:56:38.744 --> 00:56:41.416 provided by Strauss and all who  
NOTE Confidence: 0.963361976666667  
00:56:41.416 --> 00:56:43.896 used an electron microscope to  
NOTE Confidence: 0.963361976666667  
00:56:43.896 --> 00:56:46.380 examine aqueous extracts of water  
NOTE Confidence: 0.963361976666667  
00:56:46.380 --> 00:56:48.304 wart tissues in 1963.  
NOTE Confidence: 0.963361976666667  
00:56:48.304 --> 00:56:51.260 The physical properties of HPVDNA  
NOTE Confidence: 0.963361976666667  
00:56:51.260 --> 00:56:52.760 were described in the study  
NOTE Confidence: 0.963361976666667  
00:56:52.760 --> 00:56:53.960 by Crawford and Crawford,  
NOTE Confidence: 0.963361976666667

00:56:53.960 --> 00:56:56.046 and it wasn't until the 1920s that  
NOTE Confidence: 0.963361976666667

00:56:56.046 --> 00:56:58.950 a role of HPV in cervical cancer was  
NOTE Confidence: 0.963361976666667

00:56:59.032 --> 00:57:02.455 postulated for the first time by this  
NOTE Confidence: 0.963361976666667

00:57:02.455 --> 00:57:04.560 gentleman professor Harold Zuhausen.  
NOTE Confidence: 0.963361976666667

00:57:04.560 --> 00:57:06.800 He's a German virologist,  
NOTE Confidence: 0.963361976666667

00:57:06.800 --> 00:57:09.635 also known as the father of virology.  
NOTE Confidence: 0.963361976666667

00:57:09.640 --> 00:57:11.292 He subsequently isolated and  
NOTE Confidence: 0.963361976666667

00:57:11.292 --> 00:57:13.357 cloned different strains of HPV.  
NOTE Confidence: 0.926356825789473

00:57:13.360 --> 00:57:15.210 His research concluded that patients  
NOTE Confidence: 0.926356825789473

00:57:15.210 --> 00:57:18.472 infected with HPV 16 and 18 were at an  
NOTE Confidence: 0.926356825789473

00:57:18.472 --> 00:57:20.157 increased risk of developing cancer,  
NOTE Confidence: 0.926356825789473

00:57:20.160 --> 00:57:22.246 and he won a Nobel Prize for  
NOTE Confidence: 0.926356825789473

00:57:22.246 --> 00:57:23.840 Medicine or Physiology in 2008.  
NOTE Confidence: 0.926356825789473

00:57:23.840 --> 00:57:30.280 Sadly, he passed away May 2023. So this  
NOTE Confidence: 0.961529192

00:57:32.400 --> 00:57:34.712 before we can move on, is what is HPV?  
NOTE Confidence: 0.961529192

00:57:34.712 --> 00:57:37.298 As most of us know HPV stands

NOTE Confidence: 0.961529192  
00:57:37.298 --> 00:57:39.958 for the Human Papilloma virus.  
NOTE Confidence: 0.961529192  
00:57:39.960 --> 00:57:41.898 The picture on the left you  
NOTE Confidence: 0.961529192  
00:57:41.898 --> 00:57:44.399 can see here is the HPV genome.  
NOTE Confidence: 0.961529192  
00:57:44.400 --> 00:57:47.622 It's approximately 8000 base pair circular  
NOTE Confidence: 0.961529192  
00:57:47.622 --> 00:57:51.199 double stranded DNA genome in case in  
NOTE Confidence: 0.961529192  
00:57:51.199 --> 00:57:53.439 a non enveloped isocahedral capsid.  
NOTE Confidence: 0.961529192  
00:57:53.440 --> 00:57:56.660 It has seven to nine open reading  
NOTE Confidence: 0.961529192  
00:57:56.660 --> 00:57:58.740 frames divided into 3 regions.  
NOTE Confidence: 0.961529192  
00:57:58.740 --> 00:58:01.212 So you have your your listed  
NOTE Confidence: 0.961529192  
00:58:01.212 --> 00:58:02.916 E or early region.  
NOTE Confidence: 0.961529192  
00:58:02.920 --> 00:58:04.276 It's in a purple or maroon,  
NOTE Confidence: 0.961529192  
00:58:04.280 --> 00:58:06.560 not sure how it's coming across  
NOTE Confidence: 0.961529192  
00:58:06.560 --> 00:58:09.456 and it contains the E 12456  
NOTE Confidence: 0.961529192  
00:58:09.456 --> 00:58:11.796 and seven open reading frames.  
NOTE Confidence: 0.961529192  
00:58:11.800 --> 00:58:14.040 The core proteins E1 and Two have  
NOTE Confidence: 0.961529192

00:58:14.040 --> 00:58:16.683 key roles in viral DNA replication  
NOTE Confidence: 0.961529192

00:58:16.683 --> 00:58:18.827 and amplification and regulating  
NOTE Confidence: 0.961529192

00:58:18.827 --> 00:58:20.435 A viral transcription.  
NOTE Confidence: 0.961529192

00:58:20.440 --> 00:58:24.118 The accessory proteins E456 and Seven.  
NOTE Confidence: 0.961529192

00:58:24.120 --> 00:58:26.068 These proteins facilitate the  
NOTE Confidence: 0.961529192

00:58:26.068 --> 00:58:28.503 different stages of the vegetative  
NOTE Confidence: 0.961529192

00:58:28.503 --> 00:58:31.291 virus life cycle primarily by forming  
NOTE Confidence: 0.961529192

00:58:31.291 --> 00:58:33.516 virus post interactions to alter  
NOTE Confidence: 0.961529192

00:58:33.594 --> 00:58:36.612 environment of the keratinocyte to  
NOTE Confidence: 0.961529192

00:58:36.612 --> 00:58:39.427 support viral replication and enable  
NOTE Confidence: 0.961529192

00:58:39.427 --> 00:58:42.317 invasion of host antiviral defenses.  
NOTE Confidence: 0.961529192

00:58:42.320 --> 00:58:45.880 And for the high risk HPVS which we  
NOTE Confidence: 0.961529192

00:58:45.880 --> 00:58:50.256 focus on a lot on the key players of  
NOTE Confidence: 0.961529192

00:58:50.256 --> 00:58:55.920 oncogenesis are the oncoproteins E6 and E7.  
NOTE Confidence: 0.961529192

00:58:55.920 --> 00:58:58.678 So the L or late region delineated  
NOTE Confidence: 0.961529192

00:58:58.678 --> 00:59:00.828 in blue contains the structural

NOTE Confidence: 0.961529192

00:59:00.828 --> 00:59:03.038 proteins L1 and L2 genes.

NOTE Confidence: 0.961529192

00:59:03.040 --> 00:59:05.245 The L1 and L2 proteins form the

NOTE Confidence: 0.961529192

00:59:05.245 --> 00:59:07.768 capsid as well as L2 having a role

NOTE Confidence: 0.961529192

00:59:07.768 --> 00:59:10.200 in delivery of the viral genome to

NOTE Confidence: 0.961529192

00:59:10.200 --> 00:59:13.026 the nucleus upon infection and viral

NOTE Confidence: 0.961529192

00:59:13.026 --> 00:59:16.156 genome encapsidation during capsid assembly.

NOTE Confidence: 0.961529192

00:59:16.160 --> 00:59:18.176 And then finally the non coding

NOTE Confidence: 0.961529192

00:59:18.176 --> 00:59:20.583 region which is here in red and that

NOTE Confidence: 0.961529192

00:59:20.583 --> 00:59:23.745 is your long control region LCR and

NOTE Confidence: 0.961529192

00:59:23.745 --> 00:59:25.877 it contains regulatory elements.

NOTE Confidence: 0.961529192

00:59:25.880 --> 00:59:27.790 This region contains binding sites

NOTE Confidence: 0.961529192

00:59:27.790 --> 00:59:29.700 for a plethora of transcription

NOTE Confidence: 0.961529192

00:59:29.767 --> 00:59:31.622 and regulatory factors that either

NOTE Confidence: 0.961529192

00:59:31.622 --> 00:59:33.477 activate or repress the early

NOTE Confidence: 0.961529192

00:59:33.480 --> 00:59:36.000 or late and late promoters,

NOTE Confidence: 0.961529192

00:59:36.000 --> 00:59:37.795 the origin of replication to  
NOTE Confidence: 0.961529192

00:59:37.795 --> 00:59:40.428 which E1 protein binds as well as  
NOTE Confidence: 0.961529192

00:59:40.428 --> 00:59:42.732 multiple binding sites for viral E2  
NOTE Confidence: 0.961529192

00:59:42.732 --> 00:59:44.760 proteins and the right hand picture.  
NOTE Confidence: 0.961529192

00:59:44.760 --> 00:59:49.656 This is for again our high risk HPV proteins,  
NOTE Confidence: 0.961529192

00:59:49.656 --> 00:59:52.920 oncoproteins E6 and E7.  
NOTE Confidence: 0.961529192

00:59:52.920 --> 00:59:53.400 So  
NOTE Confidence: 0.903019822

00:59:55.520 --> 00:59:58.320 HPV increases basal cell proliferation  
NOTE Confidence: 0.903019822

00:59:58.320 --> 01:00:01.120 and forces basal cell to.  
NOTE Confidence: 0.903019822

01:00:01.120 --> 01:00:04.405 Tolerate mutations through these two  
NOTE Confidence: 0.903019822

01:00:04.405 --> 01:00:09.825 proteins and E6 inhibits P53 and E7  
NOTE Confidence: 0.903019822

01:00:09.825 --> 01:00:13.200 retinoblastoma, also known as RB,  
NOTE Confidence: 0.903019822

01:00:13.200 --> 01:00:18.480 which you'll see here you can see my cursor.  
NOTE Confidence: 0.903019822

01:00:18.480 --> 01:00:21.217 The E6 protein blocks the binding of  
NOTE Confidence: 0.903019822

01:00:21.217 --> 01:00:23.636 transcription factor P53 to the promoter  
NOTE Confidence: 0.903019822

01:00:23.636 --> 01:00:26.090 of pro apoptotic genes through its

NOTE Confidence: 0.903019822

01:00:26.170 --> 01:00:29.450 binding with ubiquitin ligase E6AP.

NOTE Confidence: 0.903019822

01:00:29.450 --> 01:00:33.400 That's inducing its proteosomal degradation.

NOTE Confidence: 0.903019822

01:00:33.400 --> 01:00:36.914 Again, E7 onco protein induces the RB

NOTE Confidence: 0.903019822

01:00:36.914 --> 01:00:40.664 degradation for promoting S phase entry.

NOTE Confidence: 0.903019822

01:00:40.664 --> 01:00:44.640 The E7, excuse me,

NOTE Confidence: 0.903019822

01:00:44.640 --> 01:00:47.880 because of this, this protein,

NOTE Confidence: 0.903019822

01:00:47.880 --> 01:00:53.626 the P53 and your RB proteins,

NOTE Confidence: 0.903019822

01:00:53.626 --> 01:00:56.708 they're critical in the cell

NOTE Confidence: 0.903019822

01:00:56.708 --> 01:00:58.199 cycle checkpoint proteins.

NOTE Confidence: 0.903019822

01:00:58.200 --> 01:01:00.000 So with these not being around,

NOTE Confidence: 0.903019822

01:01:00.000 --> 01:01:03.700 it really prevents the protection

NOTE Confidence: 0.903019822

01:01:03.700 --> 01:01:06.328 that it's needed again,

NOTE Confidence: 0.903019822

01:01:06.328 --> 01:01:09.184 the way it looks as proliferation begets

NOTE Confidence: 0.903019822

01:01:09.184 --> 01:01:12.119 mutation and mutation begets proliferation,

NOTE Confidence: 0.903019822

01:01:12.120 --> 01:01:13.188 immune system escape.

NOTE Confidence: 0.903019822

01:01:13.188 --> 01:01:14.968 So over time with repeated  
NOTE Confidence: 0.903019822

01:01:14.968 --> 01:01:16.400 and chronic infections,  
NOTE Confidence: 0.903019822

01:01:16.400 --> 01:01:18.710 the basal cell develops sufficient  
NOTE Confidence: 0.903019822

01:01:18.710 --> 01:01:20.440 mutations that become malignant.  
NOTE Confidence: 0.850009665

01:01:23.240 --> 01:01:25.598 So HPV types and it spreads,  
NOTE Confidence: 0.850009665

01:01:25.600 --> 01:01:28.840 there are hundreds of HPV genotypes  
NOTE Confidence: 0.850009665

01:01:28.840 --> 01:01:31.549 and there are about 12 to 15  
NOTE Confidence: 0.850009665

01:01:31.549 --> 01:01:33.986 high risk HPV serotypes that  
NOTE Confidence: 0.850009665

01:01:33.986 --> 01:01:35.716 cause several types of cancers.  
NOTE Confidence: 0.850009665

01:01:35.720 --> 01:01:39.264 The two again we focus on heavily are  
NOTE Confidence: 0.850009665

01:01:39.264 --> 01:01:42.876 HPV 16 and 18 as they are the two  
NOTE Confidence: 0.850009665

01:01:42.880 --> 01:01:45.405 cervical cancer inducing HPV serotypes  
NOTE Confidence: 0.850009665

01:01:45.405 --> 01:01:48.558 responsible for 70% of cervical cancer.  
NOTE Confidence: 0.91485823625

01:01:50.720 --> 01:01:54.344 It typically HPV resolves within 9 to 12  
NOTE Confidence: 0.91485823625

01:01:54.344 --> 01:01:58.358 months and can almost clear within two years.  
NOTE Confidence: 0.91485823625

01:01:58.360 --> 01:02:00.760 But during productive cervical HPV infection,

NOTE Confidence: 0.91485823625  
01:02:00.760 --> 01:02:02.936 low grade cytological abnormalities  
NOTE Confidence: 0.91485823625  
01:02:02.936 --> 01:02:05.112 may clinically be detectable  
NOTE Confidence: 0.91485823625  
01:02:05.112 --> 01:02:07.080 and screening usually transient.  
NOTE Confidence: 0.91485823625  
01:02:07.080 --> 01:02:09.720 However, the carcinogenic HPV 16 and  
NOTE Confidence: 0.91485823625  
01:02:09.720 --> 01:02:12.430 18 infections that persist beyond 12  
NOTE Confidence: 0.91485823625  
01:02:12.430 --> 01:02:14.630 months increase the likelihood of  
NOTE Confidence: 0.91485823625  
01:02:14.630 --> 01:02:16.480 precancerous or cancerous lesions,  
NOTE Confidence: 0.91485823625  
01:02:16.480 --> 01:02:18.664 although not all persistent  
NOTE Confidence: 0.91485823625  
01:02:18.664 --> 01:02:19.756 infections progress.  
NOTE Confidence: 0.91485823625  
01:02:19.760 --> 01:02:21.400 In the United States,  
NOTE Confidence: 0.91485823625  
01:02:21.400 --> 01:02:23.573 the median age of cytologically  
NOTE Confidence: 0.91485823625  
01:02:23.573 --> 01:02:25.705 detected precancer cervical lesions  
NOTE Confidence: 0.91485823625  
01:02:25.705 --> 01:02:28.280 occurs approximately 10 years after  
NOTE Confidence: 0.91485823625  
01:02:28.280 --> 01:02:30.920 the median age of sexual debut.  
NOTE Confidence: 0.91485823625  
01:02:30.920 --> 01:02:33.836 HPV can enter a latent state.  
NOTE Confidence: 0.91485823625

01:02:33.840 --> 01:02:34.256 Additionally,  
NOTE Confidence: 0.91485823625

01:02:34.256 --> 01:02:36.336 there's evidence for cervical viral  
NOTE Confidence: 0.91485823625

01:02:36.336 --> 01:02:38.000 reactivation in some populations,  
NOTE Confidence: 0.91485823625

01:02:38.000 --> 01:02:42.158 including females with HIV and older females.  
NOTE Confidence: 0.91485823625

01:02:42.160 --> 01:02:42.544 However,  
NOTE Confidence: 0.91485823625

01:02:42.544 --> 01:02:45.232 it's unknown whether all or any subset  
NOTE Confidence: 0.91485823625

01:02:45.232 --> 01:02:48.033 of HPV infections become latent and  
NOTE Confidence: 0.91485823625

01:02:48.033 --> 01:02:50.483 whether re emergent HPV infections  
NOTE Confidence: 0.91485823625

01:02:50.483 --> 01:02:52.760 carry significant cancer risk.  
NOTE Confidence: 0.91485823625

01:02:52.760 --> 01:02:55.000 So here I have a couple listed.  
NOTE Confidence: 0.91485823625

01:02:55.000 --> 01:02:58.200 Of the genotypes you have your excuse me,  
NOTE Confidence: 0.91485823625

01:02:58.200 --> 01:03:02.960 cutaneous which is your non genital warts.  
NOTE Confidence: 0.91485823625

01:03:02.960 --> 01:03:05.486 These types have a predilection for  
NOTE Confidence: 0.91485823625

01:03:05.486 --> 01:03:07.623 cutaneous epithelium and are found  
NOTE Confidence: 0.91485823625

01:03:07.623 --> 01:03:09.652 in planter warts, common warts,  
NOTE Confidence: 0.91485823625

01:03:09.652 --> 01:03:11.436 flat warts, butcher warts.

NOTE Confidence: 0.91485823625  
01:03:11.440 --> 01:03:13.500 These are types HPV,  
NOTE Confidence: 0.91485823625  
01:03:13.500 --> 01:03:16.496 types 1-2 and four for your plantar.  
NOTE Confidence: 0.91485823625  
01:03:16.496 --> 01:03:18.680 Flat warts is types 3 and 10,  
NOTE Confidence: 0.91485823625  
01:03:18.680 --> 01:03:21.720 and the butcher warts is 7 and two,  
NOTE Confidence: 0.91485823625  
01:03:21.720 --> 01:03:23.034 the analogenital epithelium.  
NOTE Confidence: 0.91485823625  
01:03:23.034 --> 01:03:25.662 These HPV types have a predilection  
NOTE Confidence: 0.91485823625  
01:03:25.662 --> 01:03:27.738 for the analogenital keratinized  
NOTE Confidence: 0.91485823625  
01:03:27.738 --> 01:03:30.353 skin and mucous membranes infection.  
NOTE Confidence: 0.91485823625  
01:03:30.360 --> 01:03:32.999 So these common sites are your penis,  
NOTE Confidence: 0.91485823625  
01:03:33.000 --> 01:03:36.092 scrotum, perineum, \*\*\*\* canal,  
NOTE Confidence: 0.91485823625  
01:03:36.092 --> 01:03:39.368 perianal region, vaginal introitus,  
NOTE Confidence: 0.91485823625  
01:03:39.368 --> 01:03:43.475 \*\*\*\*\* and cervix for your genital  
NOTE Confidence: 0.91485823625  
01:03:43.475 --> 01:03:46.000 warts HPV 6:00 and 11:00.  
NOTE Confidence: 0.91485823625  
01:03:46.000 --> 01:03:48.660 And these are benign \*\*\*\* genital warts.  
NOTE Confidence: 0.91485823625  
01:03:48.660 --> 01:03:50.810 And then the squamous intrapathidal  
NOTE Confidence: 0.91485823625

01:03:50.810 --> 01:03:53.759 lesions and or carcinoma of the vagina,

NOTE Confidence: 0.91485823625

01:03:53.760 --> 01:03:55.520 \*\*\*\*\* cervix, \*\*\*\*\* or penis.

NOTE Confidence: 0.91485823625

01:03:55.520 --> 01:03:58.474 And that's your high risk HPV types,

NOTE Confidence: 0.91485823625

01:03:58.480 --> 01:04:01.816 16 being the most common and having

NOTE Confidence: 0.91485823625

01:04:01.816 --> 01:04:04.256 the highest risk of progression

NOTE Confidence: 0.91485823625

01:04:04.256 --> 01:04:05.720 of cervical cancer.

NOTE Confidence: 0.91485823625

01:04:05.720 --> 01:04:08.360 Other mucosal services,

NOTE Confidence: 0.91485823625

01:04:08.360 --> 01:04:10.488 HPV 16 can infect the oral mucosa and

NOTE Confidence: 0.91485823625

01:04:10.488 --> 01:04:12.718 it's been associated with squamous cell

NOTE Confidence: 0.762451648

01:04:12.720 --> 01:04:14.240 carcinoma of the oral cavity.

NOTE Confidence: 0.74760748

01:04:16.360 --> 01:04:18.000 Again, related disease in the

NOTE Confidence: 0.74760748

01:04:18.000 --> 01:04:19.640 female is your cervical cancer.

NOTE Confidence: 0.74760748

01:04:19.640 --> 01:04:22.184 It's the fourth most common cancer

NOTE Confidence: 0.74760748

01:04:22.184 --> 01:04:23.880 among females with approximately

NOTE Confidence: 0.74760748

01:04:23.880 --> 01:04:26.480 570,000 cases of invasive cervical

NOTE Confidence: 0.74760748

01:04:26.480 --> 01:04:28.852 carcinoma diagnosed and 311,000

NOTE Confidence: 0.74760748

01:04:28.852 --> 01:04:31.516 cervical cancer deaths annually.

NOTE Confidence: 0.961051079090909

01:04:34.640 --> 01:04:36.170 What are the risk factors

NOTE Confidence: 0.961051079090909

01:04:36.170 --> 01:04:37.960 and how can we prevent it?

NOTE Confidence: 0.961051079090909

01:04:37.960 --> 01:04:40.812 So risk factors for HPV multiple

NOTE Confidence: 0.961051079090909

01:04:40.812 --> 01:04:43.044 sex partners not using a form

NOTE Confidence: 0.961051079090909

01:04:43.044 --> 01:04:44.760 of sexual barrier methods.

NOTE Confidence: 0.961051079090909

01:04:44.760 --> 01:04:46.280 So male or female condoms

NOTE Confidence: 0.792129441428571

01:04:48.680 --> 01:04:50.556 age, young age at start of sex,

NOTE Confidence: 0.792129441428571

01:04:50.560 --> 01:04:54.104 particularly under the age of 18, excuse me.

NOTE Confidence: 0.792129441428571

01:04:54.104 --> 01:04:56.056 And then cigarette smoking

NOTE Confidence: 0.792129441428571

01:04:56.056 --> 01:04:57.520 alter cervical secretions,

NOTE Confidence: 0.792129441428571

01:04:57.520 --> 01:04:59.522 which increases the chance that an HP

NOTE Confidence: 0.792129441428571

01:04:59.522 --> 01:05:01.600 and V infection will be established and

NOTE Confidence: 0.792129441428571

01:05:01.600 --> 01:05:04.000 worsen the chance that it will be cleared.

NOTE Confidence: 0.792129441428571

01:05:04.000 --> 01:05:05.716 And then lastly, but not least,

NOTE Confidence: 0.792129441428571

01:05:05.720 --> 01:05:08.280 your STISA study performed by  
NOTE Confidence: 0.792129441428571

01:05:08.280 --> 01:05:09.360 Abreu and ET al.  
NOTE Confidence: 0.792129441428571

01:05:09.360 --> 01:05:14.168 In 2016 took a hundred 838 women  
NOTE Confidence: 0.792129441428571

01:05:14.168 --> 01:05:17.916 aged 18 to 68 screened using Pap  
NOTE Confidence: 0.792129441428571

01:05:17.916 --> 01:05:20.272 smears for cervical abnormalities  
NOTE Confidence: 0.792129441428571

01:05:20.272 --> 01:05:23.940 such as HPV non HPVSTDs and they  
NOTE Confidence: 0.792129441428571

01:05:23.940 --> 01:05:26.510 used PCR and MCRMPCR methods.  
NOTE Confidence: 0.792129441428571

01:05:26.510 --> 01:05:29.000 They were looking for Chlamydia gonorrhea,  
NOTE Confidence: 0.792129441428571

01:05:29.000 --> 01:05:31.820 Mycoplasma genitalium,  
NOTE Confidence: 0.792129441428571

01:05:31.820 --> 01:05:34.640 Trichomonas vaginalis,  
NOTE Confidence: 0.792129441428571

01:05:34.640 --> 01:05:36.160 HSV one and two,  
NOTE Confidence: 0.792129441428571

01:05:36.160 --> 01:05:37.680 and then Truconoma Palladium.  
NOTE Confidence: 0.936774582

01:05:39.760 --> 01:05:42.160 What they found was that  
NOTE Confidence: 0.85141425375

01:05:44.360 --> 01:05:45.590 the primary pathogens  
NOTE Confidence: 0.85141425375

01:05:45.590 --> 01:05:47.640 associated with high risk HPV  
NOTE Confidence: 0.86743335

01:05:49.680 --> 01:05:52.457 were the chlamydia and gonorrhea.

NOTE Confidence: 0.86743335

01:05:52.457 --> 01:05:53.952 Increased risk for all grade

NOTE Confidence: 0.86743335

01:05:53.952 --> 01:05:55.240 of cervical abnormalities,

NOTE Confidence: 0.86743335

01:05:55.240 --> 01:05:59.600 mainly for high grade serious

NOTE Confidence: 0.86743335

01:05:59.600 --> 01:06:01.607 squamous intraepithelial lesions,

NOTE Confidence: 0.86743335

01:06:01.607 --> 01:06:04.283 suggesting a possible synergenic

NOTE Confidence: 0.86743335

01:06:04.283 --> 01:06:06.290 synergenistic action in

NOTE Confidence: 0.86743335

01:06:06.364 --> 01:06:08.518 cervical lesions progression.

NOTE Confidence: 0.86743335

01:06:08.520 --> 01:06:10.632 And how can we prevent this

NOTE Confidence: 0.86743335

01:06:10.632 --> 01:06:12.040 so safe sex practice?

NOTE Confidence: 0.86743335

01:06:12.040 --> 01:06:14.506 That's condoms, monogamy,

NOTE Confidence: 0.86743335

01:06:14.506 --> 01:06:17.794 waiting until you're older,

NOTE Confidence: 0.86743335

01:06:17.800 --> 01:06:21.280 and then, of course, vaccination.

NOTE Confidence: 0.86743335

01:06:21.280 --> 01:06:23.494 I'm not gonna spend too much time on this

NOTE Confidence: 0.86743335

01:06:23.494 --> 01:06:25.480 slide just cause for the sake of time,

NOTE Confidence: 0.86743335

01:06:25.480 --> 01:06:28.776 but this just gives us a brief overview

NOTE Confidence: 0.86743335

01:06:28.776 --> 01:06:31.004 starting from 1951 with Henrietta Lacks.  
NOTE Confidence: 0.86743335

01:06:31.004 --> 01:06:33.240 For those of you this, that's the one.  
NOTE Confidence: 0.86743335

01:06:33.240 --> 01:06:34.200 The one thing I will bring  
NOTE Confidence: 0.86743335

01:06:34.200 --> 01:06:35.080 up is Henrietta Lacks.  
NOTE Confidence: 0.86743335

01:06:35.080 --> 01:06:38.527 She was a woman who developed cancer in a  
NOTE Confidence: 0.86743335

01:06:38.527 --> 01:06:41.593 cervical cancer in at her at the age of 30.  
NOTE Confidence: 0.86743335

01:06:41.600 --> 01:06:44.491 She had sought treatment at John Hopkins  
NOTE Confidence: 0.86743335

01:06:44.491 --> 01:06:46.520 University with Doctor George Gay,  
NOTE Confidence: 0.86743335

01:06:46.520 --> 01:06:48.760 and he took a sample of what later  
NOTE Confidence: 0.86743335

01:06:48.760 --> 01:06:50.636 became known as the He lost sales,  
NOTE Confidence: 0.86743335

01:06:50.640 --> 01:06:52.992 named after Henrietta Lacks.  
NOTE Confidence: 0.86743335

01:06:52.992 --> 01:06:56.520 And this is really what sparked  
NOTE Confidence: 0.86743335

01:06:56.520 --> 01:06:58.656 the profound impact that she had  
NOTE Confidence: 0.86743335

01:06:58.656 --> 01:07:00.080 on major scientific discoveries,  
NOTE Confidence: 0.86743335

01:07:00.080 --> 01:07:02.138 not only just with the link  
NOTE Confidence: 0.86743335

01:07:02.138 --> 01:07:04.040 between HPV and cervical cancer,

NOTE Confidence: 0.86743335

01:07:04.040 --> 01:07:05.240 but the polio vaccine.

NOTE Confidence: 0.903444470666667

01:07:09.000 --> 01:07:12.834 So here we're gonna discuss the

NOTE Confidence: 0.903444470666667

01:07:12.834 --> 01:07:16.340 vaccination guidelines so the CDC you

NOTE Confidence: 0.903444470666667

01:07:16.340 --> 01:07:18.878 can see here commit Advisory Committee

NOTE Confidence: 0.903444470666667

01:07:18.878 --> 01:07:21.434 on Immunization Practice so that ACIP

NOTE Confidence: 0.917665266666666

01:07:23.800 --> 01:07:27.355 what they list here on the right hand side,

NOTE Confidence: 0.917665266666666

01:07:27.360 --> 01:07:29.125 routine vaccination at age 11

NOTE Confidence: 0.917665266666666

01:07:29.125 --> 01:07:31.600 or 12 can be started at age 9.

NOTE Confidence: 0.917665266666666

01:07:31.600 --> 01:07:34.048 Vaccination for everyone through age 26

NOTE Confidence: 0.917665266666666

01:07:34.048 --> 01:07:36.520 is not adequately vaccinated when younger,

NOTE Confidence: 0.917665266666666

01:07:36.520 --> 01:07:38.782 and then vaccination is not recommended

NOTE Confidence: 0.917665266666666

01:07:38.782 --> 01:07:40.958 for everyone older the age of 26.

NOTE Confidence: 0.917665266666666

01:07:40.960 --> 01:07:43.432 Some adults 27 to 45 might decide to

NOTE Confidence: 0.917665266666666

01:07:43.432 --> 01:07:46.577 get the HPV vaccine if they did not get

NOTE Confidence: 0.917665266666666

01:07:46.577 --> 01:07:48.624 it adequately when they were younger.

NOTE Confidence: 0.917665266666666

01:07:48.624 --> 01:07:50.454 And then vaccination in this age range  
NOTE Confidence: 0.9176652666666666

01:07:50.454 --> 01:07:52.159 provides less benefit for several reasons,  
NOTE Confidence: 0.9176652666666666

01:07:52.160 --> 01:07:55.310 including that most people at this  
NOTE Confidence: 0.9176652666666666

01:07:55.310 --> 01:07:57.936 age point have already been exposed  
NOTE Confidence: 0.9176652666666666

01:07:57.936 --> 01:08:00.790 to HPV and the vaccine prevents new  
NOTE Confidence: 0.9176652666666666

01:08:00.790 --> 01:08:03.280 HPV and obviously does not treat  
NOTE Confidence: 0.9176652666666666

01:08:03.280 --> 01:08:05.360 existing HPV infections or disease.  
NOTE Confidence: 0.9176652666666666

01:08:05.360 --> 01:08:08.480 Your dosing schedule is A2 dose  
NOTE Confidence: 0.9176652666666666

01:08:08.480 --> 01:08:09.932 schedule and it's recommended  
NOTE Confidence: 0.9176652666666666

01:08:09.932 --> 01:08:12.110 for most persons starting in the  
NOTE Confidence: 0.9176652666666666

01:08:12.169 --> 01:08:14.159 series before their 15th birthday.  
NOTE Confidence: 0.9176652666666666

01:08:14.160 --> 01:08:15.920 The 2nd dose of HPV vaccine should be  
NOTE Confidence: 0.9176652666666666

01:08:15.920 --> 01:08:18.080 given 6 to 12 months after the first dose,  
NOTE Confidence: 0.9176652666666666

01:08:18.080 --> 01:08:20.036 and adolescents who received 2 doses  
NOTE Confidence: 0.9176652666666666

01:08:20.036 --> 01:08:21.960 less than five months apart will  
NOTE Confidence: 0.9176652666666666

01:08:21.960 --> 01:08:25.159 require a third dose of HPV vaccine.

NOTE Confidence: 0.9176652666666666  
01:08:25.160 --> 01:08:27.512 3 doses of HPV vaccine are recommended  
NOTE Confidence: 0.9176652666666666  
01:08:27.512 --> 01:08:29.953 for teens and young adults who started  
NOTE Confidence: 0.9176652666666666  
01:08:29.953 --> 01:08:33.004 the series at age 15 through 26 and  
NOTE Confidence: 0.9176652666666666  
01:08:33.004 --> 01:08:34.817 for immunocompromised persons the  
NOTE Confidence: 0.9176652666666666  
01:08:34.817 --> 01:08:38.153 schedule is 01 to two and six months.  
NOTE Confidence: 0.9176652666666666  
01:08:38.160 --> 01:08:41.688 3 doses like I mentioned immunocompromised  
NOTE Confidence: 0.9176652666666666  
01:08:41.688 --> 01:08:45.039 persons between ages 9 through 26  
NOTE Confidence: 0.9176652666666666  
01:08:45.040 --> 01:08:48.752 and then this chart here to the left  
NOTE Confidence: 0.9176652666666666  
01:08:48.752 --> 01:08:51.700 are the three HPV vaccines licensed  
NOTE Confidence: 0.9176652666666666  
01:08:51.700 --> 01:08:53.720 in the United States.  
NOTE Confidence: 0.9176652666666666  
01:08:53.720 --> 01:08:56.495 The one exclusively being used  
NOTE Confidence: 0.9176652666666666  
01:08:56.495 --> 01:09:00.719 and moved to is the 9 valent HPV  
NOTE Confidence: 0.9176652666666666  
01:09:00.720 --> 01:09:02.400 as it's covering the most  
NOTE Confidence: 0.920996315  
01:09:05.000 --> 01:09:06.400 HPV infections.  
NOTE Confidence: 0.804356714375  
01:09:08.840 --> 01:09:10.715 Contra indicate contraindications  
NOTE Confidence: 0.804356714375

01:09:10.715 --> 01:09:14.465 and precautions if you have a  
NOTE Confidence: 0.804356714375

01:09:14.465 --> 01:09:17.565 severe allergic reaction such as  
NOTE Confidence: 0.804356714375

01:09:17.565 --> 01:09:19.972 anaphylaxis to *Saccharomyces cerevese*  
NOTE Confidence: 0.804356714375

01:09:19.972 --> 01:09:22.396 and probably butchering that,  
NOTE Confidence: 0.804356714375

01:09:22.400 --> 01:09:24.240 but that's essentially Baker's use.  
NOTE Confidence: 0.804356714375

01:09:24.240 --> 01:09:26.680 That is an absolute contraindication.  
NOTE Confidence: 0.804356714375

01:09:26.680 --> 01:09:29.319 If you have a hypersensitivity to that  
NOTE Confidence: 0.804356714375

01:09:29.320 --> 01:09:32.080 moderate or severe acute illness,  
NOTE Confidence: 0.804356714375

01:09:32.080 --> 01:09:34.573 you would just hold off until it has run  
NOTE Confidence: 0.804356714375

01:09:34.573 --> 01:09:37.120 its course and you can give the vaccine  
NOTE Confidence: 0.804356714375

01:09:37.120 --> 01:09:38.646 and then minor acute illness such as  
NOTE Confidence: 0.804356714375

01:09:38.646 --> 01:09:40.239 diarrhea or upper respiratory infection,  
NOTE Confidence: 0.804356714375

01:09:40.240 --> 01:09:43.236 you can give it without any concern.  
NOTE Confidence: 0.804356714375

01:09:43.240 --> 01:09:45.574 HPV vaccine is not recommended for  
NOTE Confidence: 0.804356714375

01:09:45.574 --> 01:09:47.640 use during pregnancy and should  
NOTE Confidence: 0.804356714375

01:09:47.640 --> 01:09:49.840 be delayed until after pregnancy.

NOTE Confidence: 0.804356714375

01:09:49.840 --> 01:09:52.997 There's no study proving that it's harmful.

NOTE Confidence: 0.804356714375

01:09:53.000 --> 01:09:54.980 However, it is recommended to

NOTE Confidence: 0.804356714375

01:09:54.980 --> 01:09:56.960 wait until after the pregnancy,

NOTE Confidence: 0.94843121

01:10:00.080 --> 01:10:01.680 so screening for cervical

NOTE Confidence: 0.94843121

01:10:01.680 --> 01:10:03.680 cancer in the United States.

NOTE Confidence: 0.94843121

01:10:03.680 --> 01:10:04.872 As I mentioned before,

NOTE Confidence: 0.94843121

01:10:04.872 --> 01:10:06.660 HPV 16 and 18 are responsible

NOTE Confidence: 0.94843121

01:10:06.719 --> 01:10:08.098 for 70% of cervical cancers,

NOTE Confidence: 0.94843121

01:10:08.098 --> 01:10:10.054 and this can be prevented by

NOTE Confidence: 0.94843121

01:10:10.054 --> 01:10:11.900 regular screening of women and

NOTE Confidence: 0.94843121

01:10:11.900 --> 01:10:13.360 the vaccination of children.

NOTE Confidence: 0.94843121

01:10:13.360 --> 01:10:15.992 Your Pap test begins at age 21 regardless

NOTE Confidence: 0.94843121

01:10:15.992 --> 01:10:18.400 of your onset of sexual activity,

NOTE Confidence: 0.94843121

01:10:18.400 --> 01:10:20.920 and it recurs every three years.

NOTE Confidence: 0.94843121

01:10:20.920 --> 01:10:24.560 Co testing starts at age 30 and

NOTE Confidence: 0.94843121

01:10:24.560 --> 01:10:26.000 screening shifts to the code testing,  
NOTE Confidence: 0.94843121

01:10:26.000 --> 01:10:28.611 which is the Pap test with HPV  
NOTE Confidence: 0.94843121

01:10:28.611 --> 01:10:30.906 testing every five years until age  
NOTE Confidence: 0.94843121

01:10:30.906 --> 01:10:33.480 60 fives if they have been negative.  
NOTE Confidence: 0.94843121

01:10:33.480 --> 01:10:36.306 Pap testing before 21 or starting  
NOTE Confidence: 0.94843121

01:10:36.306 --> 01:10:38.782 HPV before 30 increases unnecessary  
NOTE Confidence: 0.94843121

01:10:38.782 --> 01:10:41.968 procedures that are both painful and  
NOTE Confidence: 0.94843121

01:10:41.968 --> 01:10:44.560 can capitalize on future fertility.  
NOTE Confidence: 0.94843121

01:10:44.560 --> 01:10:47.080 You can see here this is the  
NOTE Confidence: 0.8493298775

01:10:49.560 --> 01:10:53.528 USPSTF versus the ACS guidelines  
NOTE Confidence: 0.8493298775

01:10:53.528 --> 01:10:55.640 for cervical cancer screening.  
NOTE Confidence: 0.8493298775

01:10:55.640 --> 01:10:57.815 So the American College of  
NOTE Confidence: 0.8493298775

01:10:57.815 --> 01:10:59.555 Obstetrics and gynecologist ACOG  
NOTE Confidence: 0.8493298775

01:10:59.560 --> 01:11:02.480 joined the American Society of  
NOTE Confidence: 0.8493298775

01:11:02.480 --> 01:11:04.672 Colposcopy and Cervical Pathology.  
NOTE Confidence: 0.8493298775

01:11:04.672 --> 01:11:07.499 So the ASCCP and the Society

NOTE Confidence: 0.8493298775  
01:11:07.499 --> 01:11:08.678 of Gynecological Oncology,  
NOTE Confidence: 0.8493298775  
01:11:08.680 --> 01:11:09.920 SGO and endorsing the  
NOTE Confidence: 0.826320803846154  
01:11:12.200 --> 01:11:14.078 USPUSPSTF, which is the US Preventative  
NOTE Confidence: 0.826320803846154  
01:11:14.078 --> 01:11:15.330 Service Task Force Cervical  
NOTE Confidence: 0.826320803846154  
01:11:15.382 --> 01:11:16.879 Cancer Screening recommendation.  
NOTE Confidence: 0.826320803846154  
01:11:16.880 --> 01:11:19.316 So what would be followed was this.  
NOTE Confidence: 0.826320803846154  
01:11:19.320 --> 01:11:21.680 And then this is the American Cancer Society  
NOTE Confidence: 0.6842077  
01:11:24.640 --> 01:11:27.828 moving on cytology outcomes.  
NOTE Confidence: 0.6842077  
01:11:27.828 --> 01:11:30.600 So now you've done your Pap test,  
NOTE Confidence: 0.6842077  
01:11:30.600 --> 01:11:33.078 you've done your HPV Co testing.  
NOTE Confidence: 0.6842077  
01:11:33.080 --> 01:11:36.720 What do the results mean?  
NOTE Confidence: 0.6842077  
01:11:36.720 --> 01:11:40.038 So some cytology outcomes you have are  
NOTE Confidence: 0.6842077  
01:11:40.038 --> 01:11:42.320 negative for intraepithelial malignancy.  
NOTE Confidence: 0.6842077  
01:11:42.320 --> 01:11:44.462 This means the specimen was adequate  
NOTE Confidence: 0.6842077  
01:11:44.462 --> 01:11:46.501 for evaluation and there's no  
NOTE Confidence: 0.6842077

01:11:46.501 --> 01:11:48.157 epithelial abnormalities identified.  
NOTE Confidence: 0.6842077

01:11:48.160 --> 01:11:51.160 Next you have what's referred to as Ascus  
NOTE Confidence: 0.6842077

01:11:51.160 --> 01:11:53.200 cells that display abnormalities more  
NOTE Confidence: 0.6842077

01:11:53.200 --> 01:11:55.240 marked than simple reactive changes,  
NOTE Confidence: 0.6842077

01:11:55.240 --> 01:11:57.440 but do not display squamous  
NOTE Confidence: 0.6842077

01:11:57.440 --> 01:11:58.320 intrapithelial lesion.  
NOTE Confidence: 0.6842077

01:11:58.320 --> 01:12:01.491 In some cases these lesions are associated  
NOTE Confidence: 0.6842077

01:12:01.491 --> 01:12:03.560 with cervical intrapithelial neoplasia,  
NOTE Confidence: 0.6842077

01:12:03.560 --> 01:12:04.240 also neoplasia,  
NOTE Confidence: 0.6842077

01:12:04.240 --> 01:12:05.600 also known as sin,  
NOTE Confidence: 0.6842077

01:12:05.600 --> 01:12:08.240 and we'll get into that later.  
NOTE Confidence: 0.6842077

01:12:08.240 --> 01:12:10.670 You have your low grade squamous  
NOTE Confidence: 0.6842077

01:12:10.670 --> 01:12:11.480 intrapithelial lesions.  
NOTE Confidence: 0.6842077

01:12:11.480 --> 01:12:13.285 These lesions are associated with  
NOTE Confidence: 0.6842077

01:12:13.285 --> 01:12:16.149 HPV and tend to be associated with  
NOTE Confidence: 0.6842077

01:12:16.149 --> 01:12:19.113 transient changes that regress over time.

NOTE Confidence: 0.6842077

01:12:19.120 --> 01:12:22.648 Atypical squamous cells cannot exclude high

NOTE Confidence: 0.6842077

01:12:22.648 --> 01:12:25.000 grade squamous interepithelial lesions.

NOTE Confidence: 0.6842077

01:12:25.000 --> 01:12:26.995 These cells are likely consist of a

NOTE Confidence: 0.6842077

01:12:26.995 --> 01:12:29.355 mixture of true high grade squamous

NOTE Confidence: 0.6842077

01:12:29.355 --> 01:12:31.450 interepithelial lesions and other

NOTE Confidence: 0.6842077

01:12:31.450 --> 01:12:34.275 findings that mimic such lesions.

NOTE Confidence: 0.6842077

01:12:34.280 --> 01:12:35.960 You have atypical glandular

NOTE Confidence: 0.6842077

01:12:35.960 --> 01:12:37.640 cells not otherwise specified.

NOTE Confidence: 0.6842077

01:12:37.640 --> 01:12:40.904 This was formerly known as Agus and has

NOTE Confidence: 0.6842077

01:12:40.904 --> 01:12:43.757 recently changed to either endocervical AEC,

NOTE Confidence: 0.6842077

01:12:43.760 --> 01:12:47.840 endometrial or not otherwise specified.

NOTE Confidence: 0.6842077

01:12:47.840 --> 01:12:50.270 And then your high grade squamous

NOTE Confidence: 0.6842077

01:12:50.270 --> 01:12:51.479 intraepithelial lesion lesions

NOTE Confidence: 0.6842077

01:12:51.479 --> 01:12:53.474 associated with high risk types

NOTE Confidence: 0.6842077

01:12:53.474 --> 01:12:56.284 of HPV and that have high risk

NOTE Confidence: 0.6842077

01:12:56.284 --> 01:12:58.558 of progression to CIN or cancer.

NOTE Confidence: 0.6842077

01:12:58.560 --> 01:13:01.320 And last but not least carcinoma,

NOTE Confidence: 0.6842077

01:13:01.320 --> 01:13:03.240 squamous cell cancer,

NOTE Confidence: 0.6842077

01:13:03.240 --> 01:13:03.880 adenocarcinoma.

NOTE Confidence: 0.6842077

01:13:03.880 --> 01:13:05.780 So squamous cell carcinoma is

NOTE Confidence: 0.6842077

01:13:05.780 --> 01:13:08.346 the ectoservice caused by HPV and

NOTE Confidence: 0.6842077

01:13:08.346 --> 01:13:11.676 then adenocarcinoma of the cervix,

NOTE Confidence: 0.6842077

01:13:11.680 --> 01:13:15.170 the endocarcinoma Cervix,

NOTE Confidence: 0.6842077

01:13:15.170 --> 01:13:20.120 the endocervix is a malarian malignancy.

NOTE Confidence: 0.6842077

01:13:20.120 --> 01:13:21.362 It's a cancer derived from the

NOTE Confidence: 0.6842077

01:13:21.362 --> 01:13:22.440 descendants of the malarian ducts.

NOTE Confidence: 0.6842077

01:13:22.440 --> 01:13:23.676 As we talked at the very,

NOTE Confidence: 0.6842077

01:13:23.680 --> 01:13:24.314 very beginning,

NOTE Confidence: 0.6842077

01:13:24.314 --> 01:13:26.533 why it was important to make that

NOTE Confidence: 0.6842077

01:13:26.533 --> 01:13:28.542 note of this malarian malignancy,

NOTE Confidence: 0.6842077

01:13:28.542 --> 01:13:31.597 the simple columnar epithelium that

NOTE Confidence: 0.6842077

01:13:31.597 --> 01:13:35.118 invaginates upon itself to form these glands.

NOTE Confidence: 0.6842077

01:13:35.120 --> 01:13:37.695 It is a mucinous phenotype

NOTE Confidence: 0.6842077

01:13:37.695 --> 01:13:39.240 for malaria malignancies,

NOTE Confidence: 0.6842077

01:13:39.240 --> 01:13:41.060 commonly encountered as a mucinous

NOTE Confidence: 0.6842077

01:13:41.060 --> 01:13:42.880 variant of ovarian epithelial tumors,

NOTE Confidence: 0.962936351666667

01:13:45.760 --> 01:13:49.438 and it's rare but obviously dangerous.

NOTE Confidence: 0.76333275125

01:13:52.720 --> 01:13:55.360 So here we are,

NOTE Confidence: 0.76333275125

01:13:55.360 --> 01:13:58.000 cervical interactive neoplasm CIN.

NOTE Confidence: 0.76333275125

01:13:58.000 --> 01:14:00.760 There are three different grades,

NOTE Confidence: 0.76333275125

01:14:00.760 --> 01:14:03.370 1-2 and three, and they go from low grade

NOTE Confidence: 0.76333275125

01:14:03.370 --> 01:14:05.677 with mild atypical cellular changes.

NOTE Confidence: 0.76333275125

01:14:05.680 --> 01:14:07.960 Of the lower 3rd.

NOTE Confidence: 0.76333275125

01:14:07.960 --> 01:14:11.502 CIN 2, which is your high grade

NOTE Confidence: 0.76333275125

01:14:11.502 --> 01:14:12.914 moderately atypical change

NOTE Confidence: 0.76333275125

01:14:12.914 --> 01:14:15.645 confined to the basal 2 cells 2,

NOTE Confidence: 0.76333275125

01:14:15.645 --> 01:14:17.835 excuse me, 2/3 of the epithelium.  
NOTE Confidence: 0.76333275125

01:14:17.840 --> 01:14:19.502 And then three which is your  
NOTE Confidence: 0.76333275125

01:14:19.502 --> 01:14:21.094 high grade lesion with severely  
NOTE Confidence: 0.76333275125

01:14:21.094 --> 01:14:22.360 atypical cell changes.  
NOTE Confidence: 0.76333275125

01:14:22.360 --> 01:14:24.960 And that it's encompassing more  
NOTE Confidence: 0.76333275125

01:14:24.960 --> 01:14:27.348 than 2/3 of the epithelial thickness  
NOTE Confidence: 0.76333275125

01:14:27.348 --> 01:14:29.033 and includes both thickness lesions  
NOTE Confidence: 0.6532346

01:14:31.280 --> 01:14:32.519 for syn 1.  
NOTE Confidence: 0.815584465

01:14:34.880 --> 01:14:35.400 Excuse me,  
NOTE Confidence: 0.849132856818182

01:14:38.000 --> 01:14:40.534 yes. So a patient's risk for progression  
NOTE Confidence: 0.849132856818182

01:14:40.534 --> 01:14:42.757 to cancer related is related to in  
NOTE Confidence: 0.849132856818182

01:14:42.757 --> 01:14:45.119 large part by age and your same grade.  
NOTE Confidence: 0.849132856818182

01:14:45.120 --> 01:14:49.048 So ages greater younger than 25 years  
NOTE Confidence: 0.849132856818182

01:14:49.048 --> 01:14:51.273 have a low risk of developing cervical  
NOTE Confidence: 0.849132856818182

01:14:51.273 --> 01:14:53.355 cancer in patients 25 and older.  
NOTE Confidence: 0.849132856818182

01:14:53.360 --> 01:14:57.984 And again, the same grade has a low C1 has

NOTE Confidence: 0.849132856818182  
01:14:57.984 --> 01:15:00.440 a low potential versus a Syn 3 and Syn 2,  
NOTE Confidence: 0.849132856818182  
01:15:00.440 --> 01:15:02.480 which have higher potential for progression  
NOTE Confidence: 0.849132856818182  
01:15:02.480 --> 01:15:04.679 and a lower potential for regression.  
NOTE Confidence: 0.964818648  
01:15:09.600 --> 01:15:12.080 So what do we do?  
NOTE Confidence: 0.964818648  
01:15:12.080 --> 01:15:15.422 So the 2019 American Society of  
NOTE Confidence: 0.964818648  
01:15:15.422 --> 01:15:17.650 Copaci and Cervical Pathology  
NOTE Confidence: 0.964818648  
01:15:17.743 --> 01:15:19.824 ASCCP put out this really,  
NOTE Confidence: 0.964818648  
01:15:19.824 --> 01:15:21.715 really great app which I'll get into  
NOTE Confidence: 0.964818648  
01:15:21.715 --> 01:15:23.558 and I'm going to hope I can show you.  
NOTE Confidence: 0.964818648  
01:15:23.560 --> 01:15:28.120 But essentially in collaboration  
NOTE Confidence: 0.964818648  
01:15:28.120 --> 01:15:30.040 with multiple professional societies  
NOTE Confidence: 0.964818648  
01:15:30.040 --> 01:15:31.480 and government organizations,  
NOTE Confidence: 0.964818648  
01:15:31.480 --> 01:15:33.800 the United States and Canada  
NOTE Confidence: 0.964818648  
01:15:33.800 --> 01:15:35.656 published practice changing consensus  
NOTE Confidence: 0.964818648  
01:15:35.656 --> 01:15:37.583 guidelines regarding the evaluation  
NOTE Confidence: 0.964818648

01:15:37.583 --> 01:15:39.918 and management of cervical dysplasia.  
NOTE Confidence: 0.964818648

01:15:39.920 --> 01:15:41.156 The consensus recommendations  
NOTE Confidence: 0.964818648

01:15:41.156 --> 01:15:43.628 are based on the principle of  
NOTE Confidence: 0.964818648

01:15:43.628 --> 01:15:45.758 equal management for equal risk.  
NOTE Confidence: 0.964818648

01:15:45.760 --> 01:15:47.794 So earlier today I think Jenny  
NOTE Confidence: 0.964818648

01:15:47.794 --> 01:15:49.600 might be on the call.  
NOTE Confidence: 0.964818648

01:15:49.600 --> 01:15:52.336 You know she's like well this is what we  
NOTE Confidence: 0.964818648

01:15:52.336 --> 01:15:56.077 got for our Pap smear HPV Co testing test.  
NOTE Confidence: 0.964818648

01:15:56.080 --> 01:15:57.076 What does this mean?  
NOTE Confidence: 0.964818648

01:15:57.076 --> 01:15:58.882 And it takes in a lot of  
NOTE Confidence: 0.964818648

01:15:58.882 --> 01:16:00.117 things as far as well,  
NOTE Confidence: 0.964818648

01:16:00.120 --> 01:16:03.680 have they been HPV positive in the past?  
NOTE Confidence: 0.964818648

01:16:03.680 --> 01:16:04.568 What are their histories?  
NOTE Confidence: 0.964818648

01:16:04.568 --> 01:16:06.319 It's more than just what it is today.  
NOTE Confidence: 0.964818648

01:16:06.320 --> 01:16:07.760 It takes into the whole  
NOTE Confidence: 0.964818648

01:16:07.760 --> 01:16:08.912 account of the person.

NOTE Confidence: 0.964818648  
01:16:08.920 --> 01:16:09.462 So again,  
NOTE Confidence: 0.964818648  
01:16:09.462 --> 01:16:11.088 this means the same current screening  
NOTE Confidence: 0.964818648  
01:16:11.088 --> 01:16:12.936 results may lead to a different  
NOTE Confidence: 0.964818648  
01:16:12.936 --> 01:16:14.188 management recommendation for one  
NOTE Confidence: 0.964818648  
01:16:14.188 --> 01:16:15.599 patient versus another patient,  
NOTE Confidence: 0.964818648  
01:16:15.600 --> 01:16:18.120 depending on the past testing results.  
NOTE Confidence: 0.964818648  
01:16:18.120 --> 01:16:21.088 So I'm gonna see if I can bring  
NOTE Confidence: 0.964818648  
01:16:21.088 --> 01:16:23.916 over this screen so you can see,  
NOTE Confidence: 0.964818648  
01:16:23.920 --> 01:16:25.040 Can everyone see this now?  
NOTE Confidence: 0.964818648  
01:16:25.040 --> 01:16:25.080 I  
NOTE Confidence: 0.814343881666666  
01:16:27.320 --> 01:16:30.880 don't know if anyone can see yeah  
NOTE Confidence: 0.814343881666666  
01:16:30.880 --> 01:16:32.824 so this you can actually download  
NOTE Confidence: 0.814343881666666  
01:16:32.824 --> 01:16:35.208 as an app for providers, nurses,  
NOTE Confidence: 0.814343881666666  
01:16:35.208 --> 01:16:38.160 whomever or if you just want to play around  
NOTE Confidence: 0.814343881666666  
01:16:38.234 --> 01:16:40.858 with it and you literally just plug in  
NOTE Confidence: 0.814343881666666

01:16:40.858 --> 01:16:43.196 exactly what it is that is popping up.

NOTE Confidence: 0.814343881666666

01:16:43.200 --> 01:16:47.640 So you know age 3065,

NOTE Confidence: 0.814343881666666

01:16:47.640 --> 01:16:48.954 they came in for routine screening

NOTE Confidence: 0.814343881666666

01:16:48.954 --> 01:16:50.519 and this is a pick your own.

NOTE Confidence: 0.814343881666666

01:16:50.520 --> 01:16:51.280 So if you pick one,

NOTE Confidence: 0.814343881666666

01:16:51.280 --> 01:16:52.040 the other one clicks off.

NOTE Confidence: 0.814343881666666

01:16:52.040 --> 01:16:53.800 So let's say routine screening.

NOTE Confidence: 0.814343881666666

01:16:53.800 --> 01:16:55.640 Next what it came back,

NOTE Confidence: 0.814343881666666

01:16:55.640 --> 01:16:57.592 their HPV was positive.

NOTE Confidence: 0.814343881666666

01:16:57.592 --> 01:17:00.032 Ours are usually always genotyped

NOTE Confidence: 0.814343881666666

01:17:00.040 --> 01:17:02.404 and we'll say that these were

NOTE Confidence: 0.814343881666666

01:17:02.404 --> 01:17:03.532 present And then cytology,

NOTE Confidence: 0.814343881666666

01:17:03.532 --> 01:17:05.240 what did it came come back as?

NOTE Confidence: 0.814343881666666

01:17:05.240 --> 01:17:08.006 So we'll just say ask as does

NOTE Confidence: 0.814343881666666

01:17:08.006 --> 01:17:09.584 the patient of previous and will

NOTE Confidence: 0.814343881666666

01:17:09.584 --> 01:17:11.617 say no and then it will map out

NOTE Confidence: 0.814343881666666  
01:17:11.617 --> 01:17:12.952 exactly what it is confirming  
NOTE Confidence: 0.814343881666666  
01:17:12.952 --> 01:17:15.157 these are exactly what you put in.  
NOTE Confidence: 0.814343881666666  
01:17:15.160 --> 01:17:16.480 And then it tells you recommendation.  
NOTE Confidence: 0.814343881666666  
01:17:16.480 --> 01:17:17.712 Colposcopy risk,  
NOTE Confidence: 0.814343881666666  
01:17:17.712 --> 01:17:22.640 intermediate risk of CIN 3 plus is 9%.  
NOTE Confidence: 0.814343881666666  
01:17:22.640 --> 01:17:24.080 So it's a really great tool.  
NOTE Confidence: 0.814343881666666  
01:17:24.080 --> 01:17:26.159 Again you can put on your phone.  
NOTE Confidence: 0.814343881666666  
01:17:26.160 --> 01:17:29.919 For me who's new to gynecology oncology,  
NOTE Confidence: 0.814343881666666  
01:17:29.920 --> 01:17:32.920 it's a great resource and I love it.  
NOTE Confidence: 0.814343881666666  
01:17:32.920 --> 01:17:34.945 So I highly encourage but  
NOTE Confidence: 0.814343881666666  
01:17:34.945 --> 01:17:36.160 like it recommended.  
NOTE Confidence: 0.814343881666666  
01:17:36.160 --> 01:17:38.841 So colposcopy it can be diagnostic and  
NOTE Confidence: 0.814343881666666  
01:17:38.841 --> 01:17:40.402 therapeutic colposcopy with extensional  
NOTE Confidence: 0.814343881666666  
01:17:40.402 --> 01:17:43.234 biopsy which we've done here in the office.  
NOTE Confidence: 0.814343881666666  
01:17:43.240 --> 01:17:45.760 So you have your Ecto cervical and  
NOTE Confidence: 0.814343881666666

01:17:45.760 --> 01:17:47.332 endo cervical curetage excision,  
NOTE Confidence: 0.814343881666666

01:17:47.332 --> 01:17:49.792 your loop electrical excision procedure  
NOTE Confidence: 0.814343881666666

01:17:49.792 --> 01:17:53.356 known as the LEAP and then your ablation.  
NOTE Confidence: 0.814343881666666

01:17:53.356 --> 01:17:55.351 So your cryotherapy cold knife  
NOTE Confidence: 0.814343881666666

01:17:55.351 --> 01:17:59.030 and CO2 lesia all my own time.  
NOTE Confidence: 0.814343881666666

01:17:59.030 --> 01:17:59.800 OK,  
NOTE Confidence: 0.814343881666666

01:17:59.800 --> 01:18:02.008 so finally what is the future  
NOTE Confidence: 0.814343881666666

01:18:02.008 --> 01:18:03.112 of cervical cancer?  
NOTE Confidence: 0.814343881666666

01:18:03.120 --> 01:18:05.731 So in 20-30 The Who hopes to  
NOTE Confidence: 0.814343881666666

01:18:05.731 --> 01:18:08.049 meet milestones on path to  
NOTE Confidence: 0.814343881666666

01:18:08.049 --> 01:18:09.717 eliminating cervical cancer  
NOTE Confidence: 0.945436634

01:18:12.040 --> 01:18:15.685 after meeting with meeting the 907090  
NOTE Confidence: 0.945436634

01:18:15.685 --> 01:18:18.355 targets through a global focus on  
NOTE Confidence: 0.945436634

01:18:18.355 --> 01:18:20.123 vaccination screening and treatment,  
NOTE Confidence: 0.945436634

01:18:20.123 --> 01:18:22.328 The Who hopes to eradicate  
NOTE Confidence: 0.945436634

01:18:22.328 --> 01:18:23.688 vaccine preventable cervical

NOTE Confidence: 0.945436634

01:18:23.688 --> 01:18:25.758 cancer within the next century.

NOTE Confidence: 0.945436634

01:18:25.760 --> 01:18:27.760 90% of girls fully vaccinated

NOTE Confidence: 0.945436634

01:18:27.760 --> 01:18:30.164 with HPV vaccine by age 1570%

NOTE Confidence: 0.945436634

01:18:30.164 --> 01:18:32.184 of women initially screened with

NOTE Confidence: 0.945436634

01:18:32.184 --> 01:18:34.387 high performance testing by age 35

NOTE Confidence: 0.945436634

01:18:34.387 --> 01:18:36.200 and a secondary test at age 45.

NOTE Confidence: 0.945436634

01:18:36.200 --> 01:18:39.600 And 90% of pre cancers treated and 90%

NOTE Confidence: 0.945436634

01:18:39.600 --> 01:18:42.250 of invasive cancers managed strategies

NOTE Confidence: 0.945436634

01:18:42.250 --> 01:18:44.900 towards the elimination of cervical

NOTE Confidence: 0.945436634

01:18:44.979 --> 01:18:47.919 cancer as a global public health problem.

NOTE Confidence: 0.8942685

01:18:50.160 --> 01:18:52.694 The guiding principles life course and public

NOTE Confidence: 0.8942685

01:18:52.694 --> 01:18:54.959 health approach social justice and equality,

NOTE Confidence: 0.8942685

01:18:54.960 --> 01:18:57.908 integrated people centered health

NOTE Confidence: 0.8942685

01:18:57.908 --> 01:19:01.296 services and then the challenges that

NOTE Confidence: 0.8942685

01:19:01.296 --> 01:19:04.120 we face limited supply of the vaccine,

NOTE Confidence: 0.8942685

01:19:04.120 --> 01:19:06.405 cost and affordability of the  
NOTE Confidence: 0.8942685

01:19:06.405 --> 01:19:08.233 vaccine and delivering treatment,  
NOTE Confidence: 0.8942685

01:19:08.240 --> 01:19:12.819 the methods of which we deliver it and  
NOTE Confidence: 0.8942685

01:19:12.819 --> 01:19:15.878 then quality pathology and last but  
NOTE Confidence: 0.8942685

01:19:15.878 --> 01:19:18.086 certainly not least, therapeutic vaccines.  
NOTE Confidence: 0.8942685

01:19:18.086 --> 01:19:21.001 So therapeutic HPV vaccines deliver  
NOTE Confidence: 0.8942685

01:19:21.001 --> 01:19:24.486 tumor antigen to stimulate an immune  
NOTE Confidence: 0.8942685

01:19:24.486 --> 01:19:27.332 response to eliminate tumor cells.  
NOTE Confidence: 0.8942685

01:19:27.332 --> 01:19:30.197 Vaccine antigens delivery platforms are  
NOTE Confidence: 0.8942685

01:19:30.197 --> 01:19:32.920 diverse and include DNARNA peptide proteins,  
NOTE Confidence: 0.8942685

01:19:32.920 --> 01:19:34.892 viral vectors, microbial vectors  
NOTE Confidence: 0.8942685

01:19:34.892 --> 01:19:37.236 and antigen presenting cells.  
NOTE Confidence: 0.8942685

01:19:37.240 --> 01:19:39.452 Randomized randomized control trials  
NOTE Confidence: 0.8942685

01:19:39.452 --> 01:19:41.664 have demonstrated that therapeutic  
NOTE Confidence: 0.8942685

01:19:41.664 --> 01:19:44.100 HPV vaccines are efficacious in  
NOTE Confidence: 0.8942685

01:19:44.100 --> 01:19:46.200 patients with cervical with syn.

NOTE Confidence: 0.8942685

01:19:46.200 --> 01:19:49.236 In patients with HPV mediated malignancies,

NOTE Confidence: 0.8942685

01:19:49.240 --> 01:19:51.280 evidence of efficacy is limited.

NOTE Confidence: 0.8942685

01:19:51.280 --> 01:19:51.834 However,

NOTE Confidence: 0.8942685

01:19:51.834 --> 01:19:54.050 numerous ongoing studies evaluating

NOTE Confidence: 0.8942685

01:19:54.050 --> 01:19:56.820 updated therapeutic HPV vaccines in

NOTE Confidence: 0.8942685

01:19:56.892 --> 01:19:59.186 combination with immune checkpoint

NOTE Confidence: 0.8942685

01:19:59.186 --> 01:20:01.558 inhibition and other therapies

NOTE Confidence: 0.8942685

01:20:01.560 --> 01:20:04.680 exhibit significant promise.

NOTE Confidence: 0.8942685

01:20:04.680 --> 01:20:09.275 So here are my references and I will stop

NOTE Confidence: 0.8942685

01:20:09.275 --> 01:20:11.760 sharing and hopefully that gives us an.

NOTE Confidence: 0.8942685

01:20:11.760 --> 01:20:13.252 5 minutes for questions.

NOTE Confidence: 0.8942685

01:20:13.252 --> 01:20:13.998 I'm sorry.

NOTE Confidence: 0.874441824

01:20:14.480 --> 01:20:15.920 No, it's great. Thank you.

NOTE Confidence: 0.874441824

01:20:15.920 --> 01:20:18.080 The information is amazing

NOTE Confidence: 0.874441824

01:20:18.080 --> 01:20:20.240 and very well appreciated.

NOTE Confidence: 0.874441824

01:20:20.240 --> 01:20:22.720 We have two questions in the Q and  
NOTE Confidence: 0.911591877142857

01:20:25.040 --> 01:20:26.440 AI will just shout them out there.  
NOTE Confidence: 0.911591877142857

01:20:26.440 --> 01:20:28.365 I think the first one came in  
NOTE Confidence: 0.911591877142857

01:20:28.365 --> 01:20:29.920 while Doctor Datina was talking.  
NOTE Confidence: 0.911591877142857

01:20:29.920 --> 01:20:32.095 How do you feel about  
NOTE Confidence: 0.911591877142857

01:20:32.095 --> 01:20:33.400 ultrasound screenings annually?  
NOTE Confidence: 0.828662855

01:20:37.840 --> 01:20:39.196 And don't forget that you're on.  
NOTE Confidence: 0.828662855

01:20:39.200 --> 01:20:40.680 Yeah, there you go. I  
NOTE Confidence: 0.728786208333334

01:20:40.760 --> 01:20:44.512 I think that there's there's really no no  
NOTE Confidence: 0.728786208333334

01:20:44.512 --> 01:20:47.328 proven role for it for annual screening.  
NOTE Confidence: 0.728786208333334

01:20:47.328 --> 01:20:51.370 I think it will end up with this as Doctor  
NOTE Confidence: 0.728786208333334

01:20:51.370 --> 01:20:55.200 Paddle already said it end up to far  
NOTE Confidence: 0.728786208333334

01:20:55.200 --> 01:20:58.600 more unnecessary surgery being performed.  
NOTE Confidence: 0.728786208333334

01:20:58.600 --> 01:21:01.040 I think when you couple it with the  
NOTE Confidence: 0.728786208333334

01:21:01.040 --> 01:21:04.560 symptoms the patient has or your index of  
NOTE Confidence: 0.728786208333334

01:21:04.560 --> 01:21:06.680 suspicion based on your physical exam,

NOTE Confidence: 0.728786208333334  
01:21:06.680 --> 01:21:08.200 the patient's personal history,  
NOTE Confidence: 0.728786208333334  
01:21:08.200 --> 01:21:11.320 the the then the use of a sonogram,  
NOTE Confidence: 0.728786208333334  
01:21:11.320 --> 01:21:13.438 I think is is God value.  
NOTE Confidence: 0.728786208333334  
01:21:13.440 --> 01:21:15.575 But just to say I'm going to  
NOTE Confidence: 0.728786208333334  
01:21:15.575 --> 01:21:17.559 send somebody for one every year,  
NOTE Confidence: 0.728786208333334  
01:21:17.560 --> 01:21:20.360 it's just a waste of healthcare resources,  
NOTE Confidence: 0.9223058  
01:21:23.800 --> 01:21:29.160 OK. And our other question is,  
NOTE Confidence: 0.9223058  
01:21:29.160 --> 01:21:31.265 do you see artificial intelligence  
NOTE Confidence: 0.9223058  
01:21:31.265 --> 01:21:33.370 leading us to an earlier  
NOTE Confidence: 0.9223058  
01:21:33.442 --> 01:21:35.438 diagnosis of ovarian cancer?  
NOTE Confidence: 0.793384690666667  
01:21:38.480 --> 01:21:39.404 They're actually interestingly  
NOTE Confidence: 0.793384690666667  
01:21:39.404 --> 01:21:41.252 there was there's a new study  
NOTE Confidence: 0.793384690666667  
01:21:41.252 --> 01:21:42.529 that's gonna be published in  
NOTE Confidence: 0.793384690666667  
01:21:42.529 --> 01:21:46.288 the Gynon March 2024 edition,  
NOTE Confidence: 0.793384690666667  
01:21:46.288 --> 01:21:49.200 the Gynon Journal looking at  
NOTE Confidence: 0.92933286

01:21:50.600 --> 01:21:51.880 like a very preliminary study  
NOTE Confidence: 0.92933286

01:21:51.880 --> 01:21:53.599 out of Georgia Tech I believe.  
NOTE Confidence: 0.949388936666666

01:21:53.880 --> 01:21:57.606 And they are looking at using AI plus like  
NOTE Confidence: 0.949388936666666

01:21:57.606 --> 01:22:02.920 a combination of a number of metabolic,  
NOTE Confidence: 0.949388936666666

01:22:02.920 --> 01:22:04.912 I guess indices that can be  
NOTE Confidence: 0.949388936666666

01:22:04.912 --> 01:22:07.020 tested in the blood to see if  
NOTE Confidence: 0.949388936666666

01:22:07.020 --> 01:22:09.004 they can come up with a A profile.  
NOTE Confidence: 0.949388936666666

01:22:09.004 --> 01:22:09.916 So what they're doing,  
NOTE Confidence: 0.949388936666666

01:22:09.920 --> 01:22:11.720 my understanding of what they're doing  
NOTE Confidence: 0.949388936666666

01:22:11.720 --> 01:22:13.572 is that they're taking patients that  
NOTE Confidence: 0.949388936666666

01:22:13.572 --> 01:22:15.372 they have that have known ovarian  
NOTE Confidence: 0.949388936666666

01:22:15.372 --> 01:22:16.880 cancer versus nothing and they're  
NOTE Confidence: 0.949388936666666

01:22:16.880 --> 01:22:18.590 trying to establish some kind of  
NOTE Confidence: 0.949388936666666

01:22:18.590 --> 01:22:21.320 score based off of this metabolic  
NOTE Confidence: 0.949388936666666

01:22:21.320 --> 01:22:23.272 profile that they're building.  
NOTE Confidence: 0.949388936666666

01:22:23.280 --> 01:22:26.204 So I I think that there is going to

NOTE Confidence: 0.949388936666666  
01:22:26.204 --> 01:22:29.155 be a role for it but there are also a  
NOTE Confidence: 0.949388936666666  
01:22:29.155 --> 01:22:31.480 lot of I think downsides of AI that  
NOTE Confidence: 0.949388936666666  
01:22:31.480 --> 01:22:36.008 we you know we have to remember in the  
NOTE Confidence: 0.949388936666666  
01:22:36.008 --> 01:22:37.640 future as we apply them to our patients.  
NOTE Confidence: 0.398670372  
01:22:39.400 --> 01:22:40.400 I I look out look  
NOTE Confidence: 0.749319235  
01:22:40.400 --> 01:22:41.678 out for that article. I I  
NOTE Confidence: 0.897329464615385  
01:22:41.680 --> 01:22:43.768 I would, I would add to that and  
NOTE Confidence: 0.897329464615385  
01:22:43.768 --> 01:22:46.035 and just say that the one of the  
NOTE Confidence: 0.897329464615385  
01:22:46.035 --> 01:22:47.983 programs that that that I brought  
NOTE Confidence: 0.897329464615385  
01:22:47.983 --> 01:22:50.944 with me to Yale is early screening  
NOTE Confidence: 0.897329464615385  
01:22:50.944 --> 01:22:53.678 for ovarian and endometrial cancer.  
NOTE Confidence: 0.897329464615385  
01:22:53.680 --> 01:22:56.164 And and there we use a form of what's  
NOTE Confidence: 0.897329464615385  
01:22:56.164 --> 01:22:58.584 called machine learning which is a a,  
NOTE Confidence: 0.897329464615385  
01:22:58.584 --> 01:23:00.120 a type of AI.  
NOTE Confidence: 0.897329464615385  
01:23:00.120 --> 01:23:02.800 And we had done all of these studies  
NOTE Confidence: 0.897329464615385

01:23:02.800 --> 01:23:05.455 and collected all this data and didn't  
NOTE Confidence: 0.897329464615385

01:23:05.455 --> 01:23:07.365 think we had anything worthwhile  
NOTE Confidence: 0.897329464615385

01:23:07.440 --> 01:23:09.942 until we met with the bioinformatics  
NOTE Confidence: 0.897329464615385

01:23:09.942 --> 01:23:12.820 specialist and they began to train  
NOTE Confidence: 0.897329464615385

01:23:12.820 --> 01:23:15.110 our systems using machine learning.  
NOTE Confidence: 0.897329464615385

01:23:15.110 --> 01:23:17.120 And then we discovered things that  
NOTE Confidence: 0.897329464615385

01:23:17.120 --> 01:23:19.038 we never thought was visible in  
NOTE Confidence: 0.897329464615385

01:23:19.038 --> 01:23:20.820 this data and it wasn't visible  
NOTE Confidence: 0.897329464615385

01:23:20.875 --> 01:23:22.360 until we use these systems.  
NOTE Confidence: 0.897329464615385

01:23:22.360 --> 01:23:25.712 So I think they can just add an  
NOTE Confidence: 0.897329464615385

01:23:25.712 --> 01:23:28.052 enormous amount for analyzing large,  
NOTE Confidence: 0.897329464615385

01:23:28.052 --> 01:23:29.516 large sums of data.  
NOTE Confidence: 0.897329464615385

01:23:29.520 --> 01:23:33.060 But it as Doctor Papadla just alluded  
NOTE Confidence: 0.897329464615385

01:23:33.060 --> 01:23:35.160 to you you have to train these  
NOTE Confidence: 0.897329464615385

01:23:35.160 --> 01:23:37.320 systems and that means you've got to,  
NOTE Confidence: 0.897329464615385

01:23:37.320 --> 01:23:39.413 they've got to see huge amounts of

NOTE Confidence: 0.897329464615385  
01:23:39.413 --> 01:23:42.159 data and you also have to be very  
NOTE Confidence: 0.897329464615385  
01:23:42.159 --> 01:23:44.375 careful about overfitting your data for  
NOTE Confidence: 0.897329464615385  
01:23:44.375 --> 01:23:46.559 what what you're really looking for.  
NOTE Confidence: 0.897329464615385  
01:23:46.560 --> 01:23:48.378 But I don't think there's any  
NOTE Confidence: 0.897329464615385  
01:23:48.378 --> 01:23:49.980 question is these systems undergo  
NOTE Confidence: 0.897329464615385  
01:23:49.980 --> 01:23:51.610 refinement that these are going  
NOTE Confidence: 0.897329464615385  
01:23:51.610 --> 01:23:53.878 to become part part of pretty much  
NOTE Confidence: 0.897329464615385  
01:23:53.878 --> 01:23:55.393 everything we do in medicine.  
NOTE Confidence: 0.897329464615385  
01:23:55.400 --> 01:23:57.544 They read mammograms better  
NOTE Confidence: 0.897329464615385  
01:23:57.544 --> 01:23:59.220 than most radiologists today.  
NOTE Confidence: 0.897329464615385  
01:23:59.220 --> 01:24:02.430 You know there's a lot of places where  
NOTE Confidence: 0.897329464615385  
01:24:02.430 --> 01:24:04.536 they're they're already doing that.  
NOTE Confidence: 0.897329464615385  
01:24:04.536 --> 01:24:06.832 They're going to be reading our CAT  
NOTE Confidence: 0.897329464615385  
01:24:06.832 --> 01:24:08.970 scans or your radiology is going to  
NOTE Confidence: 0.897329464615385  
01:24:08.970 --> 01:24:11.319 be looked at with AI because again it  
NOTE Confidence: 0.897329464615385

01:24:11.319 --> 01:24:14.260 it has of the capacity to to process

NOTE Confidence: 0.897329464615385

01:24:14.260 --> 01:24:17.080 through data and refine it into

NOTE Confidence: 0.897329464615385

01:24:17.080 --> 01:24:20.040 very interesting ways for patients.

NOTE Confidence: 0.897329464615385

01:24:20.040 --> 01:24:21.156 So yeah, I think that's a,

NOTE Confidence: 0.897329464615385

01:24:21.160 --> 01:24:22.160 it's a great question

NOTE Confidence: 0.941280746666667

01:24:24.640 --> 01:24:26.116 and we have one last one.

NOTE Confidence: 0.941280746666667

01:24:26.120 --> 01:24:28.190 What is the role of uterine

NOTE Confidence: 0.941280746666667

01:24:28.190 --> 01:24:29.570 transplant in young patients

NOTE Confidence: 0.941280746666667

01:24:29.639 --> 01:24:31.118 with endometrial cancer?

NOTE Confidence: 0.7475097

01:24:36.460 --> 01:24:37.739 It's it's been, it's

NOTE Confidence: 0.86532449

01:24:37.740 --> 01:24:39.920 been used, it's been,

NOTE Confidence: 0.86532449

01:24:39.920 --> 01:24:42.100 it's it's highly experimental.

NOTE Confidence: 0.86532449

01:24:42.100 --> 01:24:43.765 I, I don't remember where

NOTE Confidence: 0.86532449

01:24:43.765 --> 01:24:45.097 exactly it was done,

NOTE Confidence: 0.86532449

01:24:45.100 --> 01:24:48.172 but I I just don't believe

NOTE Confidence: 0.86532449

01:24:48.172 --> 01:24:50.220 it's anything that's really

NOTE Confidence: 0.86532449

01:24:50.220 --> 01:24:52.580 taken off to my knowledge

NOTE Confidence: 0.947813102222222

01:24:55.760 --> 01:24:57.839 and that's what I'd have to say about that.

NOTE Confidence: 0.907697455

01:25:00.360 --> 01:25:01.920 I think it was somewhere in the UK,

NOTE Confidence: 0.907697455

01:25:01.920 --> 01:25:05.518 but I agree I've seen animal studies,

NOTE Confidence: 0.907697455

01:25:05.520 --> 01:25:07.416 but I don't know how well they

NOTE Confidence: 0.907697455

01:25:07.416 --> 01:25:09.000 translate into human at this point.

NOTE Confidence: 0.955850628571429

01:25:12.280 --> 01:25:15.276 OK. So thank you everybody so much.

NOTE Confidence: 0.955850628571429

01:25:15.280 --> 01:25:17.401 I'm going to end with one more

NOTE Confidence: 0.955850628571429

01:25:17.401 --> 01:25:19.262 comment that we had in the Q&A

NOTE Confidence: 0.955850628571429

01:25:19.262 --> 01:25:20.594 that said thanks so very much.

NOTE Confidence: 0.955850628571429

01:25:20.600 --> 01:25:23.342 We have a lot of worried women and we

NOTE Confidence: 0.955850628571429

01:25:23.342 --> 01:25:26.079 appreciate this talk and you being here.

NOTE Confidence: 0.955850628571429

01:25:26.080 --> 01:25:27.440 So I will second that.

NOTE Confidence: 0.955850628571429

01:25:27.440 --> 01:25:28.760 And thank you so much for your time.

NOTE Confidence: 0.955850628571429

01:25:28.760 --> 01:25:30.920 Thanks everybody for hanging in with

NOTE Confidence: 0.955850628571429

01:25:30.920 --> 01:25:34.640 us and spending your evening with us.

NOTE Confidence: 0.955850628571429

01:25:34.640 --> 01:25:35.680 Thank you.

NOTE Confidence: 0.955850628571429

01:25:35.680 --> 01:25:38.120 Have a great night. Thank

NOTE Confidence: 0.942459422

01:25:38.120 --> 01:25:40.000 you. Have a good night. Thank you.