WEBVTT

NOTE duration:"00:37:01" NOTE recognizability:0.865

NOTE language:en-us

NOTE Confidence: 0.8068416725

 $00:00:00.000 \longrightarrow 00:00:03.208$ See we are talking.

NOTE Confidence: 0.8068416725

 $00:00:03.210 \longrightarrow 00:00:07.039$ Generally about the topic of uncle fertility,

NOTE Confidence: 0.8068416725

 $00:00:07.040 \longrightarrow 00:00:11.255$ and more specifically about reproductive

NOTE Confidence: 0.8068416725

00:00:11.255 --> 00:00:13.784 endocrinology and infertility.

NOTE Confidence: 0.8068416725

 $00:00:13.790 \longrightarrow 00:00:17.460$ Referral for fertility preservation and

NOTE Confidence: 0.8068416725

 $00:00:17.460 \longrightarrow 00:00:21.003$ patients undergoing chemotherapy or Granada.

NOTE Confidence: 0.8068416725

 $00:00:21.003 \longrightarrow 00:00:27.450$ Toxic therapy as as the the poster said.

NOTE Confidence: 0.8068416725

 $00:00:27.450 \longrightarrow 00:00:29.676$ And we're joined by two members of

NOTE Confidence: 0.8068416725

 $00:00:29.676 \longrightarrow 00:00:33.326$ the OB GYN department, both who are

NOTE Confidence: 0.8068416725

 $00:00:33.326 \longrightarrow 00:00:36.386$ relatively young in their careers.

NOTE Confidence: 0.8068416725

00:00:36.390 --> 00:00:38.609 I don't actually know who's going first,

NOTE Confidence: 0.8068416725

 $00{:}00{:}38.610 \dashrightarrow 00{:}00{:}40.632$ and I'm going to introduce both

NOTE Confidence: 0.8068416725

 $00:00:40.632 \longrightarrow 00:00:42.650$ of them together as we start,

 $00:00:42.650 \longrightarrow 00:00:44.390$ and they can decide that.

NOTE Confidence: 0.8068416725

 $00{:}00{:}44.390 --> 00{:}00{:}45.730$ So we have two speakers.

NOTE Confidence: 0.8068416725

 $00:00:45.730 \longrightarrow 00:00:48.250$ We have Tanya Glenn,

NOTE Confidence: 0.8068416725

00:00:48.250 --> 00:00:50.770 who's originally from Rochester,

NOTE Confidence: 0.8068416725

 $00{:}00{:}50.770 \dashrightarrow 00{:}00{:}54.424$ MN and went to college at Truman

NOTE Confidence: 0.8068416725

 $00:00:54.424 \longrightarrow 00:00:57.722$ State University in Missouri and then.

NOTE Confidence: 0.8068416725

 $00:00:57.722 \longrightarrow 00:01:01.010$ Went on to attend medical school at Saint

NOTE Confidence: 0.8068416725

00:01:01.095 --> 00:01:04.000 Louis University School of Medicine.

NOTE Confidence: 0.8068416725

 $00:01:04.000 \longrightarrow 00:01:07.411$ And took the what is not such a common

NOTE Confidence: 0.8068416725

00:01:07.411 --> 00:01:10.559 path of of joining the military and

NOTE Confidence: 0.8068416725

 $00{:}01{:}10.559 \dashrightarrow 00{:}01{:}12.833$ did a combined military and civilian

NOTE Confidence: 0.8068416725

 $00:01:12.833 \longrightarrow 00:01:15.775$ residency at at Wright Patterson Air Force

NOTE Confidence: 0.8068416725

00:01:15.775 --> 00:01:18.772 Base and Wright University in Dayton, OH.

NOTE Confidence: 0.8068416725

00:01:18.772 --> 00:01:21.908 She's in her final year of REI training

NOTE Confidence: 0.8068416725

 $00:01:21.908 \longrightarrow 00:01:25.377$ at Yale and is going to be taking a

NOTE Confidence: 0.8068416725

 $00{:}01{:}25.377 \dashrightarrow 00{:}01{:}28.519$ position at Brooks Army Medical Center.

 $00:01:28.520 \longrightarrow 00:01:32.000$ After completing her her

NOTE Confidence: 0.8068416725

 $00:01:32.000 \longrightarrow 00:01:34.610$ fellowship this year.

NOTE Confidence: 0.8068416725

00:01:34.610 --> 00:01:39.810 And she is joined by Gabriella Barouch Kim,

NOTE Confidence: 0.8068416725

 $00:01:39.810 \longrightarrow 00:01:42.050$ who is from Los Angeles,

NOTE Confidence: 0.8068416725

 $00:01:42.050 \longrightarrow 00:01:43.952$ originally received her

NOTE Confidence: 0.8068416725

 $00{:}01{:}43.952 \dashrightarrow 00{:}01{:}46.488$ undergraduate degree at UCLA,

NOTE Confidence: 0.8068416725

 $00:01:46.490 \longrightarrow 00:01:50.074$ where she received a number of honors

NOTE Confidence: 0.8068416725

 $00:01:50.074 \longrightarrow 00:01:54.440$ and went on to medical school at UCSF.

NOTE Confidence: 0.8068416725

 $00:01:54.440 \longrightarrow 00:01:58.444$ She is a third year resident in

NOTE Confidence: 0.8068416725

 $00{:}01{:}58.444 \dashrightarrow 00{:}02{:}03.289$ OBGYN and is also interested in REI.

NOTE Confidence: 0.8068416725

 $00:02:03.290 \longrightarrow 00:02:06.391$ And is in the process of applying

NOTE Confidence: 0.8068416725

00:02:06.391 --> 00:02:07.720 for reproductive endocrinology

NOTE Confidence: 0.8068416725

 $00{:}02{:}07.795 \dashrightarrow 00{:}02{:}09.735$ and infertility fellowships as the

NOTE Confidence: 0.8068416725

 $00:02:09.735 \longrightarrow 00:02:12.624$ parent of a child who went through

NOTE Confidence: 0.8068416725

 $00:02:12.624 \longrightarrow 00:02:14.380$ the Yale OBGYN Residency.

 $00:02:14.380 \longrightarrow 00:02:17.047$ It's always nice to interact with the

NOTE Confidence: 0.8068416725

 $00:02:17.047 \longrightarrow 00:02:19.739$ with with Yale OBGYN and residents,

NOTE Confidence: 0.8068416725

 $00:02:19.740 \longrightarrow 00:02:23.009$ so they're they're here today and I'm

NOTE Confidence: 0.8068416725

 $00:02:23.009 \longrightarrow 00:02:25.879$ I'm not entirely sure what order.

NOTE Confidence: 0.8068416725

00:02:25.880 --> 00:02:27.506 I'm not entirely sure who's talking

NOTE Confidence: 0.8068416725

 $00:02:27.506 \longrightarrow 00:02:28.048$ about what,

NOTE Confidence: 0.8068416725

 $00:02:28.050 \longrightarrow 00:02:29.580$ but I'm going to leave it to the two of you.

NOTE Confidence: 0.8068416725

 $00:02:29.580 \longrightarrow 00:02:31.140$ You're both on one screen and

NOTE Confidence: 0.8068416725

 $00{:}02{:}31.140 \longrightarrow 00{:}02{:}33.050$ I think you can figure it out.

NOTE Confidence: 0.8068416725

00:02:33.050 --> 00:02:35.060 Welcome, thank you for joining us.

NOTE Confidence: 0.6345627

 $00{:}02{:}36.710 \dashrightarrow 00{:}02{:}39.910$ Thank you, thank you for having us.

NOTE Confidence: 0.88201729625

 $00:02:39.910 \longrightarrow 00:02:41.125$ So I'm Gabriella.

NOTE Confidence: 0.88201729625

00:02:41.125 --> 00:02:43.150 I'm here with Doctor Glenn.

NOTE Confidence: 0.88201729625

 $00{:}02{:}43.150 \dashrightarrow 00{:}02{:}45.535$ We're actually going to be

NOTE Confidence: 0.88201729625

 $00:02:45.535 \longrightarrow 00:02:47.220$ Co presenting and Doctor

NOTE Confidence: 0.88201729625

00:02:47.220 --> 00:02:49.410 Glenn is going to help answer

 $00:02:49.410 \longrightarrow 00:02:51.320$ questions at the end as well.

NOTE Confidence: 0.478887551

 $00:03:01.820 \longrightarrow 00:03:05.320$ OK, your slides. They look perfect.

NOTE Confidence: 0.478887551

 $00:03:05.800 \longrightarrow 00:03:08.620$ Perfect thank you so much.

NOTE Confidence: 0.478887551

00:03:08.620 --> 00:03:11.188 So today as you already mentioned,

NOTE Confidence: 0.478887551

00:03:11.190 --> 00:03:13.512 we're going to be talking about

NOTE Confidence: 0.478887551

 $00:03:13.512 \longrightarrow 00:03:15.060$ fertility preservation for patients

NOTE Confidence: 0.478887551

00:03:15.122 --> 00:03:17.030 undergoing gonadal toxic therapy.

NOTE Confidence: 0.855474025

00:03:20.150 --> 00:03:21.802 Neither Doctor Glenn nor

NOTE Confidence: 0.855474025

 $00:03:21.802 \longrightarrow 00:03:23.454$ I have any disclosures.

NOTE Confidence: 0.928460656

 $00:03:25.560 \longrightarrow 00:03:28.570$ So our objective with this talk is to try to

NOTE Confidence: 0.928460656

 $00{:}03{:}28.638 \to 00{:}03{:}31.578$ raise awareness for fertility preservation.

NOTE Confidence: 0.928460656

 $00:03:31.580 \longrightarrow 00:03:34.170$ Encourage patient and provider discussions

NOTE Confidence: 0.928460656

 $00:03:34.170 \longrightarrow 00:03:36.760$ surrounding the implications of cancer

NOTE Confidence: 0.928460656

 $00:03:36.831 \longrightarrow 00:03:39.516$ treatment on future reproductive capacity,

NOTE Confidence: 0.928460656

 $00:03:39.520 \longrightarrow 00:03:41.278$ improve multidisciplinary collaboration

 $00:03:41.278 \longrightarrow 00:03:44.208$ between providers caring for these

NOTE Confidence: 0.928460656

 $00:03:44.208 \longrightarrow 00:03:47.140$ patients and reproductive specialists,

NOTE Confidence: 0.928460656

 $00:03:47.140 \longrightarrow 00:03:49.720$ and discuss options for fertility

NOTE Confidence: 0.928460656

 $00:03:49.720 \longrightarrow 00:03:52.988$ preservation for patients who hope to

NOTE Confidence: 0.928460656

 $00:03:52.988 \longrightarrow 00:03:55.416$ preserve their reproductive capacity.

NOTE Confidence: 0.928460656

 $00:03:55.420 \longrightarrow 00:03:57.532$ So first I'd like to start with a

NOTE Confidence: 0.928460656

 $00{:}03{:}57.532 \dashrightarrow 00{:}03{:}59.800$ little bit of background on this topic.

NOTE Confidence: 0.928460656

 $00:03:59.800 \longrightarrow 00:04:02.326$ The term oncofertility was coined by

NOTE Confidence: 0.928460656

 $00:04:02.326 \longrightarrow 00:04:05.774$ Doctor Woodruff and it refers to a field

NOTE Confidence: 0.928460656

 $00:04:05.774 \longrightarrow 00:04:08.300$ of medicine concerned with minimizing the

NOTE Confidence: 0.928460656

 $00{:}04{:}08.380 \longrightarrow 00{:}04{:}11.254$ negative effects of cancer treatment on

NOTE Confidence: 0.928460656

 $00{:}04{:}11.254 \to 00{:}04{:}13.714$ the reproductive system and fertility,

NOTE Confidence: 0.928460656

 $00:04:13.714 \longrightarrow 00:04:16.434$ with assisting individuals with reproductive

NOTE Confidence: 0.928460656

 $00{:}04{:}16.434 \dashrightarrow 00{:}04{:}19.160$ impairments resulting from cancer the rapy.

NOTE Confidence: 0.908568968461538

 $00:04:22.020 \longrightarrow 00:04:24.771$ So what population are we referring to

NOTE Confidence: 0.908568968461538

 $00:04:24.771 \longrightarrow 00:04:27.288$ when we discuss fertility preservation

00:04:27.288 --> 00:04:31.084 for patients undergoing cancer therapy?

NOTE Confidence: 0.908568968461538

 $00:04:31.084 \longrightarrow 00:04:35.334$ So over 200,000 people under the age of

NOTE Confidence: 0.908568968461538

 $00:04:35.334 \longrightarrow 00:04:38.259$ 49 are diagnosed with cancer annually

NOTE Confidence: 0.908568968461538

 $00:04:38.259 \longrightarrow 00:04:41.023$ and 85% of patients less than 39 years

NOTE Confidence: 0.908568968461538

 $00:04:41.023 \longrightarrow 00:04:42.989$ old will survive for five years.

NOTE Confidence: 0.965542308

 $00:04:45.590 \longrightarrow 00:04:50.194$ 70,000 new cases a year of cancer

NOTE Confidence: 0.965542308

 $00:04:50.194 \longrightarrow 00:04:53.004$ are diagnosed in adolescence and

NOTE Confidence: 0.965542308

00:04:53.004 --> 00:04:55.654 young adults of these patients,

NOTE Confidence: 0.965542308

 $00:04:55.654 \longrightarrow 00:04:57.642$ more than 90% of them,

NOTE Confidence: 0.965542308

00:04:57.642 --> 00:04:59.910 will survive for at least five years,

NOTE Confidence: 0.965542308

 $00:04:59.910 \longrightarrow 00:05:02.500$ and these patients tend to be healthier

NOTE Confidence: 0.965542308

 $00:05:02.500 \longrightarrow 00:05:04.850$ and tolerate more intense therapies,

NOTE Confidence: 0.965542308

 $00{:}05{:}04.850 \dashrightarrow 00{:}05{:}06.970$ which is relevant because more

NOTE Confidence: 0.965542308

 $00:05:06.970 \longrightarrow 00:05:08.666$ intense therapies can drastically

NOTE Confidence: 0.965542308

 $00:05:08.666 \longrightarrow 00:05:10.709$ reduce the reproductive lifespan.

00:05:13.930 --> 00:05:16.966 Certain cancer treatments such as radiation,

NOTE Confidence: 0.910569123333333

 $00:05:16.970 \longrightarrow 00:05:18.356$ chemotherapy, and surgery,

NOTE Confidence: 0.910569123333333

 $00:05:18.356 \longrightarrow 00:05:21.128$ can lead to sterility and subfertility.

NOTE Confidence: 0.910569123333333

 $00{:}05{:}21.130 \dashrightarrow 00{:}05{:}23.986$ So next I'd like to briefly discuss

NOTE Confidence: 0.910569123333333

 $00:05:23.986 \longrightarrow 00:05:26.325$ what some of the morbidities

NOTE Confidence: 0.910569123333333

 $00:05:26.325 \longrightarrow 00:05:28.880$ of are of these therapies.

NOTE Confidence: 0.910569123333333

 $00:05:28.880 \longrightarrow 00:05:32.240$ So specifically regarding radiation therapy,

NOTE Confidence: 0.910569123333333

 $00:05:32.240 \longrightarrow 00:05:34.684$ there are acute morbidities,

NOTE Confidence: 0.9105691233333333

00:05:34.684 --> 00:05:36.517 including primary hypogonadism,

NOTE Confidence: 0.910569123333333

 $00:05:36.520 \longrightarrow 00:05:38.308$ premature ovarian insufficiency,

NOTE Confidence: 0.9105691233333333

 $00{:}05{:}38.308 \dashrightarrow 00{:}05{:}40.692$ which was previously referred

NOTE Confidence: 0.910569123333333

 $00:05:40.692 \longrightarrow 00:05:43.779$ to as premature ovarian failure,

NOTE Confidence: 0.910569123333333

 $00:05:43.780 \longrightarrow 00:05:44.842$ central hypogonadism,

NOTE Confidence: 0.9105691233333333

 $00:05:44.842 \longrightarrow 00:05:47.497$ specifically for patients who are

NOTE Confidence: 0.910569123333333

00:05:47.497 --> 00:05:49.839 undergoing radiation to the brain,

NOTE Confidence: 0.910569123333333

 $00:05:49.840 \longrightarrow 00:05:51.496$ and then there are late morbidities,

 $00:05:51.500 \longrightarrow 00:05:53.855$ including secondary cancers that can

NOTE Confidence: 0.910569123333333

 $00:05:53.855 \longrightarrow 00:05:55.739$ result from radiation therapies,

NOTE Confidence: 0.910569123333333

 $00:05:55.740 \longrightarrow 00:05:58.290$ hypothalamic pituitary ovarian

NOTE Confidence: 0.910569123333333

 $00:05:58.290 \longrightarrow 00:05:59.990$ access deficiencies.

NOTE Confidence: 0.910569123333333

00:05:59.990 --> 00:06:01.406 Spinal cord dysfunction,

NOTE Confidence: 0.910569123333333

00:06:01.406 --> 00:06:03.294 which can potentially lead

NOTE Confidence: 0.910569123333333

 $00:06:03.294 \longrightarrow 00:06:05.844$ to impotence among males and

NOTE Confidence: 0.910569123333333

 $00:06:05.844 \longrightarrow 00:06:07.960$ infertility or ovarian insufficiency.

NOTE Confidence: 0.95036386

00:06:10.940 --> 00:06:13.500 Regarding the effects of chemotherapy,

NOTE Confidence: 0.95036386

 $00:06:13.500 \longrightarrow 00:06:16.398$ there are the effects of late morbidity,

NOTE Confidence: 0.95036386

00:06:16.400 --> 00:06:17.974 including infertility,

NOTE Confidence: 0.95036386

 $00:06:17.974 \longrightarrow 00:06:20.335$ premature ovarian insufficiency

NOTE Confidence: 0.95036386

 $00{:}06{:}20.335 \dashrightarrow 00{:}06{:}22.696$ and primary hypogonadism,

NOTE Confidence: 0.95036386

 $00:06:22.700 \longrightarrow 00:06:24.785$ and there are increased risks

NOTE Confidence: 0.95036386

 $00:06:24.785 \longrightarrow 00:06:26.870$ specifically with people who are

 $00:06:26.939 \longrightarrow 00:06:28.903$ receiving alkylating agents or

NOTE Confidence: 0.95036386

 $00{:}06{:}28.903 \to 00{:}06{:}31.358$ patients with Hodgkin's lymphoma or

NOTE Confidence: 0.95036386

 $00:06:31.358 \longrightarrow 00:06:33.695$ breast cancer with undergoing adjuvant

NOTE Confidence: 0.95036386

00:06:33.695 --> 00:06:36.359 therapy where at increased risk of

NOTE Confidence: 0.95036386

 $00:06:36.360 \longrightarrow 00:06:38.328$ premature ovarian insufficiency.

NOTE Confidence: 0.901384763333333

00:06:41.640 --> 00:06:43.584 Regarding stem cell therapies

NOTE Confidence: 0.901384763333333

 $00:06:43.584 \longrightarrow 00:06:46.014$ and the effects of those,

NOTE Confidence: 0.901384763333333

 $00:06:46.020 \longrightarrow 00:06:48.372$ those can lead to gonadal dysfunction

NOTE Confidence: 0.901384763333333

 $00{:}06{:}48.372 \dashrightarrow 00{:}06{:}50.552$ and the late morbidity associated

NOTE Confidence: 0.901384763333333

 $00:06:50.552 \longrightarrow 00:06:52.704$ with those include secondary

NOTE Confidence: 0.901384763333333

 $00{:}06{:}52.704 \dashrightarrow 00{:}06{:}54.856$ cancers and endocrine dysfunction.

NOTE Confidence: 0.914950466086956

 $00:06:57.170 \longrightarrow 00:06:59.570$ Lastly, there are the surgical effects

NOTE Confidence: 0.914950466086956

 $00:06:59.570 \longrightarrow 00:07:02.279$ of cancer therapies and the acute and

NOTE Confidence: 0.914950466086956

 $00:07:02.279 \longrightarrow 00:07:04.367$ long term effects of those include

NOTE Confidence: 0.914950466086956

 $00:07:04.367 \longrightarrow 00:07:06.589$ early menopause and sterilization.

NOTE Confidence: 0.914950466086956

 $00:07:06.590 \longrightarrow 00:07:08.675$ For example, if somebody would

00:07:08.675 --> 00:07:11.184 need to undergo removal of their

NOTE Confidence: 0.914950466086956

 $00:07:11.184 \longrightarrow 00:07:12.856$ ovaries or fallopian tubes.

NOTE Confidence: 0.796782801818182

 $00:07:15.260 \longrightarrow 00:07:17.680$ So different the rapies have

NOTE Confidence: 0.796782801818182

 $00:07:17.680 \longrightarrow 00:07:19.495$ different reproductive reproductive

NOTE Confidence: 0.796782801818182

 $00:07:19.495 \longrightarrow 00:07:21.740$ risks associated with them,

NOTE Confidence: 0.796782801818182

 $00:07:21.740 \longrightarrow 00:07:24.205$ so high risk therapies include

NOTE Confidence: 0.796782801818182

00:07:24.205 --> 00:07:26.177 high dose pelvic radiation,

NOTE Confidence: 0.796782801818182

 $00:07:26.180 \longrightarrow 00:07:28.980$ radiation to the brain,

NOTE Confidence: 0.796782801818182

 $00{:}07{:}28.980 \dashrightarrow 00{:}07{:}31.780$ hematopoietic stem cell transplantation,

NOTE Confidence: 0.796782801818182

 $00:07:31.780 \longrightarrow 00:07:34.800$ total body radiation or chemotherapy

NOTE Confidence: 0.796782801818182

 $00{:}07{:}34.800 \dashrightarrow 00{:}07{:}37.820$ with high dose alkylating agents,

NOTE Confidence: 0.796782801818182

 $00{:}07{:}37.820 \dashrightarrow 00{:}07{:}40.000$ whereas low risk the rapies include

NOTE Confidence: 0.796782801818182

 $00{:}07{:}40.000 \dashrightarrow 00{:}07{:}42.770$ low dose radiation to the pelvis,

NOTE Confidence: 0.796782801818182

 $00{:}07{:}42.770 \dashrightarrow 00{:}07{:}45.734$ non alkylating chemotherapeutic drugs.

NOTE Confidence: 0.796782801818182

 $00:07:45.734 \longrightarrow 00:07:47.216$ Or antimetabolites.

 $00:07:50.510 \longrightarrow 00:07:52.386$ So now I'd like to transition a

NOTE Confidence: 0.913877095625

 $00{:}07{:}52.386 \dashrightarrow 00{:}07{:}54.107$ bit to discuss the importance

NOTE Confidence: 0.913877095625

 $00:07:54.107 \longrightarrow 00:07:55.815$ of counseling these patients.

NOTE Confidence: 0.860479558888889

 $00:07:59.430 \longrightarrow 00:08:01.755$ So all patients of reproductive

NOTE Confidence: 0.860479558888889

 $00:08:01.755 \longrightarrow 00:08:04.080$ age who will undergo potentially

NOTE Confidence: 0.860479558888889

00:08:04.160 --> 00:08:07.115 gonadal toxic therapies should be

NOTE Confidence: 0.860479558888889

 $00:08:07.115 \longrightarrow 00:08:08.888$ receiving fertility counseling.

NOTE Confidence: 0.860479558888889

 $00{:}08{:}08.890 \dashrightarrow 00{:}08{:}12.362$ This is in line with guidelines from the

NOTE Confidence: 0.860479558888889

00:08:12.362 --> 00:08:14.909 American Society of Clinical Oncology,

NOTE Confidence: 0.860479558888889

 $00:08:14.910 \longrightarrow 00:08:17.645$ which reports that all oncologic

NOTE Confidence: 0.860479558888889

 $00{:}08{:}17.645 \dashrightarrow 00{:}08{:}19.833$ healthcare providers should be

NOTE Confidence: 0.860479558888889

00:08:19.833 --> 00:08:21.822 prepared to discuss infertility

NOTE Confidence: 0.860479558888889

 $00:08:21.822 \longrightarrow 00:08:24.552$ as a potential risk of therapy.

NOTE Confidence: 0.860479558888889

 $00{:}08{:}24.560 \dashrightarrow 00{:}08{:}27.194$ The NCCN practice guideline also says

NOTE Confidence: 0.860479558888889

 $00:08:27.194 \longrightarrow 00:08:29.443$ that fertility preservation is an

NOTE Confidence: 0.860479558888889

 $00:08:29.443 \longrightarrow 00:08:31.573$ essential element of management of

 $00:08:31.573 \longrightarrow 00:08:34.119$ adolescents and young adults with cancer.

NOTE Confidence: 0.876169466666667

 $00:08:36.590 \longrightarrow 00:08:40.271$ That being said, less than half of US doctors

NOTE Confidence: 0.87616946666667

 $00:08:40.271 \longrightarrow 00:08:43.327$ inform cancer patients of childbearing

NOTE Confidence: 0.876169466666667

00:08:43.327 --> 00:08:45.887 age about fertility preservation,

NOTE Confidence: 0.876169466666667

 $00:08:45.890 \longrightarrow 00:08:48.774$ and only 47% of US doctors routinely

NOTE Confidence: 0.876169466666667

00:08:48.774 --> 00:08:51.321 refer cancer patients of childbearing

NOTE Confidence: 0.876169466666667

 $00:08:51.321 \longrightarrow 00:08:53.785$ age to reproductive endocrinologist.

NOTE Confidence: 0.939442077142857

 $00{:}08{:}56.200 \dashrightarrow 00{:}08{:}58.960$ 54% of oncologists do not discuss

NOTE Confidence: 0.939442077142857

 $00{:}08{:}58.960 \dashrightarrow 00{:}09{:}01.440$ fertility, according to the JNC

NOTE Confidence: 0.939442077142857

 $00:09:01.440 \longrightarrow 00:09:04.559$ CN that was published in 2013,

NOTE Confidence: 0.939442077142857

00:09:04.559 --> 00:09:06.326 whereas specifically pediatric

NOTE Confidence: 0.939442077142857

 $00:09:06.326 \longrightarrow 00:09:09.860$ on cologists tend to do a bit

NOTE Confidence: 0.939442077142857

 $00{:}09{:}09{:}09{:}53 \dashrightarrow 00{:}09{:}12.495$ better and 94% of pediatric

NOTE Confidence: 0.939442077142857

00:09:12.495 --> 00:09:14.130 oncologists discuss fertility.

NOTE Confidence: 0.8655962927

 $00:09:16.230 \longrightarrow 00:09:18.100$ And what basically this highlights

 $00:09:18.100 \longrightarrow 00:09:20.606$ is that there is a discrepancy

NOTE Confidence: 0.8655962927

 $00{:}09{:}20.606 \dashrightarrow 00{:}09{:}23.426$ between the current guidelines and

NOTE Confidence: 0.8655962927

 $00:09:23.426 \longrightarrow 00:09:25.682$ the reality regarding counseling,

NOTE Confidence: 0.8655962927

 $00:09:25.690 \longrightarrow 00:09:28.057$ and this is something for all of us to

NOTE Confidence: 0.8655962927

 $00:09:28.057 \longrightarrow 00:09:30.615$ work on and an area for improvement to

NOTE Confidence: 0.8655962927

 $00:09:30.615 \longrightarrow 00:09:33.049$ increase access to fertility preservation.

NOTE Confidence: 0.89745851

00:09:36.240 --> 00:09:40.136 So what about Yale? What is going on?

NOTE Confidence: 0.89745851

00:09:40.140 --> 00:09:43.740 How are you doing with counseling at Yale

NOTE Confidence: 0.89745851

00:09:43.740 --> 00:09:46.715 regarding fertility preservation for patients

NOTE Confidence: 0.89745851

00:09:46.715 --> 00:09:50.500 undergoing therapy for their cancer?

NOTE Confidence: 0.89745851

 $00:09:50.500 \longrightarrow 00:09:54.460$ So we do have one study that looks into

NOTE Confidence: 0.89745851

 $00:09:54.460 \longrightarrow 00:09:57.792$ how what percentage of patients are being

NOTE Confidence: 0.89745851

 $00:09:57.792 \longrightarrow 00:10:00.350$ counselled specifically for patients

NOTE Confidence: 0.89745851

 $00:10:00.350 \longrightarrow 00:10:03.110$ who are prescribed cyclophosphamide.

NOTE Confidence: 0.89745851

 $00:10:03.110 \longrightarrow 00:10:07.666$ The study included 236 reproductive age women

NOTE Confidence: 0.89745851

 $00:10:07.666 \longrightarrow 00:10:13.720$ between December of 2019 and October of 2021.

00:10:13.720 --> 00:10:17.640 And of these 236 patients,

NOTE Confidence: 0.89745851

00:10:17.640 --> 00:10:20.368 33% received family planning

NOTE Confidence: 0.89745851

 $00:10:20.368 \longrightarrow 00:10:24.212$ counseling and 9% were offered

NOTE Confidence: 0.89745851

 $00:10:24.212 \longrightarrow 00:10:26.900$ ovarian tissue cryopreservation.

NOTE Confidence: 0.89745851

 $00{:}10{:}26.900 \dashrightarrow 00{:}10{:}29.115$ There were certain factors which

NOTE Confidence: 0.89745851

00:10:29.115 --> 00:10:30.887 modified a patient's likelihood

NOTE Confidence: 0.89745851

 $00:10:30.887 \longrightarrow 00:10:33.411$ for receiving counseling and those

NOTE Confidence: 0.89745851

00:10:33.411 --> 00:10:35.287 included Caucasian race age,

NOTE Confidence: 0.89745851

 $00:10:35.287 \longrightarrow 00:10:36.388$ less than 40,

NOTE Confidence: 0.89745851

 $00:10:36.388 \longrightarrow 00:10:39.106$ and those who had living children were

NOTE Confidence: 0.89745851

 $00:10:39.106 \longrightarrow 00:10:41.764$ less likely to receive this counseling.

NOTE Confidence: 0.948708902222222

 $00:10:46.220 \longrightarrow 00:10:49.166$ So how can we improve access

NOTE Confidence: 0.948708902222222

00:10:49.166 --> 00:10:50.639 for fertility preservation?

NOTE Confidence: 0.939861242142857

 $00{:}10{:}53.570 \dashrightarrow 00{:}10{:}55.957$ There are several things that need to

NOTE Confidence: 0.939861242142857

00:10:55.957 --> 00:10:58.457 happen for us to achieve that goal.

 $00:10:58.460 \longrightarrow 00:11:01.810$ One is to increase awareness.

NOTE Confidence: 0.939861242142857

 $00{:}11{:}01.810 \dashrightarrow 00{:}11{:}04.962$ Next would be to assess patient's

NOTE Confidence: 0.939861242142857

00:11:04.962 --> 00:11:06.890 interest in receiving fertility,

NOTE Confidence: 0.939861242142857

00:11:06.890 --> 00:11:10.310 preservation treatment,

NOTE Confidence: 0.939861242142857

 $00:11:10.310 \longrightarrow 00:11:13.235$ as well as the provider

NOTE Confidence: 0.939861242142857

00:11:13.235 --> 00:11:14.990 providing basic counseling

NOTE Confidence: 0.939861242142857

 $00:11:14.990 \longrightarrow 00:11:17.330$ regarding fertility preservation.

NOTE Confidence: 0.939861242142857

00:11:17.330 --> 00:11:19.490 Placing a referral when indicated,

NOTE Confidence: 0.939861242142857

 $00:11:19.490 \longrightarrow 00:11:21.152$ and then ensuring that a patient

NOTE Confidence: 0.939861242142857

 $00:11:21.152 \longrightarrow 00:11:22.880$ is able to access this care.

NOTE Confidence: 0.936076306666667

 $00{:}11{:}27.340 \dashrightarrow 00{:}11{:}30.520$ So how do we increase awareness?

NOTE Confidence: 0.936076306666667

00:11:30.520 --> 00:11:33.040 Well, patients are often overwhelmed

NOTE Confidence: 0.936076306666667

 $00:11:33.040 \longrightarrow 00:11:35.848$ by a cancer diagnosis, especially when

NOTE Confidence: 0.936076306666667

 $00:11:35.848 \longrightarrow 00:11:37.818$ they first receive that diagnosis.

NOTE Confidence: 0.936076306666667

 $00:11:37.820 \longrightarrow 00:11:39.490$ They can be worried about

NOTE Confidence: 0.936076306666667

 $00:11:39.490 \longrightarrow 00:11:40.826$ delays in cancer treatment,

 $00:11:40.830 \longrightarrow 00:11:44.662$ or they could just be unaware of the

NOTE Confidence: 0.936076306666667

00:11:44.662 --> 00:11:47.543 potential effects of their therapy

NOTE Confidence: 0.936076306666667

 $00:11:47.543 \longrightarrow 00:11:49.979$ on their reproductive capacity.

NOTE Confidence: 0.936076306666667

 $00:11:49.980 \longrightarrow 00:11:52.614$ The medical team already has a

NOTE Confidence: 0.936076306666667

 $00:11:52.614 \longrightarrow 00:11:55.219$ considerable amount of counseling to do

NOTE Confidence: 0.936076306666667

 $00:11:55.219 \longrightarrow 00:11:57.535$ when a patient receives this diagnosis,

NOTE Confidence: 0.936076306666667

 $00:11:57.540 \longrightarrow 00:12:00.996$ and oftentimes that the discussion of

NOTE Confidence: 0.936076306666667

 $00:12:00.996 \longrightarrow 00:12:04.380$ fertility preservation cannot be prioritized.

NOTE Confidence: 0.936076306666667

 $00{:}12{:}04.380 \dashrightarrow 00{:}12{:}06.991$ However, the onus really falls on the

NOTE Confidence: 0.936076306666667

 $00:12:06.991 \longrightarrow 00:12:09.585$ medical team to be able to identify

NOTE Confidence: 0.936076306666667

 $00:12:09.585 \longrightarrow 00:12:12.502$ these patients who are at risk and to

NOTE Confidence: 0.936076306666667

00:12:12.502 --> 00:12:14.698 be able to provide basic counseling

NOTE Confidence: 0.936076306666667

 $00{:}12{:}14.698 \to 00{:}12{:}17.326$ and place the referral to reproductive

NOTE Confidence: 0.936076306666667

00:12:17.326 --> 00:12:18.748 endocrinology when indicated.

NOTE Confidence: 0.91699023

 $00:12:21.330 \longrightarrow 00:12:24.642$ So what are some ways that we propose we

 $00:12:24.642 \longrightarrow 00:12:28.065$ optimize this awareness so one is just

NOTE Confidence: 0.91699023

 $00:12:28.065 \longrightarrow 00:12:30.049$ through education and collaboration,

NOTE Confidence: 0.91699023

 $00{:}12{:}30.050 \dashrightarrow 00{:}12{:}32.577$ which is why doctor Glenn and I

NOTE Confidence: 0.91699023

 $00:12:32.577 \longrightarrow 00:12:35.810$ are here is to try to promote that

NOTE Confidence: 0.91699023

 $00:12:35.810 \longrightarrow 00:12:38.483$ and something else that we that

NOTE Confidence: 0.91699023

00:12:38.483 --> 00:12:41.548 we proposed was epic optimization,

NOTE Confidence: 0.91699023

 $00:12:41.550 \longrightarrow 00:12:42.762$ which we'll talk about a little

NOTE Confidence: 0.91699023

 $00:12:42.762 \longrightarrow 00:12:44.090$ bit more in the next slide.

NOTE Confidence: 0.882033265

00:12:46.740 --> 00:12:49.344 So something that Doctor Glenn and I

NOTE Confidence: 0.882033265

00:12:49.344 --> 00:12:51.732 had proposed to the Epic optimization

NOTE Confidence: 0.882033265

 $00{:}12{:}51.732 \dashrightarrow 00{:}12{:}54.532$ team is to potentially have a hard

NOTE Confidence: 0.882033265

00:12:54.611 --> 00:12:57.523 stop when a new diagnosis of cancer is

NOTE Confidence: 0.882033265

 $00:12:57.523 \longrightarrow 00:13:00.568$ entered into a patients problem list.

NOTE Confidence: 0.882033265

00:13:00.568 --> 00:13:04.852 A provider could could encounter this alert

NOTE Confidence: 0.882033265

00:13:04.852 --> 00:13:08.680 that would require that they acknowledge

NOTE Confidence: 0.882033265

 $00:13:08.778 \longrightarrow 00:13:12.900$ a reason for either referring a patient

00:13:12.900 --> 00:13:16.260 to reproductive endocrinology or not.

NOTE Confidence: 0.882033265

 $00{:}13{:}16.260 {\:{\circ}{\circ}{\circ}}>00{:}13{:}18.570$ Facing a referral or acknowledging that

NOTE Confidence: 0.882033265

 $00:13:18.570 \longrightarrow 00:13:21.238$ this is not applicable for this patient.

NOTE Confidence: 0.860350266333333

 $00:13:23.850 \longrightarrow 00:13:27.082$ After a after a provider is met with

NOTE Confidence: 0.860350266333333

 $00:13:27.082 \longrightarrow 00:13:29.910$ this alert they would then when

NOTE Confidence: 0.860350266333333

 $00:13:29.910 \longrightarrow 00:13:32.802$ indicated either place a consult to

NOTE Confidence: 0.860350266333333

 $00:13:32.889 \longrightarrow 00:13:36.263$ gynecology when a patient is in the

NOTE Confidence: 0.860350266333333

00:13:36.263 --> 00:13:39.170 inpatient setting or if they are in

NOTE Confidence: 0.860350266333333

 $00{:}13{:}39.170 \dashrightarrow 00{:}13{:}40.995$ the outpatient setting they would

NOTE Confidence: 0.860350266333333

 $00{:}13{:}40.995 \dashrightarrow 00{:}13{:}43.229$ simply just place an REI referral.

NOTE Confidence: 0.860350266333333

 $00:13:43.230 \longrightarrow 00:13:46.830$ I just want to highlight here that when

NOTE Confidence: 0.860350266333333

00:13:46.830 --> 00:13:49.682 patients are in the inpatient setting,

NOTE Confidence: 0.860350266333333

 $00{:}13{:}49.682 \dashrightarrow 00{:}13{:}53.280$ that console is a general consult to

NOTE Confidence: 0.860350266333333

00:13:53.280 --> 00:13:56.140 gynecology. Once that console is placed,

NOTE Confidence: 0.860350266333333

 $00:13:56.140 \longrightarrow 00:13:58.920$ the guide, the inpatient gynecology

00:13:58.920 --> 00:14:01.144 resident team will contact

NOTE Confidence: 0.860350266333333

 $00:14:01.144 \longrightarrow 00:14:02.820$ reproductive endocrinology.

NOTE Confidence: 0.74503135

 $00:14:05.110 \longrightarrow 00:14:10.326$ This can also be done for for preservation.

NOTE Confidence: 0.74503135

 $00:14:10.326 \longrightarrow 00:14:13.265$ For male patients, it would still be a

NOTE Confidence: 0.74503135

 $00:14:13.265 \longrightarrow 00:14:15.099$ gynecology consult in that case as well.

NOTE Confidence: 0.817576109

00:14:17.920 --> 00:14:20.624 So now regarding education,

NOTE Confidence: 0.817576109

 $00{:}14{:}20.624 \dashrightarrow 00{:}14{:}23.328$ the Oncofertility Conservatorium was

NOTE Confidence: 0.817576109

 $00:14:23.328 \longrightarrow 00:14:26.400$ developed in 2007 to address the lack

NOTE Confidence: 0.817576109

00:14:26.400 --> 00:14:27.776 of knowledge concerning fertility,

NOTE Confidence: 0.817576109

 $00:14:27.780 \longrightarrow 00:14:31.535$ preservation and the National physicians

NOTE Confidence: 0.817576109

 $00:14:31.535 \longrightarrow 00:14:34.539$ cooperative includes 83 institutions,

NOTE Confidence: 0.817576109

 $00{:}14{:}34.540 --{>} 00{:}14{:}36.206 \ including \ oncologists,$

NOTE Confidence: 0.817576109

00:14:36.206 --> 00:14:37.872 surgeons, endocrinologists,

NOTE Confidence: 0.817576109

 $00{:}14{:}37.872 \dashrightarrow 00{:}14{:}39.538$ reproductive endocrinologist,

NOTE Confidence: 0.817576109

00:14:39.540 --> 00:14:41.472 urologist, rheumatologist, geneticist,

NOTE Confidence: 0.817576109

 $00:14:41.472 \longrightarrow 00:14:44.048$ and mental health providers,

 $00:14:44.050 \longrightarrow 00:14:47.770$ and below are also different links.

NOTE Confidence: 0.817576109

 $00:14:47.770 \longrightarrow 00:14:52.066$ That can be used by both providers and

NOTE Confidence: 0.817576109

 $00:14:52.066 \longrightarrow 00:14:56.516$ patients to promote education on this topic.

NOTE Confidence: 0.90424603

 $00:15:00.600 \longrightarrow 00:15:02.216$ And then regarding counseling.

NOTE Confidence: 0.90424603

 $00:15:02.216 \longrightarrow 00:15:04.236$ So there are several steps

NOTE Confidence: 0.90424603

00:15:04.236 --> 00:15:06.119 involved in counseling patients,

NOTE Confidence: 0.90424603

00:15:06.120 --> 00:15:08.848 including informing patients of

NOTE Confidence: 0.90424603

 $00{:}15{:}08.848 \operatorname{--}{>} 00{:}15{:}12.258$ the potential risks to fertility.

NOTE Confidence: 0.90424603

00:15:12.260 --> 00:15:13.544 Of their therapy,

NOTE Confidence: 0.90424603

 $00:15:13.544 \longrightarrow 00:15:16.540$ as well as just inquiring whether they

NOTE Confidence: 0.90424603

 $00{:}15{:}16.622 \dashrightarrow 00{:}15{:}19.297$ desire to preserve their fertility.

NOTE Confidence: 0.90424603

 $00{:}15{:}19.300 \dashrightarrow 00{:}15{:}21.035$ Referring patients to REI if

NOTE Confidence: 0.90424603

 $00{:}15{:}21.035 \dashrightarrow 00{:}15{:}23.190$ they are interested as well as

NOTE Confidence: 0.90424603

00:15:23.190 --> 00:15:24.945 following up on those patients.

NOTE Confidence: 0.8755865092

 $00:15:28.120 \longrightarrow 00:15:30.290$ At this point I want to just

 $00:15:30.290 \longrightarrow 00:15:32.661$ transition a bit to discuss to

NOTE Confidence: 0.8755865092

 $00:15:32.661 \longrightarrow 00:15:34.481$ discuss patient perspectives and

NOTE Confidence: 0.8755865092

00:15:34.481 --> 00:15:36.889 hopefully this will help highlight

NOTE Confidence: 0.8755865092

 $00:15:36.889 \longrightarrow 00:15:39.369$ again the importance of this topic.

NOTE Confidence: 0.906476153

 $00:15:42.680 \longrightarrow 00:15:46.397$ So in a study that looked at

NOTE Confidence: 0.906476153

00:15:46.397 --> 00:15:50.280 female cancer survivors. Umm?

NOTE Confidence: 0.906476153

 $00:15:50.280 \longrightarrow 00:15:52.992$ There was an increased rate of

NOTE Confidence: 0.906476153

 $00:15:52.992 \longrightarrow 00:15:54.800$ pregnancy termination among female

NOTE Confidence: 0.906476153

00:15:54.873 --> 00:15:57.489 cancer providers due to a fear of the

NOTE Confidence: 0.906476153

00:15:57.489 --> 00:15:59.973 effect of their therapies on their

NOTE Confidence: 0.906476153

 $00{:}15{:}59.973 \dashrightarrow 00{:}16{:}02.173$ future on their future children,

NOTE Confidence: 0.906476153

 $00{:}16{:}02.180 \dashrightarrow 00{:}16{:}03.820$ and what this really highlights

NOTE Confidence: 0.906476153

 $00:16:03.820 \longrightarrow 00:16:05.460$ is a gap in education.

NOTE Confidence: 0.88962042

 $00:16:07.800 \longrightarrow 00:16:10.619$ This study also showed that 91%

NOTE Confidence: 0.88962042

00:16:10.619 --> 00:16:12.614 of female cancer survivors felt

NOTE Confidence: 0.88962042

 $00:16:12.614 \longrightarrow 00:16:15.334$ that their quality of life was

 $00:16:15.334 \longrightarrow 00:16:17.434$ improved after receiving counseling

NOTE Confidence: 0.88962042

 $00:16:17.434 \longrightarrow 00:16:19.534$ and treatment about fertility.

NOTE Confidence: 0.886591492727273

 $00:16:22.260 \longrightarrow 00:16:25.858$ There was also a cross sectional study

NOTE Confidence: 0.886591492727273

00:16:25.858 --> 00:16:28.040 concerning fertility after cancer,

NOTE Confidence: 0.886591492727273

 $00:16:28.040 \longrightarrow 00:16:31.505$ where the primary outcome was use of

NOTE Confidence: 0.886591492727273

00:16:31.505 --> 00:16:34.636 fertility treatment and in this study,

NOTE Confidence: 0.886591492727273

00:16:34.636 --> 00:16:38.180 75\% of participants reported that having

NOTE Confidence: 0.886591492727273

 $00{:}16{:}38.180 \dashrightarrow 00{:}16{:}41.980$ a biological child was important to them.

NOTE Confidence: 0.886591492727273

 $00:16:41.980 \longrightarrow 00:16:44.052 15\%$ of these participants

NOTE Confidence: 0.886591492727273

 $00:16:44.052 \longrightarrow 00:16:46.124$ actually used fertility services.

NOTE Confidence: 0.886591492727273

00:16:46.130 --> 00:16:49.756 And survivors were less likely to pursue

NOTE Confidence: 0.886591492727273

 $00{:}16{:}49.756 \dashrightarrow 00{:}16{:}53.092$ infertility treatment due to a fear of

NOTE Confidence: 0.886591492727273

 $00{:}16{:}53.092 \dashrightarrow 00{:}16{:}55.636$ adverse effects on their personal health,

NOTE Confidence: 0.886591492727273

00:16:55.640 --> 00:16:57.080 which again highlights a

NOTE Confidence: 0.886591492727273

 $00:16:57.080 \longrightarrow 00:16:58.520$ gap in their education.

 $00:17:01.730 \longrightarrow 00:17:04.316$ Other patient perspectives include a survey

NOTE Confidence: 0.905115535833333

 $00:17:04.316 \longrightarrow 00:17:07.350$ from the Journal of Clinical Oncology.

NOTE Confidence: 0.905115535833333

 $00:17:07.350 \longrightarrow 00:17:11.350$ In this survey, 81% of teen girls and

NOTE Confidence: 0.905115535833333

00:17:11.350 --> 00:17:14.710 93\% of their parents would be interested

NOTE Confidence: 0.905115535833333

00:17:14.710 --> 00:17:17.221 in fertility preservation, even if that,

NOTE Confidence: 0.905115535833333

 $00:17:17.221 \longrightarrow 00:17:20.860$ even if that method were to be experimental.

NOTE Confidence: 0.884638052727273

 $00:17:23.920 \longrightarrow 00:17:27.364$ In a survey from the Journal of

NOTE Confidence: 0.884638052727273

 $00{:}17{:}27.364 \dashrightarrow 00{:}17{:}29.710$ Assisted Reproduction and Genetics.

NOTE Confidence: 0.884638052727273

00:17:29.710 --> 00:17:32.566 12.5% of patients reported that they were.

NOTE Confidence: 0.884638052727273

 $00:17:32.570 \longrightarrow 00:17:35.440$ They would regret if they were unable

NOTE Confidence: 0.884638052727273

 $00{:}17{:}35.440 \dashrightarrow 00{:}17{:}38.988$ to use the tissue that they preserved

NOTE Confidence: 0.884638052727273

 $00:17:38.990 \longrightarrow 00:17:40.782$ for ovarian tissue preservation.

NOTE Confidence: 0.884638052727273

 $00{:}17{:}40.782 \dashrightarrow 00{:}17{:}43.470$ In these patients and parents felt

NOTE Confidence: 0.884638052727273

 $00:17:43.540 \longrightarrow 00:17:46.150$ more in control of their decision

NOTE Confidence: 0.884638052727273

 $00:17:46.150 \longrightarrow 00:17:47.890$ with receiving this counseling.

NOTE Confidence: 0.870578100909091

 $00:17:52.340 \longrightarrow 00:17:53.516$ Other patient perspectives.

00:17:53.516 --> 00:17:55.868 There are studies and surveys that

NOTE Confidence: 0.870578100909091

 $00:17:55.868 \longrightarrow 00:17:59.675$ indicate that 26 to 80% of individuals

NOTE Confidence: 0.870578100909091

 $00{:}17{:}59.675 \dashrightarrow 00{:}18{:}01.556$ remember discussing fertility.

NOTE Confidence: 0.870578100909091

 $00:18:01.560 \longrightarrow 00:18:03.525$ This range really highlights the

NOTE Confidence: 0.870578100909091

 $00{:}18{:}03.525 \dashrightarrow 00{:}18{:}05.097$ variability in each practice.

NOTE Confidence: 0.974336988

 $00:18:08.010 \longrightarrow 00:18:10.828$ 68% of males and 14% of females

NOTE Confidence: 0.974336988

 $00:18:10.828 \longrightarrow 00:18:13.073$ remembered being offered a referral

NOTE Confidence: 0.974336988

 $00:18:13.073 \longrightarrow 00:18:14.420$ for fertility preservation.

NOTE Confidence: 0.903673052

00:18:16.580 --> 00:18:19.646 And then this last statistic reports

NOTE Confidence: 0.903673052

 $00{:}18{:}19.646 \dashrightarrow 00{:}18{:}22.359$ that female survivors were less

NOTE Confidence: 0.903673052

 $00:18:22.359 \longrightarrow 00:18:25.279$ likely to be prescribed infertility

NOTE Confidence: 0.903673052

00:18:25.279 --> 00:18:27.615 medications after seeking help,

NOTE Confidence: 0.903673052

 $00:18:27.620 \longrightarrow 00:18:30.819$ and that relative risk was 0.57.

NOTE Confidence: 0.903673052

 $00:18:30.819 \longrightarrow 00:18:33.531$ And what this shows us is that there's

NOTE Confidence: 0.903673052

00:18:33.531 --> 00:18:36.435 also a lack of education among providers.

 $00:18:39.100 \longrightarrow 00:18:41.388$ So next, I'd like to speak about the

NOTE Confidence: 0.913911173684211

 $00{:}18{:}41.388 \dashrightarrow 00{:}18{:}43.407$ different methods that can be offered

NOTE Confidence: 0.913911173684211

 $00:18:43.407 \longrightarrow 00:18:45.142$ to patients for fertility preservation.

NOTE Confidence: 0.890928088461538

 $00:18:47.800 \longrightarrow 00:18:50.110$ So there are many proven as

NOTE Confidence: 0.890928088461538

 $00:18:50.110 \longrightarrow 00:18:51.650$ well as experimental methods

NOTE Confidence: 0.890928088461538

00:18:51.727 --> 00:18:53.449 for preserving fertility.

NOTE Confidence: 0.890928088461538

 $00:18:53.450 \longrightarrow 00:18:56.790$ These include gamete or embryo

NOTE Confidence: 0.890928088461538

00:18:56.790 --> 00:18:58.666 cryopreservation, ovarian tissue,

NOTE Confidence: 0.890928088461538

 $00:18:58.666 \longrightarrow 00:19:01.078$ or whole ovary preservation,

NOTE Confidence: 0.890928088461538

 $00:19:01.080 \longrightarrow 00:19:02.796$ suppression of damage which

NOTE Confidence: 0.890928088461538

 $00{:}19{:}02.796 \dashrightarrow 00{:}19{:}04.512$ can include decreasing the

NOTE Confidence: 0.890928088461538

 $00:19:04.512 \longrightarrow 00:19:07.168$ dose of a certain therapy or

NOTE Confidence: 0.890928088461538

00:19:07.168 --> 00:19:08.896 using an alternative therapy.

NOTE Confidence: 0.890928088461538

00:19:08.900 --> 00:19:12.188 Decreasing the dose to the gonads,

NOTE Confidence: 0.890928088461538

 $00:19:12.190 \longrightarrow 00:19:14.662$ or steel or shielding the gonads

NOTE Confidence: 0.890928088461538

 $00:19:14.662 \longrightarrow 00:19:17.060$ or avoidance of damage entirely,

 $00:19:17.060 \longrightarrow 00:19:18.131$ which could entail.

NOTE Confidence: 0.890928088461538

00:19:18.131 --> 00:19:19.916 Removing the gonads or using

NOTE Confidence: 0.890928088461538

 $00:19:19.916 \longrightarrow 00:19:21.140$ an alternative therapy.

NOTE Confidence: 0.86628459625

00:19:23.960 --> 00:19:26.816 So to discuss some of the proven methods,

NOTE Confidence: 0.86628459625

 $00{:}19{:}26.820 \dashrightarrow 00{:}19{:}29.930$ the gold standard is considered

NOTE Confidence: 0.86628459625

 $00:19:29.930 \longrightarrow 00:19:31.174$ embryo cryopreservation.

NOTE Confidence: 0.86628459625

 $00:19:31.180 \longrightarrow 00:19:33.480$ This process includes stimulating

NOTE Confidence: 0.86628459625

 $00:19:33.480 \longrightarrow 00:19:35.780$ the ovaries with gonadotropins,

NOTE Confidence: 0.86628459625

 $00:19:35.780 \longrightarrow 00:19:37.571$ surgically retrieving oocytes,

NOTE Confidence: 0.86628459625

 $00:19:37.571 \longrightarrow 00:19:39.959$ inseminating the O sites,

NOTE Confidence: 0.86628459625

00:19:39.960 --> 00:19:43.299 culturing them for three to five days,

NOTE Confidence: 0.86628459625

 $00:19:43.300 \longrightarrow 00:19:45.640$ and then cryo preserving them.

NOTE Confidence: 0.86628459625

 $00{:}19{:}45.640 \dashrightarrow 00{:}19{:}48.300$ This tends to have a high success

NOTE Confidence: 0.86628459625

00:19:48.300 --> 00:19:51.010 with 90% survival of embryos and

NOTE Confidence: 0.86628459625

 $00:19:51.010 \longrightarrow 00:19:53.939$ live birth rates between 22 to 35.

 $00:19:53.940 \longrightarrow 00:19:55.504$ Percent, this whole process

NOTE Confidence: 0.86628459625

00:19:55.504 --> 00:19:57.850 takes about two to three weeks,

NOTE Confidence: 0.86628459625

 $00:19:57.850 \longrightarrow 00:19:59.980$ and some of the cons include

NOTE Confidence: 0.86628459625

00:19:59.980 --> 00:20:02.110 exposure to high dose hormones,

NOTE Confidence: 0.86628459625

 $00:20:02.110 \longrightarrow 00:20:03.445$ the time involved,

NOTE Confidence: 0.86628459625

00:20:03.445 --> 00:20:07.206 and the fact that the that the patient

NOTE Confidence: 0.86628459625

 $00:20:07.206 \longrightarrow 00:20:11.098$ would need either partner or donor sperm.

NOTE Confidence: 0.86628459625

 $00:20:11.100 \longrightarrow 00:20:13.508$ Another option is mature

NOTE Confidence: 0.86628459625

00:20:13.508 --> 00:20:15.314 O site cryopreservation.

NOTE Confidence: 0.86628459625

 $00:20:15.320 \longrightarrow 00:20:18.295$ This tends to have slightly lower success

NOTE Confidence: 0.86628459625

00:20:18.295 --> 00:20:20.614 rates between 50 and 90% survival.

NOTE Confidence: 0.86628459625

 $00:20:20.614 \longrightarrow 00:20:23.792$ That's likely due to attrition of the

NOTE Confidence: 0.86628459625

 $00:20:23.792 \longrightarrow 00:20:26.758$ O sites, as they need to be frozen,

NOTE Confidence: 0.86628459625

 $00:20:26.760 \longrightarrow 00:20:29.343$ thawed, then inseminated.

NOTE Confidence: 0.86628459625

00:20:29.343 --> 00:20:33.648 And sorry it fertilized and

NOTE Confidence: 0.86628459625

 $00:20:33.648 \longrightarrow 00:20:36.440$ after fertilization matured.

 $00:20:36.440 \longrightarrow 00:20:38.075$ This process takes essentially the

NOTE Confidence: 0.86628459625

 $00:20:38.075 \longrightarrow 00:20:40.200$ amount the same amount of time as.

NOTE Confidence: 0.86628459625

 $00:20:40.200 \longrightarrow 00:20:42.033$ Embryo choir preservation.

NOTE Confidence: 0.86628459625

00:20:42.033 --> 00:20:45.088 There are fewer ethical objection

NOTE Confidence: 0.86628459625

 $00:20:45.088 \longrightarrow 00:20:48.915$ objections and no partner is required

NOTE Confidence: 0.86628459625

 $00:20:48.915 \longrightarrow 00:20:51.487$ for oversight chair preservation.

NOTE Confidence: 0.86628459625

00:20:51.490 --> 00:20:55.095 Another proven method includes O for praxy.

NOTE Confidence: 0.86628459625

 $00{:}20{:}55.100 \dashrightarrow 00{:}20{:}58.468$ This has a success rate between 16 and

NOTE Confidence: 0.86628459625

00:20:58.468 --> 00:21:01.056 90% and involves fixing the ovary to

NOTE Confidence: 0.86628459625

 $00:21:01.056 \longrightarrow 00:21:03.659$ the pelvic brim with a surgical clip.

NOTE Confidence: 0.86628459625

 $00:21:03.660 \longrightarrow 00:21:05.540$ This is typically used for

NOTE Confidence: 0.86628459625

 $00:21:05.540 \longrightarrow 00:21:07.700$ patients who will be exposed to,

NOTE Confidence: 0.86628459625

00:21:07.700 --> 00:21:08.544 for example,

NOTE Confidence: 0.86628459625

 $00:21:08.544 \longrightarrow 00:21:11.076$ radiation therapy to the pelvis and

NOTE Confidence: 0.86628459625

 $00:21:11.076 \longrightarrow 00:21:13.838$ what it's essentially doing is moving

00:21:13.838 --> 00:21:17.256 the gonads away from that site.

NOTE Confidence: 0.86628459625

 $00{:}21{:}17.256 \dashrightarrow 00{:}21{:}20.376$ There are no ethical obligations,

NOTE Confidence: 0.86628459625

 $00:21:20.380 \longrightarrow 00:21:23.134$ I'm sorry there's no ethical objections

NOTE Confidence: 0.86628459625

00:21:23.134 --> 00:21:26.148 to over prexy and enables a patient

NOTE Confidence: 0.86628459625

 $00:21:26.148 \longrightarrow 00:21:29.784$ to be able to use their own O sites

NOTE Confidence: 0.86628459625

 $00:21:29.784 \longrightarrow 00:21:32.319$ and there's no stimulation required.

NOTE Confidence: 0.86628459625

 $00:21:32.320 \longrightarrow 00:21:36.310$ Some of the cons include that.

NOTE Confidence: 0.91342121375

 $00:21:39.200 \longrightarrow 00:21:41.100$ It really depends on a

NOTE Confidence: 0.91342121375

00:21:41.100 --> 00:21:42.240 patient's vascular system.

NOTE Confidence: 0.91342121375

 $00:21:42.240 \longrightarrow 00:21:43.660$ It depends on their age.

NOTE Confidence: 0.91342121375

 $00:21:43.660 \longrightarrow 00:21:46.576$ It depends on the dose of

NOTE Confidence: 0.91342121375

00:21:46.576 --> 00:21:48.520 radiation that they're receiving,

NOTE Confidence: 0.91342121375

 $00{:}21{:}48.520 \dashrightarrow 00{:}21{:}52.069$ and it can also be affected if

NOTE Confidence: 0.91342121375

 $00:21:52.069 \longrightarrow 00:21:55.920$ the area is not shielded. The.

NOTE Confidence: 0.759999091666667

 $00:21:58.900 \longrightarrow 00:22:01.483$ Other methods for.

NOTE Confidence: 0.759999091666667

00:22:01.483 --> 00:22:04.066 For fertility preservation,

 $00:22:04.070 \longrightarrow 00:22:07.118$ include ovarian tissue cryopreservation.

NOTE Confidence: 0.759999091666667

00:22:07.118 --> 00:22:10.595 This was previously thought to be

NOTE Confidence: 0.759999091666667

 $00{:}22{:}10.595 \to 00{:}22{:}13.360$ experimental and is now a proven method

NOTE Confidence: 0.759999091666667

 $00:22:13.439 \longrightarrow 00:22:16.124$ and involves obtaining ovarian cortical

NOTE Confidence: 0.759999091666667

00:22:16.124 --> 00:22:18.809 tissue prior to ovarian failure.

NOTE Confidence: 0.759999091666667

 $00:22:18.810 \longrightarrow 00:22:21.635$ The tissue is obtained via

NOTE Confidence: 0.759999091666667

00:22:21.635 --> 00:22:23.330 laparoscopy or laparotomy.

NOTE Confidence: 0.759999091666667

 $00:22:23.330 \longrightarrow 00:22:25.820$ The tissue is dissected into into

NOTE Confidence: 0.759999091666667

00:22:25.820 --> 00:22:27.175 small fragments, cryopreserved,

NOTE Confidence: 0.759999091666667

 $00{:}22{:}27.175 \dashrightarrow 00{:}22{:}30.325$ and then can later be transplanted.

NOTE Confidence: 0.759999091666667

 $00:22:30.330 \longrightarrow 00:22:31.106$ Most typically,

NOTE Confidence: 0.759999091666667

00:22:31.106 --> 00:22:33.046 that's done as an orthotopic.

NOTE Confidence: 0.759999091666667

 $00{:}22{:}33.050 \dashrightarrow 00{:}22{:}37.346$ Transplant and not a heterotopic transplant.

NOTE Confidence: 0.759999091666667

 $00:22:37.350 \longrightarrow 00:22:40.176$ Live birth rates are between 23

NOTE Confidence: 0.759999091666667

 $00:22:40.176 \longrightarrow 00:22:44.065$ to 25% and this is particularly

00:22:44.065 --> 00:22:46.797 useful for prepubescent girls,

NOTE Confidence: 0.759999091666667

 $00{:}22{:}46.800 \dashrightarrow 00{:}22{:}48.824$ and it can also be used as a

NOTE Confidence: 0.759999091666667

 $00:22:48.824 \longrightarrow 00:22:50.809$ form of endogenous hormones.

NOTE Confidence: 0.759999091666667

 $00:22:50.810 \longrightarrow 00:22:54.700$ Once this tissue is retransplantation.

NOTE Confidence: 0.759999091666667

 $00:22:54.700 \longrightarrow 00:22:58.210$ Some of the cons include.

NOTE Confidence: 0.759999091666667

00:22:58.210 --> 00:23:02.919 That reimplantation of potential

NOTE Confidence: 0.759999091666667

00:23:02.919 --> 00:23:05.988 cancer potential cancer.

NOTE Confidence: 0.759999091666667

 $00:23:05.990 \longrightarrow 00:23:08.348$ Once the tissue is removed and

NOTE Confidence: 0.759999091666667

 $00{:}23{:}08.348 \dashrightarrow 00{:}23{:}09.920$ then reimplanted the uncertain

NOTE Confidence: 0.759999091666667

 $00:23:09.988 \longrightarrow 00:23:11.598$ life span of this tissue.

NOTE Confidence: 0.759999091666667

00:23:11.600 --> 00:23:14.384 The fact that it requires surgery

NOTE Confidence: 0.759999091666667

 $00:23:14.384 \longrightarrow 00:23:17.532$ and may require IVF down the line

NOTE Confidence: 0.759999091666667

 $00:23:17.532 \longrightarrow 00:23:20.211$ and the age limit such that patients

NOTE Confidence: 0.759999091666667

 $00:23:20.211 \longrightarrow 00:23:22.459$ who are typically over the age of 40

NOTE Confidence: 0.759999091666667

 $00:23:22.459 \longrightarrow 00:23:24.537$ will have less benefit in this case.

NOTE Confidence: 0.918339348

 $00:23:29.480 \longrightarrow 00:23:31.643$ Next, I'd like to go over just

 $00:23:31.643 \longrightarrow 00:23:33.064$ a few experimental methods

NOTE Confidence: 0.918339348

00:23:33.064 --> 00:23:34.780 which include whole ovary,

NOTE Confidence: 0.918339348

 $00:23:34.780 \longrightarrow 00:23:36.436$ including pedicle cryopreservation.

NOTE Confidence: 0.918339348

00:23:36.436 --> 00:23:40.300 This is typically reserved for very young

NOTE Confidence: 0.918339348

00:23:40.374 --> 00:23:43.098 patients whose ovaries are very small,

NOTE Confidence: 0.918339348

 $00:23:43.100 \longrightarrow 00:23:46.150$ for which ovarian tissue, cryo.

NOTE Confidence: 0.918339348

00:23:46.150 --> 00:23:48.510 Location would be very difficult.

NOTE Confidence: 0.918339348

00:23:48.510 --> 00:23:50.445 Another experimental method

NOTE Confidence: 0.918339348

 $00:23:50.445 \longrightarrow 00:23:53.025$ includes GNRH agonist therapies.

NOTE Confidence: 0.918339348

 $00:23:53.030 \longrightarrow 00:23:56.278$ The thought process with this is that we

NOTE Confidence: 0.918339348

00:23:56.278 --> 00:23:59.698 shut down the ovaries while a patient

NOTE Confidence: 0.918339348

00:23:59.698 --> 00:24:02.218 is receiving their cancer therapy,

NOTE Confidence: 0.918339348

 $00{:}24{:}02.220 \dashrightarrow 00{:}24{:}04.212$ and the thought is that when

NOTE Confidence: 0.918339348

 $00:24:04.212 \longrightarrow 00:24:06.070$ these ovaries are less active,

NOTE Confidence: 0.918339348

 $00:24:06.070 \longrightarrow 00:24:08.392$ they'll be less susceptible to the

 $00:24:08.392 \longrightarrow 00:24:10.690$ harmful effects of the therapies.

NOTE Confidence: 0.900283261818182

 $00:24:13.140 \longrightarrow 00:24:14.870$ Some alternative options for patients

NOTE Confidence: 0.900283261818182

00:24:14.870 --> 00:24:16.940 include the use of donor eggs,

NOTE Confidence: 0.900283261818182

00:24:16.940 --> 00:24:20.036 the use of donor ombria embryos,

NOTE Confidence: 0.900283261818182

 $00:24:20.040 \longrightarrow 00:24:22.140$ surrogates or adoption.

NOTE Confidence: 0.92028733

 $00:24:26.710 \longrightarrow 00:24:28.846$ Lastly, to go over what happens

NOTE Confidence: 0.92028733

 $00:24:28.846 \longrightarrow 00:24:30.910$ post treatment for these patients.

NOTE Confidence: 0.92028733

 $00:24:30.910 \longrightarrow 00:24:32.890$ So regarding evaluation of

NOTE Confidence: 0.92028733

00:24:32.890 --> 00:24:35.365 their fertility down the line,

NOTE Confidence: 0.92028733

 $00:24:35.370 \longrightarrow 00:24:36.819$ most reproductive endocrinologists

NOTE Confidence: 0.92028733

 $00{:}24{:}36.819 \dashrightarrow 00{:}24{:}39.234$ or gynecologists would look for

NOTE Confidence: 0.92028733

 $00{:}24{:}39.234 \dashrightarrow 00{:}24{:}41.291$ patients to resume their menstrual

NOTE Confidence: 0.92028733

00:24:41.291 --> 00:24:43.678 cycle as well as test their anti

NOTE Confidence: 0.92028733

 $00:24:43.740 \longrightarrow 00:24:45.786$ mullerian hormone level to get a

NOTE Confidence: 0.92028733

 $00:24:45.786 \longrightarrow 00:24:47.740$ proxy of their ovarian reserve.

NOTE Confidence: 0.93709371

 $00:24:50.740 \longrightarrow 00:24:53.390$ Regarding the use of medications

00:24:53.390 --> 00:24:56.040 and outcomes for these patients,

NOTE Confidence: 0.93709371

 $00{:}24{:}56.040 \dashrightarrow 00{:}24{:}58.656$ generally we use the same medications.

NOTE Confidence: 0.93709371

 $00:24:58.660 \longrightarrow 00:25:00.404$ However, as already mentioned,

NOTE Confidence: 0.93709371

 $00:25:00.404 \longrightarrow 00:25:02.584$ if a patient has an

NOTE Confidence: 0.93709371

00:25:02.584 --> 00:25:04.360 estrogen sensitive cancer,

NOTE Confidence: 0.93709371

 $00:25:04.360 \longrightarrow 00:25:07.265$ we can consider adding letrozole

NOTE Confidence: 0.93709371

 $00:25:07.265 \longrightarrow 00:25:10.170$ and aroma taste inhibitor or

NOTE Confidence: 0.93709371

 $00{:}25{:}10.268 \dashrightarrow 00{:}25{:}13.173$ tamoxifen to reduce the exposure

NOTE Confidence: 0.93709371

 $00:25:13.173 \longrightarrow 00:25:16.078$ to high levels of estradiol.

NOTE Confidence: 0.898731865

 $00:25:18.300 \longrightarrow 00:25:20.868$ There are lower pregnancy rates in

NOTE Confidence: 0.898731865

 $00:25:20.868 \longrightarrow 00:25:23.561$ the first five years with autologous

NOTE Confidence: 0.898731865

 $00{:}25{:}23.561 \dashrightarrow 00{:}25{:}26.615$ with use of autologous O sites and

NOTE Confidence: 0.898731865

 $00:25:26.615 \longrightarrow 00:25:28.864$ that lower pregnancy rate is 60%.

NOTE Confidence: 0.898731865

00:25:28.864 --> 00:25:29.712 However, notably,

NOTE Confidence: 0.898731865

 $00:25:29.712 \longrightarrow 00:25:33.240$ if someone were to use donor O sites,

 $00:25:33.240 \longrightarrow 00:25:36.180$ pregnancy rates tend to be fairly comparable.

NOTE Confidence: 0.9074206855

00:25:39.090 --> 00:25:40.890 Regarding pregnancy complications,

NOTE Confidence: 0.9074206855

 $00{:}25{:}40.890 \dashrightarrow 00{:}25{:}43.890$ pregnancy does not affect recurrence

NOTE Confidence: 0.9074206855

00:25:43.890 --> 00:25:47.169 of any cancer and generally pregnancy

NOTE Confidence: 0.9074206855

 $00:25:47.169 \longrightarrow 00:25:50.169$ complications tend to be very low.

NOTE Confidence: 0.9074206855

 $00{:}25{:}50.170 \dashrightarrow 00{:}25{:}52.970$ The one exception to this is that

NOTE Confidence: 0.9074206855

 $00:25:52.970 \longrightarrow 00:25:54.926$ some patients who receive very high

NOTE Confidence: 0.9074206855

 $00:25:54.926 \longrightarrow 00:25:56.929$ dose of radiation to the uterus,

NOTE Confidence: 0.9074206855

 $00:25:56.930 \longrightarrow 00:25:59.030$ especially at a young age,

NOTE Confidence: 0.9074206855

 $00:25:59.030 \longrightarrow 00:26:03.846$ can potentially have a bit higher risk.

NOTE Confidence: 0.9074206855

 $00:26:03.850 \longrightarrow 00:26:05.662$ Pregnancy outcomes and

NOTE Confidence: 0.9074206855

 $00:26:05.662 \longrightarrow 00:26:06.870$ pregnancy complications.

NOTE Confidence: 0.917339296363636

00:26:09.160 --> 00:26:10.676 Regarding risk to offspring,

NOTE Confidence: 0.917339296363636

 $00:26:10.676 \longrightarrow 00:26:13.680$ there is no increased risk of anomalies.

NOTE Confidence: 0.917339296363636

00:26:13.680 --> 00:26:15.380 However, a provider may consider

NOTE Confidence: 0.917339296363636

00:26:15.380 --> 00:26:17.764 referring a patient to a genetic

 $00:26:17.764 \longrightarrow 00:26:20.068$ counselor specifically, if there is

NOTE Confidence: 0.917339296363636

 $00{:}26{:}20.068 \dashrightarrow 00{:}26{:}21.848$ a genetic predisposition to cancer.

NOTE Confidence: 0.918271262307692

 $00:26:24.690 \longrightarrow 00:26:27.160$ Some other concerns that I'd

NOTE Confidence: 0.918271262307692

00:26:27.160 --> 00:26:29.630 like to briefly discuss include

NOTE Confidence: 0.918271262307692

00:26:29.721 --> 00:26:31.923 some safety concerns so.

NOTE Confidence: 0.918271262307692

 $00:26:31.923 \longrightarrow 00:26:34.688$ It should be determined by

NOTE Confidence: 0.918271262307692

00:26:34.688 --> 00:26:36.347 a multidisciplinary team,

NOTE Confidence: 0.918271262307692

 $00:26:36.350 \longrightarrow 00:26:38.730$ including the medical oncologist

NOTE Confidence: 0.918271262307692

 $00:26:38.730 \longrightarrow 00:26:40.515$ and reproductive endocrinologist.

NOTE Confidence: 0.918271262307692

 $00:26:40.520 \longrightarrow 00:26:43.670$ As to a discussion of the risks,

NOTE Confidence: 0.918271262307692

00:26:43.670 --> 00:26:45.086 benefits, preferences,

NOTE Confidence: 0.918271262307692

 $00:26:45.086 \longrightarrow 00:26:48.626$ and prognosis of this patient

NOTE Confidence: 0.918271262307692

 $00{:}26{:}48.630 \dashrightarrow 00{:}26{:}50.594$ to discuss whether pursuing

NOTE Confidence: 0.918271262307692

 $00:26:50.594 \longrightarrow 00:26:52.067$ fertility preservation would

NOTE Confidence: 0.918271262307692

 $00:26:52.067 \longrightarrow 00:26:54.479$ be safe for the patient.

 $00:26:58.450 \longrightarrow 00:27:01.605$ There should also be consideration

NOTE Confidence: 0.84319548725

 $00:27:01.605 \longrightarrow 00:27:05.515$ paid to trying to prevent any

NOTE Confidence: 0.84319548725

 $00:27:05.515 \longrightarrow 00:27:08.755$ delays in in oncologic treatment.

NOTE Confidence: 0.84319548725

00:27:08.760 --> 00:27:10.888 Regarding the legal implications,

NOTE Confidence: 0.84319548725

 $00:27:10.888 \longrightarrow 00:27:13.548$ we should acknowledge the legal

NOTE Confidence: 0.84319548725

 $00:27:13.548 \longrightarrow 00:27:15.459$ implications of not following the

NOTE Confidence: 0.84319548725

 $00:27:15.459 \longrightarrow 00:27:18.530$ standard of care as well as the medical

NOTE Confidence: 0.84319548725

00:27:18.530 --> 00:27:21.120 liability and potential malpractice with

NOTE Confidence: 0.84319548725

 $00:27:21.120 \longrightarrow 00:27:23.274$ omission of information specifically

NOTE Confidence: 0.84319548725

 $00:27:23.274 \longrightarrow 00:27:26.838$ regarding the the risks of cancer

NOTE Confidence: 0.84319548725

 $00:27:26.838 \longrightarrow 00:27:29.450$ therapies on reproductive capacity.

NOTE Confidence: 0.920636635862069

 $00{:}27{:}32.170 \dashrightarrow 00{:}27{:}34.114$ Additionally, the ethical considerations

NOTE Confidence: 0.920636635862069

 $00:27:34.114 \longrightarrow 00:27:37.539$ to consider that every patient has the

NOTE Confidence: 0.920636635862069

 $00:27:37.539 \longrightarrow 00:27:40.185$ right to know their options concerning

NOTE Confidence: 0.920636635862069

 $00:27:40.185 \longrightarrow 00:27:42.632$ fertility preservation as well as the

NOTE Confidence: 0.920636635862069

 $00:27:42.632 \longrightarrow 00:27:44.750$ risks and costs associated with that.

00:27:44.750 --> 00:27:46.250 Post humus utilization.

NOTE Confidence: 0.920636635862069

 $00{:}27{:}46.250 \dashrightarrow 00{:}27{:}48.750$ This typically will depend on

NOTE Confidence: 0.920636635862069

 $00:27:48.750 \longrightarrow 00:27:52.508$ a patient's advance directive.

NOTE Confidence: 0.920636635862069

 $00:27:52.510 \longrightarrow 00:27:54.675$ Minors who are diagnosed with

NOTE Confidence: 0.920636635862069

00:27:54.675 --> 00:27:56.407 cancer will typically require

NOTE Confidence: 0.920636635862069

 $00:27:56.407 \longrightarrow 00:27:58.690$ a surrogate decision maker.

NOTE Confidence: 0.920636635862069

00:27:58.690 --> 00:28:00.094 And of course,

NOTE Confidence: 0.920636635862069

00:28:00.094 --> 00:28:02.434 the cost of these therapies.

NOTE Confidence: 0.92401088

 $00:28:04.560 \longrightarrow 00:28:08.880$ Just to briefly discuss the cost.

NOTE Confidence: 0.92401088

 $00:28:08.880 \longrightarrow 00:28:11.192$ There is legislation regarding

NOTE Confidence: 0.92401088

 $00{:}28{:}11.192 \dashrightarrow 00{:}28{:}13.504$ costs specifically in Connecticut.

NOTE Confidence: 0.92401088

 $00:28:13.510 \longrightarrow 00:28:15.378$ In general, in 1942,

NOTE Confidence: 0.92401088

 $00:28:15.378 \longrightarrow 00:28:18.180$ the US Supreme Court acknowledged that

NOTE Confidence: 0.92401088

 $00:28:18.259 \longrightarrow 00:28:20.947$ procreation is a basic civil right

NOTE Confidence: 0.92401088

 $00:28:20.950 \longrightarrow 00:28:22.990$ and then specifically in Connecticut.

 $00:28:22.990 \longrightarrow 00:28:26.504$ We do have the fertility preservation bill.

NOTE Confidence: 0.92401088

 $00{:}28{:}26.510 \to 00{:}28{:}28.578$ This was an acted,

NOTE Confidence: 0.92401088

 $00:28:28.578 \longrightarrow 00:28:31.680$ and basically it ensures that patients

NOTE Confidence: 0.92401088

 $00:28:31.778 \longrightarrow 00:28:35.318$ are covered for fertility preservation.

NOTE Confidence: 0.92401088

00:28:35.320 --> 00:28:39.936 If they have a medical necessity and having

NOTE Confidence: 0.92401088

00:28:39.936 --> 00:28:43.668 prior cancer treatment is considered,

NOTE Confidence: 0.92401088

 $00:28:43.670 \longrightarrow 00:28:45.554$ makes fertility preservation

NOTE Confidence: 0.92401088

 $00:28:45.554 \longrightarrow 00:28:47.438$ a medical necessity,

NOTE Confidence: 0.92401088

 $00{:}28{:}47.440 \dashrightarrow 00{:}28{:}52.627$ and so patients who have private insurance.

NOTE Confidence: 0.92401088

 $00:28:52.630 \longrightarrow 00:28:58.118$ Have have this cost covered under this bill.

NOTE Confidence: 0.92401088

00:28:58.120 --> 00:28:58.459 Unfortunately,

NOTE Confidence: 0.92401088

 $00:28:58.459 \longrightarrow 00:29:00.832$ that bill does not cover the cost

NOTE Confidence: 0.92401088

 $00:29:00.832 \longrightarrow 00:29:02.329$ for people without insurance

NOTE Confidence: 0.92401088

 $00:29:02.329 \longrightarrow 00:29:04.219$ or for people with Medicaid,

NOTE Confidence: 0.92401088

 $00:29:04.220 \longrightarrow 00:29:07.028$ and so there are other means to try to

NOTE Confidence: 0.92401088

 $00:29:07.028 \longrightarrow 00:29:09.419$ reduce that cost for those patients,

 $00:29:09.420 \longrightarrow 00:29:11.860$ and they are listed below.

NOTE Confidence: 0.92401088

 $00:29:11.860 \longrightarrow 00:29:13.189$ So for example,

NOTE Confidence: 0.92401088

 $00:29:13.189 \longrightarrow 00:29:14.518$ with repro tech,

NOTE Confidence: 0.92401088

00:29:14.520 --> 00:29:16.404 they provide discounted long

NOTE Confidence: 0.92401088

 $00{:}29{:}16.404 \dashrightarrow 00{:}29{:}18.708$ term storage of ovarian tissue

NOTE Confidence: 0.92401088

 $00:29:18.708 \longrightarrow 00:29:21.816$ as well as O sites and embryos,

NOTE Confidence: 0.92401088

00:29:21.820 --> 00:29:23.945 specifically regarding the cost of

NOTE Confidence: 0.92401088

 $00:29:23.945 \longrightarrow 00:29:25.645$ ovarian tissue prior preservation

NOTE Confidence: 0.92401088

 $00:29:25.645 \longrightarrow 00:29:27.818$ that one tends to be a bit costly.

NOTE Confidence: 0.92401088

 $00:29:27.820 \longrightarrow 00:29:30.088$ And can be between 12 to 24,000.

NOTE Confidence: 0.92401088

00:29:30.088 --> 00:29:30.406 However,

NOTE Confidence: 0.92401088

 $00:29:30.406 \longrightarrow 00:29:32.314$ this can also vary based off

NOTE Confidence: 0.92401088

 $00:29:32.314 \longrightarrow 00:29:34.060$ of the patient's income.

NOTE Confidence: 0.853602744

 $00:29:36.470 \longrightarrow 00:29:38.330$ And so lastly, to summarize,

NOTE Confidence: 0.853602744

 $00:29:38.330 \longrightarrow 00:29:40.650$ some of the things that we discussed today.

 $00:29:40.650 \longrightarrow 00:29:42.048$ Certain cancer treatments

NOTE Confidence: 0.853602744

00:29:42.048 --> 00:29:43.446 such as chemotherapy,

NOTE Confidence: 0.853602744

 $00{:}29{:}43.450 \dashrightarrow 00{:}29{:}46.288$ radiation and surgery can lead to

NOTE Confidence: 0.853602744

 $00:29:46.288 \longrightarrow 00:29:48.598$ sterility and subfertility all patients

NOTE Confidence: 0.853602744

 $00:29:48.598 \longrightarrow 00:29:51.262$ of reproductive age who will undergo

NOTE Confidence: 0.853602744

 $00{:}29{:}51.262 \dashrightarrow 00{:}29{:}52.823$ potentially genotoxic the rapies

NOTE Confidence: 0.853602744

 $00:29:52.823 \longrightarrow 00:29:55.227$ should receive appropriate counseling.

NOTE Confidence: 0.853602744

00:29:55.230 --> 00:29:57.694 Some of the methods to try to optimize

NOTE Confidence: 0.853602744

 $00:29:57.694 \longrightarrow 00:29:59.573$ access to fertility preservation

NOTE Confidence: 0.853602744

00:29:59.573 --> 00:30:01.969 and include increasing awareness,

NOTE Confidence: 0.853602744

 $00{:}30{:}01.970 \dashrightarrow 00{:}30{:}04.662$ promoting education and counseling,

NOTE Confidence: 0.853602744

 $00:30:04.662 \longrightarrow 00:30:06.798$ and collaboration, and methods.

NOTE Confidence: 0.853602744

00:30:06.798 --> 00:30:07.980 To preserve fertility,

NOTE Confidence: 0.853602744

00:30:07.980 --> 00:30:12.000 include embryo 4 O site cryopreservation,

NOTE Confidence: 0.853602744

 $00:30:12.000 \longrightarrow 00:30:15.096$ O for paxi, ovarian tissue cryopreservation,

NOTE Confidence: 0.853602744

00:30:15.100 --> 00:30:18.259 or experimental methods.

 $00:30:18.260 \longrightarrow 00:30:20.654$ Thank you so much for your attention.

NOTE Confidence: 0.853602744

00:30:20.660 --> 00:30:22.487 Here are some of our references and

NOTE Confidence: 0.853602744

 $00:30:22.487 \longrightarrow 00:30:24.428$ we're happy to answer any questions.

NOTE Confidence: 0.5388139

 $00:30:26.480 \longrightarrow 00:30:26.750$ There's. NOTE Confidence: 0.927788757142857

 $00:30:33.520 \longrightarrow 00:30:36.550$ OK, so we have a question

NOTE Confidence: 0.927788757142857

 $00:30:36.550 \longrightarrow 00:30:38.808$ here regarding oh for proxy.

NOTE Confidence: 0.927788757142857

00:30:38.808 --> 00:30:41.430 The range of success rates listed

NOTE Confidence: 0.927788757142857

 $00:30:41.509 \longrightarrow 00:30:44.132$ are quite wide, from 10 to 90%.

NOTE Confidence: 0.927788757142857

 $00{:}30{:}44.132 \dashrightarrow 00{:}30{:}46.728$ I had heard roughly a 50% chance

NOTE Confidence: 0.927788757142857

00:30:46.728 --> 00:30:48.668 of damaging the ovary directly

NOTE Confidence: 0.927788757142857

 $00{:}30{:}48.668 \dashrightarrow 00{:}30{:}50.220$ from the procedure itself,

NOTE Confidence: 0.927788757142857

 $00{:}30{:}50.220 \dashrightarrow 00{:}30{:}53.428$ which seems a high risk since since the

NOTE Confidence: 0.927788757142857

 $00{:}30{:}53.428 \to 00{:}30{:}56.086$ risk from radiation is also probabilistic.

NOTE Confidence: 0.927788757142857

 $00:30:56.086 \longrightarrow 00:30:59.016$ Does Yale offer this option?

NOTE Confidence: 0.927788757142857

 $00:30:59.020 \longrightarrow 00:31:01.526$ What do the success rates look like

00:31:01.526 --> 00:31:03.868 in modern practice and what patients?

NOTE Confidence: 0.927788757142857

 $00:31:03.870 \longrightarrow 00:31:06.537$ Do well versus poorly with this approach.

NOTE Confidence: 0.92303708

 $00:31:15.430 \longrightarrow 00:31:17.978$ I actually have not seen any

NOTE Confidence: 0.92303708

00:31:17.978 --> 00:31:19.488 perplexity done here at Yale,

NOTE Confidence: 0.86569425

 $00:31:19.490 \longrightarrow 00:31:21.205$ but it is actually a simple procedure.

NOTE Confidence: 0.86569425

 $00:31:21.210 \longrightarrow 00:31:22.110$ It's the same thing.

NOTE Confidence: 0.86569425

 $00:31:22.110 \longrightarrow 00:31:23.890$ If we had some with ovarian torsion,

NOTE Confidence: 0.86569425

00:31:23.890 --> 00:31:26.130 it's actually the same procedure to be done,

NOTE Confidence: 0.86569425

 $00:31:26.130 \longrightarrow 00:31:28.210$ so it's something that we can actually do.

NOTE Confidence: 0.86569425

00:31:28.210 --> 00:31:30.260 I haven't seen a whole lot of public

NOTE Confidence: 0.86569425

 $00:31:30.260 \longrightarrow 00:31:31.750$ radiation patients come through. I

NOTE Confidence: 0.90801173

00:31:31.760 --> 00:31:33.160 couldn't give you the exact

NOTE Confidence: 0.90801173

00:31:33.160 --> 00:31:36.450 statistics, mainly because

NOTE Confidence: 0.7586098551111111

 $00:31:36.450 \longrightarrow 00:31:40.653$ the problem is is like it varies on dose.

NOTE Confidence: 0.758609855111111

 $00:31:40.660 \longrightarrow 00:31:41.659$ Where it's located?

NOTE Confidence: 0.758609855111111

 $00:31:41.659 \longrightarrow 00:31:43.324$ Are they shielding or not?

00:31:43.330 --> 00:31:45.900 And so that's why you see that wide range.

NOTE Confidence: 0.758609855111111

 $00:31:45.900 \longrightarrow 00:31:46.820$ So even with Uber,

NOTE Confidence: 0.758609855111111

 $00:31:46.820 \longrightarrow 00:31:48.460$ Paxi would probably still

NOTE Confidence: 0.758609855111111

 $00:31:48.460 \longrightarrow 00:31:51.660$ recommend doing an additional.

NOTE Confidence: 0.758609855111111

 $00:31:51.660 \longrightarrow 00:31:54.564$ Fertility preservation procedure like

NOTE Confidence: 0.758609855111111

 $00:31:54.564 \longrightarrow 00:31:57.468$ tissue or embryo cryopreservation.

NOTE Confidence: 0.758609855111111

 $00:31:57.470 \longrightarrow 00:31:59.038$ Just to make sure that if there

NOTE Confidence: 0.758609855111111

 $00:31:59.038 \longrightarrow 00:32:00.621$ is any scatter from the radiation

NOTE Confidence: 0.758609855111111

 $00:32:00.621 \longrightarrow 00:32:01.769$ that we're still protecting

NOTE Confidence: 0.758609855111111

 $00:32:01.769 \longrightarrow 00:32:03.320$ them as much as possible.

NOTE Confidence: 0.91166512

00:32:05.840 --> 00:32:07.852 So I have a question for you, so, UM,

NOTE Confidence: 0.91166512

 $00:32:07.852 \longrightarrow 00:32:10.228$ you know. Obviously these issues come

NOTE Confidence: 0.91166512

 $00{:}32{:}10.228 \dashrightarrow 00{:}32{:}13.120$ up with a fair amount of frequency,

NOTE Confidence: 0.91166512

00:32:13.120 --> 00:32:17.692 and I'm struck that you gave a great talk,

NOTE Confidence: 0.91166512

 $00:32:17.700 \longrightarrow 00:32:21.030$ but one of you is going off to take

 $00:32:21.030 \longrightarrow 00:32:24.596$ a job in Texas and Gabriella,

NOTE Confidence: 0.91166512

00:32:24.600 --> 00:32:26.628 you're going off to do a

NOTE Confidence: 0.91166512

00:32:26.628 --> 00:32:27.980 fellowship in another year.

NOTE Confidence: 0.91166512

 $00:32:27.980 \longrightarrow 00:32:31.500$ So who on the in in the REI?

NOTE Confidence: 0.91166512

00:32:31.500 --> 00:32:34.188 Faculty is interested in these issues,

NOTE Confidence: 0.91166512

 $00:32:34.190 \longrightarrow 00:32:35.438$ who we should approach?

NOTE Confidence: 0.669570777333333

 $00:32:36.810 \longrightarrow 00:32:38.975$ Well, Gavin, be here for

NOTE Confidence: 0.669570777333333

 $00:32:38.975 \longrightarrow 00:32:41.620$ another year and so I

NOTE Confidence: 0.701417034

 $00{:}32{:}41.660 \dashrightarrow 00{:}32{:}43.510$ understand that. But you know,

NOTE Confidence: 0.701417034

 $00:32:43.510 \longrightarrow 00:32:46.358$ again. So in training

NOTE Confidence: 0.809797005454545

 $00:32:46.710 \longrightarrow 00:32:48.670$ no, absolutely. And so we're

NOTE Confidence: 0.809797005454545

00:32:48.670 --> 00:32:51.040 working with Doctor Callan as well,

NOTE Confidence: 0.809797005454545

 $00:32:51.040 \longrightarrow 00:32:53.343$ and she does mainly the probably the

NOTE Confidence: 0.809797005454545

 $00:32:53.343 \longrightarrow 00:32:55.980$ most of the fertility preservation.

NOTE Confidence: 0.809797005454545

00:32:55.980 --> 00:32:58.997 But the fellows all work together too,

NOTE Confidence: 0.809797005454545

 $00:32:59.000 \longrightarrow 00:33:00.132$ so it's everything's just

 $00:33:00.132 \longrightarrow 00:33:01.547$ kind of passed down for.

NOTE Confidence: 0.809797005454545

 $00:33:01.550 \longrightarrow 00:33:02.910$ So my second year fellow,

NOTE Confidence: 0.809797005454545

00:33:02.910 --> 00:33:05.606 who's a rising third year now Eric Kahn,

NOTE Confidence: 0.809797005454545

 $00:33:05.610 \longrightarrow 00:33:07.580$ would be another good point.

NOTE Confidence: 0.809797005454545

 $00:33:07.580 \longrightarrow 00:33:09.228$ Of reference as well.

NOTE Confidence: 0.633314596666667

 $00:33:14.060 \longrightarrow 00:33:19.180$ There's another chat. The questions.

NOTE Confidence: 0.633314596666667

 $00:33:19.180 \longrightarrow 00:33:20.951$ Can you talk a little bit more

NOTE Confidence: 0.633314596666667

 $00:33:20.951 \longrightarrow 00:33:22.200$ about your outpatient services?

NOTE Confidence: 0.633314596666667

 $00{:}33{:}22.200 \dashrightarrow 00{:}33{:}24.076$ How quickly can these patients be seen,

NOTE Confidence: 0.633314596666667

 $00:33:24.080 \longrightarrow 00:33:26.186$ particularly those who need to start

NOTE Confidence: 0.633314596666667

 $00:33:26.186 \longrightarrow 00:33:27.590$ anti cancer treatment quickly?

NOTE Confidence: 0.77724546125

00:33:27.840 --> 00:33:30.160 Absolutely. So usually the third

NOTE Confidence: 0.77724546125

 $00{:}33{:}30.160 \dashrightarrow 00{:}33{:}32.911$ year fellow actually does all of

NOTE Confidence: 0.77724546125

 $00:33:32.911 \longrightarrow 00:33:35.043$ the at least the Medicaid referrals

NOTE Confidence: 0.77724546125

 $00:33:35.043 \longrightarrow 00:33:36.958$ and other referrals as well.

00:33:36.960 --> 00:33:38.016 If you just mark them urgent,

NOTE Confidence: 0.77724546125

 $00:33:38.020 \longrightarrow 00:33:39.628$ we usually can see them within

NOTE Confidence: 0.77724546125

00:33:39.628 --> 00:33:41.800 a week if not faster in patient.

NOTE Confidence: 0.77724546125

00:33:41.800 --> 00:33:44.194 Of course we see within 24 hours a lot

NOTE Confidence: 0.77724546125

00:33:44.194 --> 00:33:46.388 of times it's just be like video chat

NOTE Confidence: 0.77724546125

 $00:33:46.388 \longrightarrow 00:33:48.380$ so we can just talk about the options.

NOTE Confidence: 0.77724546125

 $00:33:48.380 \longrightarrow 00:33:50.702$ And start getting things set up on our end,

NOTE Confidence: 0.77724546125

00:33:50.710 --> 00:33:52.786 but usually we see people very

NOTE Confidence: 0.77724546125

00:33:52.786 --> 00:33:55.339 quickly and you know we manage to

NOTE Confidence: 0.77724546125

 $00:33:55.339 \longrightarrow 00:33:57.169$ squeeze them in somewhere because

NOTE Confidence: 0.77724546125

 $00{:}33{:}57.169 \dashrightarrow 00{:}33{:}59.740$ we know how important this is and.

NOTE Confidence: 0.77724546125

00:33:59.740 --> 00:34:03.116 You know the hard part is when patients

NOTE Confidence: 0.77724546125

 $00:34:03.120 \longrightarrow 00:34:04.626$ you know are not stable enough,

NOTE Confidence: 0.77724546125

 $00:34:04.630 \longrightarrow 00:34:06.114$ and those are probably the hardest patients,

NOTE Confidence: 0.77724546125

 $00:34:06.120 \longrightarrow 00:34:08.815$ and so usually if they have to

NOTE Confidence: 0.77724546125

 $00:34:08.815 \longrightarrow 00:34:10.880$ undergo cancer treatment immediately,

 $00:34:10.880 \longrightarrow 00:34:12.392$ we want to make sure that they know how

NOTE Confidence: 0.77724546125

 $00{:}34{:}12.392 \dashrightarrow 00{:}34{:}14.155$ to find us afterwards so we can start

NOTE Confidence: 0.77724546125

 $00:34:14.155 \longrightarrow 00:34:17.370$ planning after their treatment as well.

NOTE Confidence: 0.77724546125

00:34:17.370 --> 00:34:18.100 Ohh Kurt,

NOTE Confidence: 0.77724546125

 $00:34:18.100 \longrightarrow 00:34:20.655$ is there any movement to extend reproductive

NOTE Confidence: 0.77724546125

00:34:20.655 --> 00:34:22.590 coverage to patients with Medicaid?

NOTE Confidence: 0.77724546125

 $00:34:22.590 \longrightarrow 00:34:25.814$ I wish I've not seen any movement from.

NOTE Confidence: 0.77724546125

 $00:34:25.820 \longrightarrow 00:34:27.041$ Fortunately for that,

NOTE Confidence: 0.77724546125

00:34:27.041 --> 00:34:29.890 I think there's this an ongoing struggle.

NOTE Confidence: 0.77724546125

 $00:34:29.890 \longrightarrow 00:34:31.410$ The hard part too is.

NOTE Confidence: 0.77724546125

00:34:31.410 --> 00:34:33.210 I'm not originally from East Coast,

NOTE Confidence: 0.77724546125

 $00:34:33.210 \longrightarrow 00:34:34.810$ but since all the states are so small

NOTE Confidence: 0.77724546125

 $00:34:34.810 \longrightarrow 00:34:36.526$ each time you move states we see a

NOTE Confidence: 0.77724546125

 $00:34:36.526 \longrightarrow 00:34:38.470$ lot of patients from Rhode Island and

NOTE Confidence: 0.77724546125

 $00:34:38.470 \longrightarrow 00:34:40.290$ Massachusetts and New York and all of

 $00:34:40.290 \longrightarrow 00:34:41.772$ those states have different policies

NOTE Confidence: 0.77724546125

 $00:34:41.772 \longrightarrow 00:34:43.944$ when it comes to fertility preservation,

NOTE Confidence: 0.77724546125

 $00:34:43.950 \longrightarrow 00:34:45.959$ and so it makes it very difficult

NOTE Confidence: 0.797136306

 $00:34:46.000 \longrightarrow 00:34:47.770$ to keep up with. I think,

NOTE Confidence: 0.903187732

 $00:34:48.220 \longrightarrow 00:34:49.690$ but I have not seen any

NOTE Confidence: 0.903187732

 $00:34:49.690 \longrightarrow 00:34:50.670$ improvement in that area.

NOTE Confidence: 0.898499862

00:34:54.640 --> 00:34:56.452 Can you clarify if the quality

NOTE Confidence: 0.898499862

 $00{:}34{:}56.452 \dashrightarrow 00{:}34{:}58.142$ of life statistic is independent

NOTE Confidence: 0.898499862

 $00:34:58.142 \longrightarrow 00:35:00.662$ of whether or not the patient

NOTE Confidence: 0.898499862

 $00:35:00.662 \longrightarrow 00:35:01.922$ used preservation strategies?

NOTE Confidence: 0.898499862

 $00:35:01.930 \longrightarrow 00:35:03.388$ I think the stress is the

NOTE Confidence: 0.898499862

 $00:35:03.388 \longrightarrow 00:35:04.117$ importance of referral,

NOTE Confidence: 0.898499862

 $00:35:04.120 \longrightarrow 00:35:05.288$ regardless of whether or

NOTE Confidence: 0.898499862

 $00:35:05.288 \longrightarrow 00:35:07.550$ not you have time. Yes,

NOTE Confidence: 0.81202409

 $00:35:07.560 \longrightarrow 00:35:10.692$ it does. Patients, even if they

NOTE Confidence: 0.81202409

00:35:10.692 --> 00:35:12.153 cannot pursue the treatment.

 $00:35:12.153 \longrightarrow 00:35:14.019$ Especially they can't pursue it immediately.

NOTE Confidence: 0.81202409

 $00{:}35{:}14.020 \dashrightarrow 00{:}35{:}16.525$ Still appreciate the counseling that

NOTE Confidence: 0.81202409

 $00:35:16.525 \longrightarrow 00:35:19.908$ they receive so that they're aware of it.

NOTE Confidence: 0.81202409

 $00:35:19.908 \longrightarrow 00:35:21.990$ It's not 10 years down the road that they're.

NOTE Confidence: 0.927933735

00:35:22.070 --> 00:35:23.410 Surprised by this outcome.

NOTE Confidence: 0.60009754

 $00:35:28.950 \longrightarrow 00:35:30.274$ Something as well as that

NOTE Confidence: 0.60009754

 $00:35:30.274 \longrightarrow 00:35:31.510$ we're doing a lot more ovarian

NOTE Confidence: 0.828731549230769

 $00{:}35{:}31.562 \dashrightarrow 00{:}35{:}32.729$ tissue crime preservation.

NOTE Confidence: 0.828731549230769

00:35:32.730 --> 00:35:36.104 I'm doctor ate. Who's a Yale physician,

NOTE Confidence: 0.828731549230769

00:35:36.110 --> 00:35:39.026 but recently has been working

NOTE Confidence: 0.828731549230769

 $00:35:39.026 \longrightarrow 00:35:41.090$ a little bit more with us.

NOTE Confidence: 0.828731549230769

 $00{:}35{:}41.090 \dashrightarrow 00{:}35{:}42.650$ He does the ovarian tissue crime

NOTE Confidence: 0.828731549230769

 $00{:}35{:}42.650 {\:{\mbox{--}}\!>}\ 00{:}35{:}44.158$ preservation, he kind of based out of

NOTE Confidence: 0.828731549230769

 $00:35:44.158 \longrightarrow 00:35:46.459$ New York when he comes down and does

NOTE Confidence: 0.828731549230769

 $00:35:46.459 \longrightarrow 00:35:47.867$ ovarian just require preservation,

00:35:47.870 --> 00:35:50.350 and does a lot of research on fertility,

NOTE Confidence: 0.828731549230769

 $00:35:50.350 \longrightarrow 00:35:52.156$ preservation, and so we're lucky to have

NOTE Confidence: 0.828731549230769

 $00:35:52.156 \longrightarrow 00:35:54.146$ him and that we can kind of continue.

NOTE Confidence: 0.828731549230769

 $00:35:54.150 \longrightarrow 00:35:56.370$ Still other areas that we're

NOTE Confidence: 0.828731549230769

 $00:35:56.370 \longrightarrow 00:35:59.632$ trying to improve on is, you know,

NOTE Confidence: 0.828731549230769

 $00{:}35{:}59.632 \dashrightarrow 00{:}36{:}01.608$ testicular tissue prior preservation.

NOTE Confidence: 0.828731549230769

 $00:36:01.610 \longrightarrow 00:36:03.090$ Hopefully we will get more.

NOTE Confidence: 0.828731549230769

 $00:36:03.090 \longrightarrow 00:36:04.720$ There's only like 1 area,

NOTE Confidence: 0.828731549230769

 $00:36:04.720 \longrightarrow 00:36:06.535$ I think in Philadelphia or

NOTE Confidence: 0.828731549230769

 $00:36:06.535 \longrightarrow 00:36:07.624$ Pittsburgh around here.

NOTE Confidence: 0.828731549230769

00:36:07.630 --> 00:36:10.126 That does that for prepubescent boys,

NOTE Confidence: 0.828731549230769

 $00:36:10.130 \longrightarrow 00:36:12.098$ that is still experimental,

NOTE Confidence: 0.828731549230769

 $00:36:12.098 \longrightarrow 00:36:14.235$ but there's a lot of different

NOTE Confidence: 0.828731549230769

 $00:36:14.235 \longrightarrow 00:36:15.880$ things that we're just trying

NOTE Confidence: 0.828731549230769

 $00:36:15.945 \longrightarrow 00:36:17.969$ to bring more to Yale so that we

NOTE Confidence: 0.828731549230769

 $00:36:17.969 \longrightarrow 00:36:20.431$ can ensure that we kind of cover

 $00:36:20.431 \longrightarrow 00:36:21.947$ everyone for fertility preservation.

NOTE Confidence: 0.828731549230769

 $00{:}36{:}21.950 \dashrightarrow 00{:}36{:}24.540$ When it comes to male fertility preservation.

NOTE Confidence: 0.828731549230769

00:36:24.540 --> 00:36:27.000 It's usually if they're postural,

NOTE Confidence: 0.828731549230769

 $00:36:27.000 \longrightarrow 00:36:27.834$ very straightforward.

NOTE Confidence: 0.828731549230769

00:36:27.834 --> 00:36:30.336 If there's any problem with **********

NOTE Confidence: 0.828731549230769

 $00:36:30.340 \longrightarrow 00:36:31.876$ or the patients are unable to do so,

NOTE Confidence: 0.828731549230769

 $00:36:31.880 \longrightarrow 00:36:34.456$ we just have our colleague from Urology, Dr.

NOTE Confidence: 0.828731549230769

 $00:36:34.456 \longrightarrow 00:36:36.536$ Honig, help us with that,

NOTE Confidence: 0.828731549230769

 $00:36:36.540 \longrightarrow 00:36:38.742$ but we have our own andrology

NOTE Confidence: 0.828731549230769

 $00:36:38.742 \longrightarrow 00:36:40.660$ lab and store sperm here.

NOTE Confidence: 0.911451026666667

 $00:36:46.120 \longrightarrow 00:36:47.539$ Any other questions?

NOTE Confidence: 0.888016965714286

 $00:36:51.450 \longrightarrow 00:36:52.650$ Well, thank you both.

NOTE Confidence: 0.888016965714286

 $00{:}36{:}52.650 {\:{\circ}{\circ}{\circ}}>00{:}36{:}55.276$ It was really great and we

NOTE Confidence: 0.888016965714286

 $00{:}36{:}55.276 \dashrightarrow 00{:}36{:}56.848$ look forward to interacting

NOTE Confidence: 0.888016965714286

 $00:36:56.848 \longrightarrow 00:36:59.117$ with your colleagues in the in

 $00{:}36{:}59.117 \dashrightarrow 00{:}37{:}00.995$ the years ahead and good luck.