WEBVTT

00:00:00.000 --> 00:00:02.148 Funding for Yale Cancer Answers is

NOTE Confidence: 0.798806687272727

00:00:02.148 --> 00:00:04.180 provided by Smilow Cancer Hospital.

NOTE Confidence: 0.71947448

00:00:06.490 --> 00:00:08.645 Welcome to Yale Cancer Answers

NOTE Confidence: 0.71947448

00:00:08.645 --> 00:00:10.369 with Doctor Anees Chagpar.

NOTE Confidence: 0.71947448

00:00:10.370 --> 00:00:12.205 Yale Cancer Answers features the

NOTE Confidence: 0.71947448

00:00:12.205 --> 00:00:14.040 latest information on cancer care

NOTE Confidence: 0.71947448

00:00:14.102 --> 00:00:15.550 by welcoming oncologists and

NOTE Confidence: 0.71947448

00:00:15.550 --> 00:00:17.722 specialists who are on the forefront

NOTE Confidence: 0.71947448

00:00:17.779 --> 00:00:19.447 of the battle to fight cancer.

NOTE Confidence: 0.71947448

00:00:19.450 --> 00:00:21.200 This week, it's a conversation

NOTE Confidence: 0.71947448

00:00:21.200 --> 00:00:22.950 about recent advances in breast

NOTE Confidence: 0.71947448

00:00:23.007 --> 00:00:24.867 imaging with Doctor Kiran Sheikh.

NOTE Confidence: 0.71947448

00:00:24.870 --> 00:00:27.018 Dr Sheikh is an assistant professor

NOTE Confidence: 0.71947448

00:00:27.018 --> 00:00:28.879 of clinical radiology and biomedical

NOTE Confidence: 0.71947448

00:00:28.879 --> 00:00:31.448 imaging at the Yale School of Medicine,

NOTE Confidence: 0.71947448

00:00:31.450 --> 00:00:33.285 where Doctor Chagpar is a

NOTE Confidence: 0.71947448

00:00:33.285 --> 00:00:34.753 professor of surgical oncology.

NOTE Confidence: 0.909353873913044

00:00:35.870 --> 00:00:37.806 Kiran, maybe we can start off by

NOTE Confidence: 0.909353873913044

00:00:37.806 --> 00:00:39.552 you telling us a little bit more

NOTE Confidence: 0.909353873913044

00:00:39.552 --> 00:00:41.378 about yourself and what it is that you do?

NOTE Confidence: 0.791913098

00:00:41.390 --> 00:00:42.980 Originally I was always

NOTE Confidence: 0.791913098

00:00:42.980 --> 00:00:44.570 kind of interested in medicine.

NOTE Confidence: 0.791913098

00:00:44.570 --> 00:00:46.762 My parents were both in

NOTE Confidence: 0.791913098

00:00:46.762 --> 00:00:48.366 medical careers, so I was always

NOTE Confidence: 0.791913098

00:00:48.366 --> 00:00:49.686 kind of going towards medicine.

NOTE Confidence: 0.791913098

00:00:49.690 --> 00:00:53.970 But in general, I ended up in radiology

NOTE Confidence: 0.791913098

00:00:53.970 --> 00:00:55.266 later on in my career.

NOTE Confidence: 0.791913098

00:00:55.270 --> 00:00:57.442 I was in medical school and

NOTE Confidence: 0.791913098

00:00:57.442 --> 00:00:58.890 gearing towards actually neurology,

NOTE Confidence: 0.791913098

00:00:58.890 --> 00:00:59.185 neurosurgery.

NOTE Confidence: 0.791913098

00:00:59.185 --> 00:01:02.210 And then as I kind of went down my path,

NOTE Confidence: 0.791913098

00:01:02.210 --> 00:01:04.716 I met a lot of radiologists and

NOTE Confidence: 0.791913098

00:01:04.716 --> 00:01:05.790 they were amazing mentors

NOTE Confidence: 0.791913098

00:01:05.790 --> 00:01:08.070 and they introduced me to

NOTE Confidence: 0.791913098

00:01:08.070 --> 00:01:10.379 the field of diagnostic imaging and

NOTE Confidence: 0.791913098

00:01:10.379 --> 00:01:12.899 I kind of started figuring out that

NOTE Confidence: 0.791913098

00:01:12.899 --> 00:01:15.376 besides being involved in the

NOTE Confidence: 0.791913098

00:01:15.376 --> 00:01:17.859 care and the treatment of patients,

NOTE Confidence: 0.791913098

00:01:17.859 --> 00:01:20.470 I actually started becoming a lot more

NOTE Confidence: 0.791913098

00:01:20.537 --> 00:01:22.657 intrigued about just the initial

NOTE Confidence: 0.791913098

00:01:22.660 --> 00:01:24.510 impact of diagnosing disease and

NOTE Confidence: 0.791913098

00:01:24.510 --> 00:01:27.122 being a part of the forefront of

NOTE Confidence: 0.791913098

00:01:27.122 --> 00:01:29.516 imaging and so that's kind of how

NOTE Confidence: 0.791913098

00:01:29.516 --> 00:01:32.140 I ended up in radiology.

NOTE Confidence: 0.791913098

00:01:32.140 --> 00:01:35.800 And then specifically within breast imaging,

NOTE Confidence: 0.791913098

00:01:35.800 --> 00:01:38.848 it was actually when I was in medical

NOTE Confidence: 0.791913098

00:01:38.848 --> 00:01:41.803 school I again I had those radiologists

NOTE Confidence: 0.791913098

00:01:41.803 --> 00:01:44.943 that kind of were my mentors and

NOTE Confidence: 0.791913098

00:01:44.943 --> 00:01:47.775 then ended up in radiology

NOTE Confidence: 0.791913098

00:01:47.775 --> 00:01:50.900 residency and saw the unique

NOTE Confidence: 0.791913098

00:01:50.900 --> 00:01:53.080 relationship that the radiologists

NOTE Confidence: 0.791913098

00:01:53.080 --> 00:01:56.020 had with our breast patients and how

NOTE Confidence: 0.791913098

00:01:56.020 --> 00:01:58.468 important breast imaging was for

NOTE Confidence: 0.791913098

00:01:58.468 --> 00:02:01.072 population screening and the kind

NOTE Confidence: 0.791913098

00:02:01.142 --> 00:02:03.760 of larger impact that they could have.

NOTE Confidence: 0.791913098

00:02:03.760 --> 00:02:05.596 So that's how I ended up in breast imaging.

NOTE Confidence: 0.8994717275

00:02:07.250 --> 00:02:09.824 A lot of us know a

NOTE Confidence: 0.8994717275

00:02:09.824 --> 00:02:12.177 little bit about breast imaging in

NOTE Confidence: 0.8994717275

00:02:12.177 --> 00:02:15.136 the sense that most people know about

NOTE Confidence: 0.8994717275

00:02:15.136 --> 00:02:17.836 the importance of getting a mammogram.

NOTE Confidence: 0.8994717275

00:02:17.840 --> 00:02:20.984 But what tends to be a little bit

NOTE Confidence: 0.8994717275

00:02:20.984 --> 00:02:24.931 confusing right now is what really are the

NOTE Confidence: 0.8994717275

00:02:24.931 --> 00:02:27.390 recommendations for screening imaging for,

NOTE Confidence: 0.8994717275

00:02:27.390 --> 00:02:29.350 let's start with people at average risk.

NOTE Confidence: 0.8994717275

00:02:29.350 --> 00:02:31.310 Let's suppose you don't have a

NOTE Confidence: 0.8994717275

00:02:31.310 --> 00:02:33.002 huge family history, or at least not

NOTE Confidence: 0.8994717275

00:02:33.002 --> 00:02:34.470 a family history that you know of.

NOTE Confidence: 0.8994717275

00:02:34.470 --> 00:02:37.170 You don't have a genetic predisposition.

NOTE Confidence: 0.8994717275

00:02:37.170 --> 00:02:42.266 You're just a regular individual in society.

NOTE Confidence: 0.8994717275

00:02:42.270 --> 00:02:44.270 The recommendations for breast imaging

NOTE Confidence: 0.8994717275

00:02:44.270 --> 00:02:46.656 in terms of screening for breast

NOTE Confidence: 0.8994717275

00:02:46.656 --> 00:02:48.896 cancer seem to be a moving target.

NOTE Confidence: 0.8994717275

00:02:48.900 --> 00:02:50.601 Where are we now and what do

NOTE Confidence: 0.8994717275

00:02:50.601 --> 00:02:52.069 you recommend for your patients?

00:02:53.530 --> 00:02:54.442 What is breast imaging?

NOTE Confidence: 0.82760357

00:02:54.442 --> 00:02:55.354 So in general,

NOTE Confidence: 0.82760357

00:02:55.360 --> 00:02:56.824 we have different types of imaging

NOTE Confidence: 0.82760357

00:02:56.824 --> 00:02:58.678 modalities that we do for breast imaging.

NOTE Confidence: 0.82760357

00:02:58.680 --> 00:03:01.028 We do mammography, ultrasound,

NOTE Confidence: 0.82760357

00:03:01.028 --> 00:03:03.376 MRI for screening evaluation.

NOTE Confidence: 0.82760357

00:03:03.380 --> 00:03:05.370 Mammography is our gold standard

NOTE Confidence: 0.82760357

00:03:05.370 --> 00:03:07.360 screening exam for breast cancer.

NOTE Confidence: 0.82760357

00:03:07.360 --> 00:03:08.872 It's noninvasive, it's effective.

NOTE Confidence: 0.82760357

00:03:08.872 --> 00:03:10.762 It allows us to have

NOTE Confidence: 0.82760357

00:03:10.762 --> 00:03:12.468 early detection of cancer.

NOTE Confidence: 0.82760357

00:03:12.470 --> 00:03:14.330 And so that's actually the

NOTE Confidence: 0.82760357

00:03:14.330 --> 00:03:15.446 initial screening evaluation.

NOTE Confidence: 0.82760357

00:03:15.450 --> 00:03:17.795 So now our Society of breast Imaging

NOTE Confidence: 0.82760357

00:03:17.795 --> 00:03:20.184 and Academy and College of Radiology

NOTE Confidence: 0.82760357

00:03:20.184 --> 00:03:22.374 recommends that women with average

NOTE Confidence: 0.82760357

00:03:22.374 --> 00:03:24.289 lifetime risk of breast cancer

NOTE Confidence: 0.82760357

00:03:24.289 --> 00:03:26.543 begin screening at the age of 40.

NOTE Confidence: 0.82760357

00:03:26.550 --> 00:03:27.658 And like you said,

NOTE Confidence: 0.82760357

00:03:27.658 --> 00:03:29.320 there is a lot of confusion

NOTE Confidence: 0.82760357

00:03:29.388 --> 00:03:31.086 just because of the fact that

NOTE Confidence: 0.82760357

00:03:31.086 --> 00:03:32.890 there are lots of different

NOTE Confidence: 0.82760357

00:03:32.890 --> 00:03:35.410 imaging studies

NOTE Confidence: 0.82760357

00:03:35.410 --> 00:03:38.310 out there that have been discussed

NOTE Confidence: 0.82760357

00:03:38.310 --> 00:03:40.602 about what's the best timing to

NOTE Confidence: 0.82760357

00:03:40.610 --> 00:03:41.950 start the screening.

NOTE Confidence: 0.82760357

00:03:41.950 --> 00:03:44.422 And so different countries with different

NOTE Confidence: 0.82760357

00:03:44.422 --> 00:03:46.637 risk profiles of their population

NOTE Confidence: 0.82760357

00:03:46.637 --> 00:03:49.107 start screening at different times.

NOTE Confidence: 0.82760357

00:03:49.110 --> 00:03:50.626 And so in essence,

NOTE Confidence: 0.82760357

00:03:50.626 --> 00:03:52.900 you have some areas where they're

NOTE Confidence: 0.82760357

00:03:52.978 --> 00:03:55.162 recommending from 40 to 45 that

NOTE Confidence: 0.82760357

00:03:55.162 --> 00:03:57.386 they can just have the option

NOTE Confidence: 0.82760357

00:03:57.386 --> 00:03:59.444 to start screening and then 45

NOTE Confidence: 0.82760357

00:03:59.444 --> 00:04:01.366 to 54 you start annually.

NOTE Confidence: 0.82760357

00:04:01.366 --> 00:04:03.675 And I would say the most important

NOTE Confidence: 0.82760357

00:04:03.675 --> 00:04:06.349 thing that we always know is that

NOTE Confidence: 0.82760357

00:04:06.349 --> 00:04:08.366 mammography is the most effective

NOTE Confidence: 0.82760357

00:04:08.366 --> 00:04:10.736 exam for early detection of cancer.

NOTE Confidence: 0.82760357

00:04:10.740 --> 00:04:13.560 And since the advent of mammography,

NOTE Confidence: 0.82760357

00:04:13.560 --> 00:04:17.556 we've actually reduced mortality by 30%

NOTE Confidence: 0.82760357

00:04:17.560 --> 00:04:19.744 and that's been documented since the 1990s.

NOTE Confidence: 0.82760357

00:04:19.750 --> 00:04:22.342 So all this early detection of

NOTE Confidence: 0.82760357

00:04:22.342 --> 00:04:24.070 breast cancer through mammography

NOTE Confidence: 0.82760357

00:04:24.141 --> 00:04:26.637 screening is important to figure out.

NOTE Confidence: 0.82760357

00:04:26.640 --> 00:04:27.216 I mean it's

NOTE Confidence: 0.82760357

00:04:27.216 --> 00:04:28.368 the main reason why we

NOTE Confidence: 0.82760357

00:04:28.368 --> 00:04:29.565 have the significant decrease

NOTE Confidence: 0.82760357

00:04:29.565 --> 00:04:30.837 in breast cancer mortality.

NOTE Confidence: 0.82760357

00:04:30.840 --> 00:04:32.653 So we have to kind of figure

NOTE Confidence: 0.82760357

00:04:32.653 --> 00:04:34.160 out and parcel out what's

NOTE Confidence: 0.82760357

00:04:34.160 --> 00:04:35.840 the most important thing.

NOTE Confidence: 0.82760357

00:04:43.060 --> 00:04:44.812 Everyone recommends again starting

NOTE Confidence: 0.82760357

00:04:44.812 --> 00:04:48.183 screening at the age of 40 and on

NOTE Confidence: 0.82760357

00:04:48.183 --> 00:04:50.175 the option of an annual basis.

NOTE Confidence: 0.82760357

00:04:50.180 --> 00:04:52.796 Once women get older and their

NOTE Confidence: 0.82760357

00:04:52.796 --> 00:04:55.340 breast density starts to decrease,

NOTE Confidence: 0.82760357

00:04:55.340 --> 00:04:56.900 that's actually the reason why.

NOTE Confidence: 0.82760357

00:04:56.900 --> 00:04:58.524 Then in other countries they have the

NOTE Confidence: 0.82760357

00:04:58.524 --> 00:05:00.148 option of doing it every other year.

NOTE Confidence: 0.82760357

00:05:00.150 --> 00:05:01.406 And the reason is,

NOTE Confidence: 0.82760357

00:05:01.406 --> 00:05:02.976 if the breast density decreasing

NOTE Confidence: 0.82760357

00:05:02.976 --> 00:05:04.775 confers a slightly decreased

NOTE Confidence: 0.82760357

00:05:04.775 --> 00:05:06.560 risk of breast cancer because

NOTE Confidence: 0.82760357

00:05:06.560 --> 00:05:07.919 there's less vibrant glandular

NOTE Confidence: 0.82760357

00:05:07.919 --> 00:05:09.803 tissue and so that's the reason

NOTE Confidence: 0.82760357

00:05:09.803 --> 00:05:11.086 why that these recommendations

NOTE Confidence: 0.82760357

00:05:11.086 --> 00:05:13.340 end up being where it could

NOTE Confidence: 0.82760357

00:05:13.404 --> 00:05:14.976 be switching off to every other

NOTE Confidence: 0.82760357

00:05:14.976 --> 00:05:16.360 year or less and less.

NOTE Confidence: 0.82760357

00:05:16.360 --> 00:05:18.733 But we do recommend that women with

NOTE Confidence: 0.82760357

00:05:18.733 --> 00:05:20.648 average risk still continue screening

NOTE Confidence: 0.82760357

00:05:20.648 --> 00:05:23.138 as long as they have an expected

NOTE Confidence: 0.82760357

00:05:23.138 --> 00:05:25.099 life expectancy of 10 more years.

NOTE Confidence: 0.82760357

00:05:25.100 --> 00:05:27.308 So for some that may be in their

NOTE Confidence: 0.82760357

00:05:27.308 --> 00:05:29.498 80s and others with very good

NOTE Confidence: 0.82760357

00:05:29.498 --> 00:05:31.453 lifespan they might be later.

NOTE Confidence: 0.82760357

00:05:31.460 --> 00:05:33.086 So it's a discussion that

NOTE Confidence: 0.82760357

00:05:33.086 --> 00:05:34.616 women would have with their

NOTE Confidence: 0.82760357

00:05:34.616 --> 00:05:35.789 primary care physicians.

NOTE Confidence: 0.807690408888889

00:05:36.130 --> 00:05:39.399 What about for women who are at

NOTE Confidence: 0.807690408888889

00:05:39.399 --> 00:05:42.008 higher risk? So let's suppose

NOTE Confidence: 0.807690408888889

00:05:42.008 --> 00:05:46.600 you have a family history of breast cancer

NOTE Confidence: 0.807690408888889

00:05:46.600 --> 00:05:50.716 or maybe you have a genetic mutation.

NOTE Confidence: 0.870264092222222

00:05:50.810 --> 00:05:53.222 High risk women are women with

NOTE Confidence: 0.870264092222222

00:05:53.222 --> 00:05:55.390 greater than 20% lifetime risk

NOTE Confidence: 0.870264092222222

00:05:55.390 --> 00:05:57.310 of developing breast cancer.

NOTE Confidence: 0.870264092222222

00:05:57.310 --> 00:05:58.518 And for those women,

NOTE Confidence: 0.870264092222222

00:05:58.518 --> 00:06:00.330 that's a certain subset of women

NOTE Confidence: 0.870264092222222

00:06:00.330 --> 00:06:02.626 and that could either be women that

NOTE Confidence: 0.870264092222222

00:06:02.626 --> 00:06:05.818 may have a mutation like BRCA 1, BRCA 2.

NOTE Confidence: 0.870264092222222

00:06:05.818 --> 00:06:07.942 They may have had a history

NOTE Confidence: 0.870264092222222

00:06:07.942 --> 00:06:09.538 of chest radiation between

NOTE Confidence: 0.870264092222222

00:06:09.538 --> 00:06:12.335 the ages of 10 and 30, strong

NOTE Confidence: 0.870264092222222

00:06:12.335 --> 00:06:14.645 family history possibly like a pre

NOTE Confidence: 0.870264092222222

00:06:14.645 --> 00:06:16.188 menopausal breast cancer diagnosis

NOTE Confidence: 0.870264092222222

00:06:16.188 --> 00:06:18.477 in a first degree relative or they

NOTE Confidence: 0.870264092222222

00:06:18.477 --> 00:06:20.250 have certain genetic disorders and

NOTE Confidence: 0.870264092222222

00:06:20.250 --> 00:06:22.356 those are our high risk patients.

NOTE Confidence: 0.870264092222222

00:06:22.360 --> 00:06:24.598 For those patients we do recommend

NOTE Confidence: 0.870264092222222

00:06:24.598 --> 00:06:26.468 they actually start annual screening

NOTE Confidence: 0.870264092222222

00:06:26.468 --> 00:06:28.964 mammography at the age of 30 and it

NOTE Confidence: 0.870264092222222

00:06:28.964 --> 00:06:31.294 could actually even be as early as 25.

NOTE Confidence: 0.870264092222222

00:06:31.300 --> 00:06:35.507 So if let's say I am a

00:06:37.190 --> 00:06:40.270 25 year old female and my mother got

NOTE Confidence: 0.870264092222222

00:06:40.270 --> 00:06:42.627 diagnosed with breast cancer at 35.

NOTE Confidence: 0.870264092222222

00:06:42.630 --> 00:06:45.010 I can actually begin screening at 25,

NOTE Confidence: 0.870264092222222

00:06:45.010 --> 00:06:47.510 but we don't recommend earlier

NOTE Confidence: 0.870264092222222

00:06:47.510 --> 00:06:50.646 than 25 just because of the degree

NOTE Confidence: 0.870264092222222

00:06:50.646 --> 00:06:52.554 of dense tissue and it limits

NOTE Confidence: 0.870264092222222

00:06:52.554 --> 00:06:54.110 the sensitivity of mammography.

NOTE Confidence: 0.870264092222222

00:06:54.110 --> 00:06:56.750 So we start mammography as early as 25,

NOTE Confidence: 0.870264092222222

00:06:56.750 --> 00:06:59.450 but recommend at the age of 30 for high risk.

NOTE Confidence: 0.870264092222222

00:06:59.450 --> 00:07:01.688 And then in conjunction with that

NOTE Confidence: 0.870264092222222

00:07:01.688 --> 00:07:04.010 we do recommend also breast MRI.

NOTE Confidence: 0.870264092222222

00:07:04.010 --> 00:07:05.810 So as we alluded to breast MRI is

NOTE Confidence: 0.870264092222222

00:07:05.810 --> 00:07:07.910 actually a very effective type of

NOTE Confidence: 0.870264092222222

00:07:07.910 --> 00:07:09.795 imaging modality and for screening

NOTE Confidence: 0.870264092222222

00:07:09.795 --> 00:07:12.327 evaluation and we perform it in

NOTE Confidence: 0.870264092222222

00:07:12.327 --> 00:07:13.593 conjunction with mammography

NOTE Confidence: 0.870264092222222

00:07:13.660 --> 00:07:15.170 in these high risk women.

NOTE Confidence: 0.870264092222222

00:07:15.170 --> 00:07:18.173 And breast MRI is in essence an

NOTE Confidence: 0.870264092222222

00:07:18.173 --> 00:07:20.976 imaging exam where we give them

NOTE Confidence: 0.870264092222222

00:07:20.976 --> 00:07:23.832 contrast and MRI images are obtained.

NOTE Confidence: 0.870264092222222

00:07:23.840 --> 00:07:25.680 And what it allows us to do is

NOTE Confidence: 0.870264092222222

00:07:25.680 --> 00:07:27.573 see very small lesions that may

NOTE Confidence: 0.870264092222222

00:07:27.573 --> 00:07:29.283 be missed on mammography because

NOTE Confidence: 0.870264092222222

00:07:29.283 --> 00:07:31.229 of that contrast enhancement.

NOTE Confidence: 0.870264092222222

00:07:31.230 --> 00:07:33.438 So it's showing us tiny little

NOTE Confidence: 0.870264092222222

00:07:33.438 --> 00:07:35.422 vascular lesions that are enhancing

NOTE Confidence: 0.870264092222222

00:07:35.422 --> 00:07:37.206 and then they're seen

NOTE Confidence: 0.870264092222222

00:07:37.210 --> 00:07:39.870 as discreet amongst the non

NOTE Confidence: 0.870264092222222

00:07:39.870 --> 00:07:41.466 enhancing breast tissue,

NOTE Confidence: 0.870264092222222

00:07:41.470 --> 00:07:43.630 so breast MRI is helpful in

NOTE Confidence: 0.870264092222222

00:07:43.630 --> 00:07:45.070 these high risk patients.

NOTE Confidence: 0.870264092222222

00:07:45.070 --> 00:07:46.477 One of the things that we notice

NOTE Confidence: 0.870264092222222

00:07:46.477 --> 00:07:48.120 a lot of people get confused,

NOTE Confidence: 0.870264092222222

00:07:48.120 --> 00:07:50.656 they say well if breast MRI is so

NOTE Confidence: 0.870264092222222

00:07:50.656 --> 00:07:52.688 sensitive then why do I even have

NOTE Confidence: 0.870264092222222

00:07:52.688 --> 00:07:54.709 to do mammography at the age of 30,

NOTE Confidence: 0.870264092222222

00:07:54.710 --> 00:07:57.286 why wouldn't I just do breast MRI?

NOTE Confidence: 0.870264092222222

00:07:57.290 --> 00:07:59.355 And the important thing to note is

NOTE Confidence: 0.870264092222222

00:07:59.355 --> 00:08:01.481 that although it is the most sensitive

NOTE Confidence: 0.870264092222222

00:08:01.481 --> 00:08:04.180 in what the highest cancer detection rate,

NOTE Confidence: 0.870264092222222

00:08:04.180 --> 00:08:06.121 it can be sometimes so sensitive,

NOTE Confidence: 0.870264092222222

00:08:06.121 --> 00:08:07.963 it could be difficult to distinguish

NOTE Confidence: 0.870264092222222

00:08:07.963 --> 00:08:09.627 between normal and abnormal findings.

NOTE Confidence: 0.870264092222222

00:08:09.630 --> 00:08:11.826 So it can potentially lead to

NOTE Confidence: 0.870264092222222

00:08:11.826 --> 00:08:12.558 unnecessary biopsies.

NOTE Confidence: 0.870264092222222

00:08:12.560 --> 00:08:14.961 So that's why we don't recommend breast

NOTE Confidence: 0.870264092222222

00:08:14.961 --> 00:08:17.399 MRI routinely on average risk patients.

NOTE Confidence: 0.870264092222222

00:08:17.400 --> 00:08:19.654 We specify for these high risk patients

NOTE Confidence: 0.870264092222222

00:08:19.654 --> 00:08:22.198 and we always do it in conjunction

NOTE Confidence: 0.870264092222222

00:08:22.198 --> 00:08:24.083 with mammography because it also

NOTE Confidence: 0.870264092222222

00:08:24.083 --> 00:08:25.916 actually doesn't always detect stage

NOTE Confidence: 0.870264092222222

00:08:25.916 --> 00:08:28.710 zero breast cancer or what we call DCIS.

NOTE Confidence: 0.870264092222222

00:08:28.710 --> 00:08:31.195 And that sometimes may show up more

NOTE Confidence: 0.870264092222222

00:08:31.195 --> 00:08:33.680 discreetly as calcifications on mammography.

NOTE Confidence: 0.870264092222222

00:08:33.680 --> 00:08:34.290 So it's

NOTE Confidence: 0.870264092222222

00:08:34.290 --> 00:08:36.120 really the combination of the two.

NOTE Confidence: 0.870264092222222

00:08:36.120 --> 00:08:38.260 Mammography is our gold standard,

NOTE Confidence: 0.870264092222222

00:08:38.260 --> 00:08:39.919 which can allow us to see very,

NOTE Confidence: 0.870264092222222

00:08:39.920 --> 00:08:41.372 very tiny, subtle,

NOTE Confidence: 0.870264092222222

00:08:41.372 --> 00:08:42.824 faint calcifications and

NOTE Confidence: 0.870264092222222

00:08:42.824 --> 00:08:44.760 then also breast MRI,

NOTE Confidence: 0.870264092222222

00:08:44.760 --> 00:08:46.236 which allows us to see very,

NOTE Confidence: 0.870264092222222

00:08:46.240 --> 00:08:48.288 very tiny vascular lesions.

NOTE Confidence: 0.861123559375

00:08:48.360 --> 00:08:52.154 And so in these patients where you're

NOTE Confidence: 0.861123559375

00:08:52.154 --> 00:08:54.381 recommending annual mammography and

NOTE Confidence: 0.861123559375

00:08:54.381 --> 00:08:56.996 you're also recommending annual MRI,

NOTE Confidence: 0.861123559375

00:08:57.000 --> 00:08:58.981 one question that often comes up is

NOTE Confidence: 0.861123559375

00:08:58.981 --> 00:09:01.218 should you do the two in conjunction?

NOTE Confidence: 0.861123559375

00:09:01.220 --> 00:09:02.144 So for example,

NOTE Confidence: 0.861123559375

00:09:02.144 --> 00:09:04.300 every year get a mammogram and an

NOTE Confidence: 0.861123559375

00:09:04.300 --> 00:09:06.256 MRI at about the same time

NOTE Confidence: 0.861123559375

00:09:06.256 --> 00:09:07.970 or should you stagger them?

NOTE Confidence: 0.861123559375

00:09:07.970 --> 00:09:10.826 So have your mammogram say in

NOTE Confidence: 0.861123559375

00:09:10.826 --> 00:09:13.970 January and your MRI say in July,

NOTE Confidence: 0.861123559375

00:09:13.970 --> 00:09:18.702 and that way you still have each test every year,

NOTE Confidence: 0.861123559375

00:09:18.702 --> 00:09:23.310 but have a six month interval between tests?

NOTE Confidence: 0.861123559375

00:09:23.310 --> 00:09:24.478 What do you recommend?

NOTE Confidence: 0.799555301111111

00:09:25.090 --> 00:09:27.258 I think that's just as you labeled

NOTE Confidence: 0.799555301111111

00:09:27.258 --> 00:09:29.420 it, it's very helpful to space

NOTE Confidence: 0.799555301111111

00:09:29.420 --> 00:09:31.852 it out by six months and what that allows

NOTE Confidence: 0.799555301111111

00:09:31.852 --> 00:09:34.420 you to do is that you're getting some

NOTE Confidence: 0.799555301111111

00:09:34.420 --> 00:09:36.920 screening evaluation every six months

NOTE Confidence: 0.799555301111111

00:09:36.920 --> 00:09:39.330 the breast MRI's at one point and then

NOTE Confidence: 0.799555301111111

00:09:39.330 --> 00:09:41.260 six months later and do the mammography.

NOTE Confidence: 0.799555301111111

00:09:41.260 --> 00:09:43.476 It's also helpful because of the fact that

NOTE Confidence: 0.799555301111111

00:09:43.476 --> 00:09:46.078 you are giving contrast with the breast MRI.

NOTE Confidence: 0.799555301111111

00:09:46.080 --> 00:09:48.126 If you did do mammography and

NOTE Confidence: 0.799555301111111

00:09:48.126 --> 00:09:50.220 breast MRI on the same day,

NOTE Confidence: 0.799555301111111

00:09:50.220 --> 00:09:52.410 you would have to make sure that you did the

NOTE Confidence: 0.799555301111111

00:09:52.465 --> 00:09:54.460 mammogram first and then the breast MRI.

NOTE Confidence: 0.799555301111111

00:09:54.460 --> 00:09:56.960 Otherwise the contrast enhancement

NOTE Confidence: 0.799555301111111

00:09:56.960 --> 00:09:59.700 in the breast would affect the

NOTE Confidence: 0.799555301111111

00:09:59.700 --> 00:10:01.180 results of the mammography.

NOTE Confidence: 0.799555301111111

00:10:01.180 --> 00:10:03.000 So we will recommend every

NOTE Confidence: 0.799555301111111

00:10:03.000 --> 00:10:05.210 six months so you do one.

NOTE Confidence: 0.799555301111111

00:10:05.210 --> 00:10:07.261 Either a breast MRI and mammography and

NOTE Confidence: 0.799555301111111

00:10:07.261 --> 00:10:09.388 then the other exam six months later,

NOTE Confidence: 0.799555301111111

00:10:09.390 --> 00:10:10.632 and that allows us to see

NOTE Confidence: 0.799555301111111

00:10:10.632 --> 00:10:11.840 you also every six months.

NOTE Confidence: 0.799555301111111

00:10:11.840 --> 00:10:14.038 You're being evaluated every six months and

NOTE Confidence: 0.799555301111111

00:10:14.038 --> 00:10:15.840 you're getting imaging every six months.

NOTE Confidence: 0.919927986666667

00:10:17.320 --> 00:10:18.937 So, you know, this brings us to

NOTE Confidence: 0.919927986666667

00:10:18.937 --> 00:10:20.944 another question, which is one of

NOTE Confidence: 0.919927986666667

00:10:20.944 --> 00:10:23.260 the newer modalities that is coming

NOTE Confidence: 0.919927986666667

00:10:23.345 --> 00:10:26.579 into the fore is something called

NOTE Confidence: 0.919927986666667

00:10:26.579 --> 00:10:28.196 contrast enhanced mammography.

NOTE Confidence: 0.919927986666667

00:10:28.200 --> 00:10:30.208 Can you tell us a little bit more

NOTE Confidence: 0.919927986666667

00:10:30.208 --> 00:10:32.521 about that and how is that the same

NOTE Confidence: 0.919927986666667

00:10:32.521 --> 00:10:34.059 or different from standard mammography

NOTE Confidence: 0.919927986666667

00:10:34.059 --> 00:10:36.531 and how is that the same or different

NOTE Confidence: 0.919927986666667

00:10:36.531 --> 00:10:40.662 from MRI and how does it fit into

NOTE Confidence: 0.919927986666667

00:10:40.662 --> 00:10:43.930 standard practice now or does it? Yeah,

NOTE Confidence: 0.912800091666667

00:10:43.940 --> 00:10:44.992 it's, it's very exciting.

NOTE Confidence: 0.912800091666667

00:10:44.992 --> 00:10:47.533 I think, you know, in general our goal is.

NOTE Confidence: 0.912800091666667

00:10:47.533 --> 00:10:49.798 Radiologists were always trying to

NOTE Confidence: 0.912800091666667

00:10:49.798 --> 00:10:51.610 positively impact patient outcome.

NOTE Confidence: 0.912800091666667

00:10:51.610 --> 00:10:54.102 We're always trying to try to diagnose

NOTE Confidence: 0.912800091666667

00:10:54.102 --> 00:10:56.480 these diseases as early as possible and

NOTE Confidence: 0.912800091666667

00:10:56.480 --> 00:10:59.602 with that trying to kind of keep on pushing

NOTE Confidence: 0.912800091666667

00:10:59.602 --> 00:11:01.972 the envelope for our imaging modalities.

NOTE Confidence: 0.912800091666667

00:11:01.980 --> 00:11:04.590 And what we notice is that if we can use

NOTE Confidence: 0.912800091666667

00:11:04.655 --> 00:11:07.199 more of these functional based methods,

NOTE Confidence: 0.912800091666667

00:11:07.200 --> 00:11:09.730 meaning this imaging with contrast,

NOTE Confidence: 0.912800091666667

00:11:09.730 --> 00:11:11.720 so breast MRI or contrast

NOTE Confidence: 0.912800091666667

00:11:11.720 --> 00:11:12.516 enhanced mammography,

NOTE Confidence: 0.912800091666667

00:11:12.520 --> 00:11:14.824 then we'd be able to see these tiny

NOTE Confidence: 0.912800091666667

00:11:14.824 --> 00:11:16.628 lesions and the great thing is,

NOTE Confidence: 0.912800091666667

00:11:16.630 --> 00:11:18.736 the contrast enhancement mammography is

NOTE Confidence: 0.912800091666667

00:11:18.740 --> 00:11:20.360 the combination of them both

NOTE Confidence: 0.912800091666667

00:11:20.360 --> 00:11:21.980 where you do the mammography,

NOTE Confidence: 0.912800091666667

00:11:21.980 --> 00:11:24.248 you can see these very tiny,

NOTE Confidence: 0.912800091666667

00:11:24.250 --> 00:11:26.586 subtle fine pleomorphic calcifications

NOTE Confidence: 0.912800091666667

00:11:26.586 --> 00:11:29.946 that could represent stage zero breast

NOTE Confidence: 0.912800091666667

00:11:29.946 --> 00:11:32.126 cancer carcinoma and

NOTE Confidence: 0.912800091666667

00:11:32.130 --> 00:11:35.856 then you can also have the breast MRI

NOTE Confidence: 0.912800091666667

00:11:35.856 --> 00:11:38.350 which allows the contrast enhanced,

NOTE Confidence: 0.912800091666667

00:11:38.350 --> 00:11:40.690 which again allows you evaluation

NOTE Confidence: 0.912800091666667

00:11:40.690 --> 00:11:43.030 of these tiny enhancing lesions.

NOTE Confidence: 0.912800091666667

00:11:43.030 --> 00:11:45.613 So the way we do contrast enhanced

NOTE Confidence: 0.912800091666667

00:11:45.613 --> 00:11:47.499 mammography is that it's kind

NOTE Confidence: 0.912800091666667

00:11:47.499 --> 00:11:49.259 of a dual energy exposure.

NOTE Confidence: 0.912800091666667

00:11:49.260 --> 00:11:51.696 Where you take the images prior

NOTE Confidence: 0.912800091666667

00:11:51.696 --> 00:11:53.320 to giving the contrast,

NOTE Confidence: 0.912800091666667

00:11:53.320 --> 00:11:55.300 then you give the contrast

00:11:56.620 --> 00:11:58.402 through the

NOTE Confidence: 0.912800091666667

00:11:58.402 --> 00:12:00.827 IV as if you were giving it

NOTE Confidence: 0.912800091666667

00:12:00.827 --> 00:12:02.955 for any exam on contrast enhanced

NOTE Confidence: 0.912800091666667

00:12:02.955 --> 00:12:04.520 CT exam or MRI exam.

NOTE Confidence: 0.912800091666667

00:12:04.520 --> 00:12:06.424 And then you do a subtraction of the

NOTE Confidence: 0.912800091666667

00:12:06.424 --> 00:12:08.454 two of the contrast image and then

NOTE Confidence: 0.912800091666667

00:12:08.454 --> 00:12:10.306 the non contrast image and allows

NOTE Confidence: 0.912800091666667

00:12:10.306 --> 00:12:12.100 those areas that are enhancing and

NOTE Confidence: 0.912800091666667

00:12:12.100 --> 00:12:14.376 then you can visualize

NOTE Confidence: 0.912800091666667

00:12:14.376 --> 00:12:16.096 those enhancing over

NOTE Confidence: 0.912800091666667

00:12:16.096 --> 00:12:18.161 the non enhancing tissue and you

NOTE Confidence: 0.912800091666667

00:12:18.161 --> 00:12:20.120 have the combination of the two.

00:12:20.993 --> 00:12:23.030 If we do see any abnormality with

NOTE Confidence: 0.912800091666667

00:12:23.090 --> 00:12:25.110 the contrast enhanced mammography,

NOTE Confidence: 0.912800091666667

00:12:25.110 --> 00:12:27.120 we often can actually target just

NOTE Confidence: 0.912800091666667

00:12:27.120 --> 00:12:29.513 based on that and we are still

NOTE Confidence: 0.912800091666667

00:12:29.513 --> 00:12:31.468 in the development of this, but it's

NOTE Confidence: 0.912800091666667

00:12:32.106 --> 00:12:34.020 really great that we're

NOTE Confidence: 0.912800091666667

00:12:34.083 --> 00:12:36.333 able to now actually target

NOTE Confidence: 0.912800091666667

00:12:36.333 --> 00:12:37.683 unconscious enhanced mammography.

NOTE Confidence: 0.912800091666667

00:12:37.690 --> 00:12:39.482 And if for some reason we think that

NOTE Confidence: 0.912800091666667

00:12:39.482 --> 00:12:41.222 there's a solid mass there that we

NOTE Confidence: 0.912800091666667

00:12:41.222 --> 00:12:42.845 can see on ultrasound we will recommend

NOTE Confidence: 0.912800091666667

00:12:42.845 --> 00:12:44.807 a targeted ultrasound to evaluate it.

NOTE Confidence: 0.912800091666667

00:12:44.810 --> 00:12:46.694 And potentially if there's a lot

NOTE Confidence: 0.912800091666667

00:12:46.694 --> 00:12:48.366 of findings on contrast enhanced

NOTE Confidence: 0.912800091666667

00:12:48.366 --> 00:12:50.526 mammography where we feel as though

NOTE Confidence: 0.912800091666667

00:12:50.530 --> 00:12:51.778 further dedicated evaluation with

NOTE Confidence: 0.912800091666667

00:12:51.778 --> 00:12:54.009 the breast can be performed

NOTE Confidence: 0.912800091666667

00:12:54.009 --> 00:12:56.137 then we can also recommend that too.

NOTE Confidence: 0.912800091666667

00:12:56.140 --> 00:12:58.254 So it's a great initial exam.

NOTE Confidence: 0.912800091666667

00:12:58.260 --> 00:13:00.900 Now where are we within the span of

NOTE Confidence: 0.912800091666667

00:13:00.900 --> 00:13:03.959 it being in screening versus diagnostic?

NOTE Confidence: 0.912800091666667

00:13:03.960 --> 00:13:06.120 I would say in academic centers

NOTE Confidence: 0.912800091666667

00:13:06.120 --> 00:13:08.770 everyone is pretty much doing it now

NOTE Confidence: 0.912800091666667

00:13:08.770 --> 00:13:10.670 definitely for research reasons trying

NOTE Confidence: 0.912800091666667

00:13:10.670 --> 00:13:13.296 to see what is the increased cancer

NOTE Confidence: 0.912800091666667

00:13:13.296 --> 00:13:15.377 detection rate and prove

NOTE Confidence: 0.912800091666667

00:13:15.377 --> 00:13:17.039 that it's something that would be

NOTE Confidence: 0.912800091666667

00:13:17.039 --> 00:13:18.980 helpful for the screening population.

NOTE Confidence: 0.912800091666667

00:13:18.980 --> 00:13:21.257 So in general if you just think about

NOTE Confidence: 0.912800091666667

00:13:21.260 --> 00:13:22.924 screening population, every 1000

NOTE Confidence: 0.912800091666667

00:13:22.924 --> 00:13:25.013 women has

NOTE Confidence: 0.912800091666667

00:13:25.013 --> 00:13:27.128 just a routine 2D mammogram.

NOTE Confidence: 0.912800091666667

00:13:27.130 --> 00:13:29.489 You can detect about anywhere from about

NOTE Confidence: 0.912800091666667

00:13:29.489 --> 00:13:33.397 3 to 7 breast cancers.

NOTE Confidence: 0.912800091666667

00:13:33.400 --> 00:13:35.496 And then what it does is the contrast

NOTE Confidence: 0.912800091666667

00:13:35.496 --> 00:13:36.907 enhanced mammogram actually allows you

NOTE Confidence: 0.912800091666667

00:13:36.907 --> 00:13:38.846 to even actually get an additional 10

NOTE Confidence: 0.8103018

00:13:38.898 --> 00:13:39.528 for the 1000.

NOTE Confidence: 0.8103018

00:13:39.530 --> 00:13:41.930 So it's very helpful.

NOTE Confidence: 0.8103018

00:13:41.930 --> 00:13:43.842 What we need to do is just look

NOTE Confidence: 0.8103018

00:13:43.842 --> 00:13:46.307 at the the risk of the procedures

NOTE Confidence: 0.8103018

00:13:46.307 --> 00:13:48.227 anytime you're giving any contrast you have

00:13:51.800 --> 00:13:53.294 make sure that you have staff

NOTE Confidence: 0.8103018

00:13:53.294 --> 00:13:55.050 that are able to put in an IV,

NOTE Confidence: 0.8103018

00:13:55.050 --> 00:13:56.658 that the patient can tolerate the

NOTE Confidence: 0.8103018

00:13:56.658 --> 00:13:58.660 IV contrast and then also if there's

NOTE Confidence: 0.8103018

00:13:58.660 --> 00:14:00.120 any kind of contrast reactions.

NOTE Confidence: 0.8103018

00:14:00.120 --> 00:14:02.059 But these things are handled by the

NOTE Confidence: 0.8103018

00:14:02.059 --> 00:14:03.524 radiologists on a routine basis

NOTE Confidence: 0.8103018

00:14:03.524 --> 00:14:05.369 with all contrast imaging studies.

NOTE Confidence: 0.8103018

00:14:05.369 --> 00:14:08.330 So that's something that's easy to do.

NOTE Confidence: 0.8103018

00:14:08.330 --> 00:14:09.866 It's just really making sure

NOTE Confidence: 0.8103018

00:14:09.866 --> 00:14:11.852 about the cost and just seeing the

NOTE Confidence: 0.8103018

00:14:11.852 --> 00:14:13.357 effect on the patient experience

NOTE Confidence: 0.8103018

00:14:13.357 --> 00:14:15.000 that they're able to tolerate it.

NOTE Confidence: 0.8103018

00:14:15.000 --> 00:14:18.059 And then once that's really been proven,

NOTE Confidence: 0.8103018

00:14:18.060 --> 00:14:20.146 then I really do think that it's

NOTE Confidence: 0.8103018

00:14:20.146 --> 00:14:22.349 going to become our main mainstream

NOTE Confidence: 0.8103018

00:14:22.350 --> 00:14:24.740 way of screening all patients.

NOTE Confidence: 0.884300385

00:14:24.810 --> 00:14:26.418 Great, we're going to learn

NOTE Confidence: 0.884300385

00:14:26.418 --> 00:14:28.592 a lot more right after we take a

NOTE Confidence: 0.884300385

00:14:28.592 --> 00:14:30.164 short break for a medical minute.

NOTE Confidence: 0.884300385

00:14:30.170 --> 00:14:31.988 Please stay tuned to learn more

NOTE Confidence: 0.884300385

00:14:31.988 --> 00:14:33.535 about improvements in breast imaging

NOTE Confidence: 0.884300385

00:14:33.535 --> 00:14:35.399 with my guest, doctor Kiran Sheikh.

NOTE Confidence: 0.75955225

00:14:35.810 --> 00:14:37.820 Funding for Yale Cancer Answers

NOTE Confidence: 0.75955225

00:14:37.820 --> 00:14:39.830 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.75955225

00:14:39.830 --> 00:14:41.745 where their liver cancer program

NOTE Confidence: 0.75955225

00:14:41.745 --> 00:14:43.660 brings together a dedicated group

NOTE Confidence: 0.75955225

00:14:43.727 --> 00:14:45.847 of specialists whose focus is

NOTE Confidence: 0.75955225

00:14:45.847 --> 00:14:47.543 determining the best personalized

NOTE Confidence: 0.75955225

00:14:47.543 --> 00:14:49.310 treatment plan for each patient.

NOTE Confidence: 0.75955225

00:14:49.310 --> 00:14:52.380 Learn more at smilowcancerhospital.org.

NOTE Confidence: 0.917465535714286

00:14:54.500 --> 00:14:57.368 The American Cancer Society estimates that

NOTE Confidence: 0.917465535714286

00:14:57.368 --> 00:14:59.878 over 200,000 cases of Melanoma will be

NOTE Confidence: 0.917465535714286

00:14:59.878 --> 00:15:02.299 diagnosed in the United States this year,

NOTE Confidence: 0.917465535714286

00:15:02.300 --> 00:15:05.415 with over 1000 patients in Connecticut alone.

NOTE Confidence: 0.917465535714286

00:15:05.420 --> 00:15:07.705 While Melanoma accounts for only

NOTE Confidence: 0.917465535714286

00:15:07.705 --> 00:15:10.204 about 1% of skin cancer cases,

NOTE Confidence: 0.917465535714286

00:15:10.204 --> 00:15:13.200 it causes the most skin cancer deaths,

NOTE Confidence: 0.917465535714286

00:15:13.200 --> 00:15:14.624 but when detected early,

NOTE Confidence: 0.917465535714286

00:15:14.624 --> 00:15:17.340 it is easily treated and highly curable.

NOTE Confidence: 0.917465535714286

00:15:17.340 --> 00:15:19.228 Clinical trials are currently

NOTE Confidence: 0.917465535714286

00:15:19.228 --> 00:15:21.116 underway at federally designated

NOTE Confidence: 0.917465535714286

00:15:21.116 --> 00:15:23.065 Comprehensive cancer centers such as

NOTE Confidence: 0.917465535714286

00:15:23.065 --> 00:15:25.256 Yale Cancer Center and Smilow Cancer

NOTE Confidence: 0.917465535714286

00:15:25.260 --> 00:15:27.260 Hospital to test innovative new

NOTE Confidence: 0.917465535714286

00:15:27.260 --> 00:15:29.732 treatments for Melanoma. The goal of

NOTE Confidence: 0.917465535714286

00:15:29.732 --> 00:15:31.762 the specialized programs of research

NOTE Confidence: 0.917465535714286

00:15:31.762 --> 00:15:34.522 excellence in skin Cancer Grant is to

NOTE Confidence: 0.917465535714286

00:15:34.522 --> 00:15:37.014 better understand the biology of skin cancer,

NOTE Confidence: 0.917465535714286

00:15:37.020 --> 00:15:38.720 where the focus on discovering

NOTE Confidence: 0.917465535714286

00:15:38.720 --> 00:15:40.985 targets that will lead to improved

NOTE Confidence: 0.917465535714286

00:15:40.985 --> 00:15:42.488 diagnosis and treatment.

NOTE Confidence: 0.917465535714286

00:15:42.490 --> 00:15:44.938 More information is available

NOTE Confidence: 0.917465535714286

00:15:44.938 --> 00:15:45.977 at yalecancercenter.org.

NOTE Confidence: 0.917465535714286

00:15:45.977 --> 00:15:48.539 You're listening to Connecticut public radio.

NOTE Confidence: 0.826856155

00:15:50.510 --> 00:15:52.706 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.826856155

00:15:52.710 --> 00:15:54.366 This is doctor Anees Chagpar and

NOTE Confidence: 0.826856155

00:15:54.366 --> 00:15:55.989 I'm joined tonight by my guest,

NOTE Confidence: 0.826856155

00:15:55.990 --> 00:15:57.490 doctor Kiran Sheikh.

NOTE Confidence: 0.826856155

00:15:57.490 --> 00:15:58.990 We're discussing recent

NOTE Confidence: 0.826856155

00:15:58.990 --> 00:16:00.990 advances in breast imaging.

NOTE Confidence: 0.826856155

00:16:00.990 --> 00:16:03.328 And right before the break we were

NOTE Confidence: 0.826856155

00:16:03.328 --> 00:16:05.076 talking about screening modalities and

NOTE Confidence: 0.826856155

00:16:05.076 --> 00:16:07.116 some of the interesting work that's

NOTE Confidence: 0.826856155

00:16:07.116 --> 00:16:09.648 going on right now in terms of research,

NOTE Confidence: 0.826856155

00:16:09.650 --> 00:16:12.930 looking at contrast enhanced mammography,

NOTE Confidence: 0.826856155

00:16:12.930 --> 00:16:14.770 which might actually blend

NOTE Confidence: 0.826856155

00:16:14.770 --> 00:16:17.530 together the best of both worlds

NOTE Confidence: 0.826856155

00:16:17.613 --> 00:16:20.109 in terms of mammography and MRI.

00:16:20.868 --> 00:16:23.900 Another question that comes up I think is

NOTE Confidence: 0.826856155

00:16:23.971 --> 00:16:26.757 with regards to the role of ultrasound.

NOTE Confidence: 0.826856155

00:16:26.760 --> 00:16:29.579 So many people will say,

NOTE Confidence: 0.826856155

00:16:29.579 --> 00:16:31.697 I know the data on mammography,

NOTE Confidence: 0.826856155

00:16:31.700 --> 00:16:34.948 my doctor always sends me for a mammogram.

NOTE Confidence: 0.826856155

00:16:34.950 --> 00:16:38.254 Why can't I just have an ultrasound

NOTE Confidence: 0.826856155

00:16:38.254 --> 00:16:40.999 for screening instead of a mammogram?

NOTE Confidence: 0.826856155

00:16:41.000 --> 00:16:42.330 Can you speak to that?

NOTE Confidence: 0.667252597857143

00:16:42.500 --> 00:16:44.596 And so in a sense what the different

NOTE Confidence: 0.667252597857143

00:16:44.596 --> 00:16:46.139 modalities that we have in imaging,

NOTE Confidence: 0.667252597857143

00:16:46.140 --> 00:16:48.444 each modality kind of gives different

NOTE Confidence: 0.667252597857143

00:16:48.444 --> 00:16:49.980 information to the radiologist.

NOTE Confidence: 0.667252597857143

00:16:49.980 --> 00:16:51.004 Mammography is

NOTE Confidence: 0.667252597857143

00:16:51.004 --> 00:16:53.386 In essence a 2 D mammography

NOTE Confidence: 0.667252597857143

00:16:53.386 --> 00:16:55.360 takes 2 pictures of the breast and

NOTE Confidence: 0.667252597857143

00:16:55.417 --> 00:16:57.109 then 3D mammography which we have

NOTE Confidence: 0.667252597857143

00:16:57.109 --> 00:16:59.033 is also called digital breast

NOTE Confidence: 0.667252597857143

00:16:59.033 --> 00:17:00.513 tomosynthesis, and takes multiple images

NOTE Confidence: 0.667252597857143

00:17:00.513 --> 00:17:02.510 of the breast at different angles

NOTE Confidence: 0.667252597857143

00:17:02.510 --> 00:17:04.295 and then that allows us

NOTE Confidence: 0.667252597857143

00:17:04.300 --> 00:17:07.044 to visualize the breast in different layers.

NOTE Confidence: 0.667252597857143

00:17:07.050 --> 00:17:09.493 And so we have optimized

NOTE Confidence: 0.667252597857143

00:17:09.493 --> 00:17:11.371 mammography with our 3D mammography

NOTE Confidence: 0.667252597857143

00:17:11.371 --> 00:17:14.045 and it now allows us to see abnormalities

NOTE Confidence: 0.667252597857143

00:17:14.045 --> 00:17:15.961 that previously were obscured

NOTE Confidence: 0.667252597857143

00:17:15.961 --> 00:17:17.917 by just overlapping tissue.

NOTE Confidence: 0.667252597857143

00:17:17.920 --> 00:17:19.570 And that actually has given us

NOTE Confidence: 0.667252597857143

00:17:19.570 --> 00:17:21.468 a higher cancer detection rate

NOTE Confidence: 0.667252597857143

00:17:21.468 --> 00:17:23.318 than just routine 2D mammography.

NOTE Confidence: 0.667252597857143

00:17:23.320 --> 00:17:25.714 And it's giving us an

NOTE Confidence: 0.667252597857143

00:17:25.714 --> 00:17:27.665 additional 2 cancerous breast per 1000

NOTE Confidence: 0.667252597857143

00:17:27.665 --> 00:17:29.805 now screening breast ultrasound was

NOTE Confidence: 0.667252597857143

00:17:29.805 --> 00:17:32.145 in essence recommended for women with

NOTE Confidence: 0.667252597857143

00:17:32.145 --> 00:17:34.455 dense breast tissue and to be performed

NOTE Confidence: 0.667252597857143

00:17:34.460 --> 00:17:35.708 in conjunction with mammography.

NOTE Confidence: 0.667252597857143

00:17:35.708 --> 00:17:37.268 And you may ask then,

NOTE Confidence: 0.667252597857143

00:17:37.270 --> 00:17:38.730 well, why are we

NOTE Confidence: 0.667252597857143

00:17:38.730 --> 00:17:40.920 doing breast ultrasound

NOTE Confidence: 0.667252597857143

00:17:40.994 --> 00:17:42.959 in patients with dense breast

NOTE Confidence: 0.667252597857143

00:17:42.959 --> 00:17:45.350 tissue and not in patients with

NOTE Confidence: 0.667252597857143

00:17:46.034 --> 00:17:47.744 routine breast tissue such as

NOTE Confidence: 0.667252597857143

00:17:47.744 --> 00:17:49.486 scattered or fatty tissue?

NOTE Confidence: 0.667252597857143

00:17:49.486 --> 00:17:50.910 And in essence it's

NOTE Confidence: 0.667252597857143

00:17:50.910 --> 00:17:53.970 a numbers game.

NOTE Confidence: 0.667252597857143

00:17:53.970 --> 00:17:55.710 Anyone who has heterogeneously dense

NOTE Confidence: 0.667252597857143

00:17:55.710 --> 00:17:57.450 or extremely dense breast tissue

NOTE Confidence: 0.667252597857143

00:17:57.510 --> 00:17:59.330 just has more fibroglandular tissue.

NOTE Confidence: 0.667252597857143

00:17:59.330 --> 00:18:01.934 So having more of the fibroglandular

NOTE Confidence: 0.667252597857143

00:18:01.934 --> 00:18:03.670 tissue just naturally increases

NOTE Confidence: 0.667252597857143

00:18:03.743 --> 00:18:05.788 your risk of developing disease.

NOTE Confidence: 0.667252597857143

00:18:05.790 --> 00:18:07.866 And then also there's the fact

NOTE Confidence: 0.667252597857143

00:18:07.866 --> 00:18:09.250 of that obscuring tissue.

NOTE Confidence: 0.667252597857143

00:18:09.250 --> 00:18:11.994 So what we did is we've been recommending

NOTE Confidence: 0.667252597857143

00:18:11.994 --> 00:18:13.688 breast ultrasound in these patients

NOTE Confidence: 0.667252597857143

00:18:13.688 --> 00:18:15.812 with dense breast tissue to see

NOTE Confidence: 0.667252597857143

00:18:15.812 --> 00:18:17.366 the tissue in a different way.

NOTE Confidence: 0.667252597857143

00:18:17.370 --> 00:18:19.866 So besides X-ray with ultrasound waves,

NOTE Confidence: 0.667252597857143

00:18:19.870 --> 00:18:22.118 it penetrates the tissue and it allows us

NOTE Confidence: 0.667252597857143

00:18:22.118 --> 00:18:24.324 to see that same abnormality that maybe

NOTE Confidence: 0.667252597857143

00:18:24.324 --> 00:18:26.850 that mass that we saw in mammography.

NOTE Confidence: 0.667252597857143

00:18:26.850 --> 00:18:29.027 But then it gives us additional information,

NOTE Confidence: 0.667252597857143

00:18:29.030 --> 00:18:30.626 is it a solid lesion or is

NOTE Confidence: 0.667252597857143

00:18:30.626 --> 00:18:31.790 it a cystic lesion.

NOTE Confidence: 0.667252597857143

00:18:31.790 --> 00:18:32.950 When those sound waves

NOTE Confidence: 0.667252597857143

00:18:32.950 --> 00:18:34.110 penetrate through a cyst,

NOTE Confidence: 0.667252597857143

00:18:34.110 --> 00:18:35.520 which is very pliable and

NOTE Confidence: 0.667252597857143

00:18:35.520 --> 00:18:36.930 kind of soft,

NOTE Confidence: 0.667252597857143

00:18:36.930 --> 00:18:39.250 it shows up as

NOTE Confidence: 0.667252597857143

00:18:39.250 --> 00:18:40.834 marked fluid containing structure,

NOTE Confidence: 0.667252597857143

00:18:40.834 --> 00:18:42.418 while something that's solid

NOTE Confidence: 0.667252597857143

00:18:42.418 --> 00:18:44.159 and has a lot of strain,

NOTE Confidence: 0.667252597857143

00:18:44.160 --> 00:18:46.434 it displaces those sonographic waves and

NOTE Confidence: 0.667252597857143

00:18:46.434 --> 00:18:49.923 it shows up as something more solid and

NOTE Confidence: 0.667252597857143

00:18:49.923 --> 00:18:52.298 a different appearance on ultrasound.

NOTE Confidence: 0.667252597857143

00:18:52.300 --> 00:18:54.775 And so that gives us a lot of information.

NOTE Confidence: 0.667252597857143

00:18:54.780 --> 00:18:58.552 Now for evaluating masses,

NOTE Confidence: 0.667252597857143

00:18:58.552 --> 00:19:00.438 it's fantastic.

NOTE Confidence: 0.667252597857143

00:19:00.440 --> 00:19:03.716 But the caveat is again is those

NOTE Confidence: 0.667252597857143

00:19:03.716 --> 00:19:05.120 tiny little calcifications,

NOTE Confidence: 0.667252597857143

00:19:05.120 --> 00:19:06.956 so fundamentally mammography,

NOTE Confidence: 0.667252597857143

00:19:06.956 --> 00:19:10.628 whether you have dense breast tissue

NOTE Confidence: 0.667252597857143

00:19:10.630 --> 00:19:14.134 or you have a fatty tissue if

NOTE Confidence: 0.667252597857143

00:19:14.134 --> 00:19:17.208 your average risk or your high risk,

NOTE Confidence: 0.667252597857143

00:19:17.210 --> 00:19:19.560 it's still fundamentally the gold

NOTE Confidence: 0.667252597857143

00:19:19.560 --> 00:19:20.970 standard screening evaluation

NOTE Confidence: 0.667252597857143

00:19:20.970 --> 00:19:23.369 because of the fact that it is

NOTE Confidence: 0.667252597857143

00:19:23.369 --> 00:19:25.117 the best way to evaluate those

NOTE Confidence: 0.667252597857143

00:19:25.117 --> 00:19:27.397 tiny ducts to see if any kind of

NOTE Confidence: 0.667252597857143

00:19:27.397 --> 00:19:28.626 subtle calcifications are existing.

NOTE Confidence: 0.667252597857143

00:19:28.626 --> 00:19:30.810 And that's always our goal of

NOTE Confidence: 0.667252597857143

00:19:30.867 --> 00:19:32.599 screening evaluation, early detection.

NOTE Confidence: 0.88635563125

00:19:32.660 --> 00:19:35.148 This brings up another question.

NOTE Confidence: 0.88635563125

00:19:35.150 --> 00:19:37.415 Sometimes different populations of women

NOTE Confidence: 0.88635563125

00:19:37.415 --> 00:19:40.598 may have questions about how to screen,

NOTE Confidence: 0.88635563125

00:19:40.600 --> 00:19:43.520 particularly women who may have

NOTE Confidence: 0.88635563125

00:19:43.520 --> 00:19:45.856 breast implants for augmentation,

NOTE Confidence: 0.88635563125

00:19:45.860 --> 00:19:48.356 so they still have breast tissue

NOTE Confidence: 0.88635563125

00:19:48.356 --> 00:19:50.931 and perhaps even have a family

NOTE Confidence: 0.88635563125

00:19:50.931 --> 00:19:53.608 history of cancer, or perhaps not.

NOTE Confidence: 0.88635563125

00:19:53.608 --> 00:19:56.940 But when they have implants in place,

NOTE Confidence: 0.88635563125

00:19:56.940 --> 00:19:58.740 can they still get a mammogram?

NOTE Confidence: 0.88635563125

00:19:58.740 --> 00:20:00.735 Talk a little bit about how they

NOTE Confidence: 0.88635563125

00:20:00.735 --> 00:20:02.449 should screen for breast cancer.

NOTE Confidence: 0.810522558333333

00:20:02.500 --> 00:20:05.920 So when a patient has implants,

NOTE Confidence: 0.810522558333333

00:20:05.920 --> 00:20:07.720 oftentimes the implants now I

NOTE Confidence: 0.810522558333333

00:20:07.720 --> 00:20:09.520 would say routinely are placed

NOTE Confidence: 0.810522558333333

00:20:09.587 --> 00:20:11.327 behind the pectoralis muscle.

NOTE Confidence: 0.810522558333333

00:20:11.330 --> 00:20:13.418 So we call those retro pectoral

NOTE Confidence: 0.810522558333333

00:20:13.418 --> 00:20:15.201 implants and that does actually

NOTE Confidence: 0.810522558333333

00:20:15.201 --> 00:20:17.777 allow us to move the implant away

NOTE Confidence: 0.810522558333333

00:20:17.777 --> 00:20:19.770 from the glandular tissue that's

NOTE Confidence: 0.810522558333333

00:20:19.770 --> 00:20:22.170 in front of the pectoralis muscle.

NOTE Confidence: 0.810522558333333

00:20:22.170 --> 00:20:23.370 And so by doing that,

NOTE Confidence: 0.810522558333333

00:20:23.370 --> 00:20:25.210 we actually take two different

NOTE Confidence: 0.810522558333333

00:20:25.210 --> 00:20:27.050 types of pictures with mammography.

NOTE Confidence: 0.810522558333333

00:20:27.050 --> 00:20:29.136 We'll take a picture with the implant

NOTE Confidence: 0.810522558333333

00:20:29.136 --> 00:20:31.176 in view and then we'll actually

NOTE Confidence: 0.810522558333333

00:20:31.176 --> 00:20:33.330 displace the implant to the side.

NOTE Confidence: 0.810522558333333

00:20:33.330 --> 00:20:34.800 And so then we take that picture

NOTE Confidence: 0.810522558333333

00:20:34.800 --> 00:20:36.238 and then we can evaluate the

NOTE Confidence: 0.810522558333333

00:20:36.238 --> 00:20:37.756 tissue just as we would evaluate

NOTE Confidence: 0.810522558333333

00:20:37.756 --> 00:20:39.487 the tissue in any routine patient.

NOTE Confidence: 0.810522558333333

00:20:39.490 --> 00:20:40.261 And so again,

NOTE Confidence: 0.810522558333333

00:20:40.261 --> 00:20:41.803 we evaluate the tissue and evaluate

NOTE Confidence: 0.810522558333333

00:20:41.810 --> 00:20:43.820 if we see any calcifications,

NOTE Confidence: 0.810522558333333

00:20:43.820 --> 00:20:44.420 masses,

NOTE Confidence: 0.810522558333333

00:20:44.420 --> 00:20:46.220 asymmetries or architectural

NOTE Confidence: 0.810522558333333

00:20:46.220 --> 00:20:48.620 distortion in these patients.

NOTE Confidence: 0.810522558333333

00:20:48.620 --> 00:20:49.880 Now if they do again, the

NOTE Confidence: 0.810522558333333

00:20:49.880 --> 00:20:51.275 same thing, if they have dense breast

NOTE Confidence: 0.810522558333333

00:20:51.275 --> 00:20:53.151 tissue where they have a higher

NOTE Confidence: 0.810522558333333

00:20:53.151 --> 00:20:54.839 percent of fibroglandular tissue,

NOTE Confidence: 0.810522558333333

00:20:54.840 --> 00:20:56.832 we would recommend them to get

NOTE Confidence: 0.810522558333333

00:20:56.832 --> 00:20:58.160 a screening breast ultrasound.

NOTE Confidence: 0.810522558333333

00:20:58.160 --> 00:20:59.978 Some patients with implants if they've

NOTE Confidence: 0.810522558333333

00:20:59.978 --> 00:21:02.260 had a lot of surgical history

NOTE Confidence: 0.810522558333333

00:21:03.448 --> 00:21:05.230 we have cases of patients that

NOTE Confidence: 0.810522558333333

00:21:05.290 --> 00:21:07.070 either have had silicone injections

NOTE Confidence: 0.810522558333333

00:21:07.070 --> 00:21:09.346 and when they've gone to other

NOTE Confidence: 0.810522558333333

00:21:09.346 --> 00:21:11.078 countries and they've actually

NOTE Confidence: 0.810522558333333

00:21:11.078 --> 00:21:13.243 injected silicone within the tissue,

NOTE Confidence: 0.810522558333333

00:21:13.250 --> 00:21:14.760 that can actually then

NOTE Confidence: 0.810522558333333

00:21:14.760 --> 00:21:16.702 make the breasts a little bit

NOTE Confidence: 0.810522558333333

00:21:16.702 --> 00:21:18.190 more difficult to interpret.

NOTE Confidence: 0.810522558333333

00:21:18.190 --> 00:21:20.062 So for those patients we would

NOTE Confidence: 0.810522558333333

00:21:20.062 --> 00:21:21.943 recommend a breast MRI to evaluate

NOTE Confidence: 0.810522558333333

00:21:21.943 --> 00:21:24.207 it just because they have a lot more

NOTE Confidence: 0.810522558333333

00:21:24.268 --> 00:21:26.008 post surgical changes and foreign

NOTE Confidence: 0.810522558333333

00:21:26.008 --> 00:21:28.027 body granulomas and so on within

NOTE Confidence: 0.810522558333333

00:21:28.027 --> 00:21:29.966 the tissue that it would

NOTE Confidence: 0.810522558333333

00:21:29.966 --> 00:21:31.921 be helpful to have that contrast

NOTE Confidence: 0.810522558333333

00:21:31.921 --> 00:21:33.606 enhanced evaluation with breast MRI.

NOTE Confidence: 0.810522558333333

00:21:33.610 --> 00:21:35.164 So it is a per case basis,

NOTE Confidence: 0.810522558333333

00:21:35.170 --> 00:21:37.450 but a routine patient with implants

NOTE Confidence: 0.810522558333333

00:21:37.450 --> 00:21:39.389 can definitely get screening evaluation

NOTE Confidence: 0.810522558333333

00:21:39.389 --> 00:21:41.525 just as a patient without implants

NOTE Confidence: 0.810522558333333

00:21:41.525 --> 00:21:43.549 and they would be mammography

NOTE Confidence: 0.810522558333333

00:21:43.550 --> 00:21:45.054 1st as the gold standard and we would

NOTE Confidence: 0.810522558333333

00:21:45.054 --> 00:21:46.404 do the implant displays views and

NOTE Confidence: 0.810522558333333

00:21:46.404 --> 00:21:48.140 then if they have the dense tissue,

NOTE Confidence: 0.810522558333333

00:21:48.140 --> 00:21:49.826 we would do the breast ultrasound

NOTE Confidence: 0.810522558333333

00:21:49.826 --> 00:21:51.989 and then MRI on a per case basis.

NOTE Confidence: 0.876955625

00:21:52.300 --> 00:21:54.650 What about patients who have

NOTE Confidence: 0.876955625

00:21:54.650 --> 00:21:56.060 had bilateral mastectomies,

NOTE Confidence: 0.876955625

00:21:56.060 --> 00:21:57.830 maybe they've had cancer in the

NOTE Confidence: 0.876955625

00:21:57.830 --> 00:22:00.141 past or maybe they've had bilateral

NOTE Confidence: 0.876955625

00:22:00.141 --> 00:22:01.749 mastectomies prophylactically and

NOTE Confidence: 0.876955625

00:22:01.749 --> 00:22:03.357 they've gotten reconstructed,

NOTE Confidence: 0.876955625

00:22:03.360 --> 00:22:05.004 whether that reconstruction has

NOTE Confidence: 0.876955625

00:22:05.004 --> 00:22:07.470 been with implants or whether it's

NOTE Confidence: 0.876955625

00:22:07.541 --> 00:22:09.599 been with using their own tissue,

NOTE Confidence: 0.876955625

00:22:09.600 --> 00:22:11.760 moving tissue around from their belly,

NOTE Confidence: 0.876955625

00:22:11.760 --> 00:22:14.100 etcetera to create new breasts.

NOTE Confidence: 0.876955625

00:22:14.100 --> 00:22:16.724 And now it looks like they have breasts,

NOTE Confidence: 0.876955625

00:22:16.730 --> 00:22:19.410 although they've had a mastectomy.

NOTE Confidence: 0.876955625

00:22:19.410 --> 00:22:22.788 So should they have imaging for

NOTE Confidence: 0.876955625

00:22:22.790 --> 00:22:25.214 further surveillance or not?

NOTE Confidence: 0.876955625

00:22:25.214 --> 00:22:28.850 And how do we monitor them

NOTE Confidence: 0.876955625

00:22:28.850 --> 00:22:30.378 for breast cancer risk?

NOTE Confidence: 0.849739877307692

00:22:30.790 --> 00:22:31.778 That's a great question.

NOTE Confidence: 0.849739877307692

00:22:31.778 --> 00:22:33.855 And so I think the most important thing

NOTE Confidence: 0.849739877307692

00:22:33.855 --> 00:22:35.999 is that when anyone has had any kind

NOTE Confidence: 0.849739877307692

00:22:36.055 --> 00:22:37.807 of prior history of breast cancer,

NOTE Confidence: 0.849739877307692

00:22:37.810 --> 00:22:39.555 the relationship with their breast

NOTE Confidence: 0.849739877307692

00:22:39.555 --> 00:22:41.300 surgeons and plastic surgeons that

NOTE Confidence: 0.849739877307692

00:22:41.350 --> 00:22:43.065 they've had is a very crucial one.

NOTE Confidence: 0.849739877307692

00:22:43.070 --> 00:22:44.180 And so a lot of times

NOTE Confidence: 0.849739877307692

00:22:44.180 --> 00:22:45.788 when a patient has had mastectomy,

NOTE Confidence: 0.849739877307692

00:22:45.790 --> 00:22:47.405 they still actually have their

NOTE Confidence: 0.849739877307692

00:22:47.405 --> 00:22:49.020 routine visits with their breast

NOTE Confidence: 0.849739877307692

00:22:49.072 --> 00:22:50.607 surgeons and breast care team.

NOTE Confidence: 0.849739877307692

00:22:50.610 --> 00:22:52.824 And on these routine visits they

NOTE Confidence: 0.849739877307692

00:22:52.824 --> 00:22:54.710 will evaluate them and see

NOTE Confidence: 0.849739877307692

00:22:54.710 --> 00:22:56.582 if they've noticed any kind of

NOTE Confidence: 0.849739877307692

00:22:56.582 --> 00:22:57.830 differences in their breasts,

NOTE Confidence: 0.849739877307692

00:22:57.830 --> 00:23:00.526 have they noticed any pain or

NOTE Confidence: 0.849739877307692

00:23:00.526 --> 00:23:03.606 lump or any kind of new things, and if they had

NOTE Confidence: 0.849739877307692

00:23:03.610 --> 00:23:04.794 nipple sparing mastectomy,

NOTE Confidence: 0.849739877307692

00:23:04.794 --> 00:23:06.418 if they have any kind of discharge, or

00:23:09.046 --> 00:23:10.978 any new symptoms, and then that's

NOTE Confidence: 0.849739877307692

00:23:10.978 --> 00:23:12.628 evaluated by that breast surgeon.

NOTE Confidence: 0.849739877307692

00:23:12.630 --> 00:23:14.270 If there are symptoms then

NOTE Confidence: 0.849739877307692

00:23:14.270 --> 00:23:15.754 we will do imaging.

NOTE Confidence: 0.849739877307692

00:23:15.754 --> 00:23:18.950 And so if the patients had mastectomy,

NOTE Confidence: 0.849739877307692

00:23:18.950 --> 00:23:21.195 there's actually no more actual

NOTE Confidence: 0.849739877307692

00:23:21.195 --> 00:23:23.440 glandular tissue to really be

NOTE Confidence: 0.849739877307692

00:23:23.515 --> 00:23:25.650 able to image on mammography.

NOTE Confidence: 0.849739877307692

00:23:25.650 --> 00:23:27.945 So if they have a little small palpable lump,

NOTE Confidence: 0.849739877307692

00:23:27.950 --> 00:23:29.516 we would do then a targeted

NOTE Confidence: 0.849739877307692

00:23:29.516 --> 00:23:31.215 ultrasound in that area to evaluate

NOTE Confidence: 0.849739877307692

00:23:31.215 --> 00:23:33.294 it and see if it's something that's

NOTE Confidence: 0.849739877307692

00:23:33.294 --> 00:23:34.368 associated with the skin,

NOTE Confidence: 0.849739877307692

00:23:34.370 --> 00:23:36.572 superficial skin lesion or if it's

NOTE Confidence: 0.849739877307692

00:23:36.572 --> 00:23:38.040 something just underneath the

NOTE Confidence: 0.849739877307692

00:23:38.098 --> 00:23:39.988 dermis and possibly a recurrence.

NOTE Confidence: 0.849739877307692

00:23:39.990 --> 00:23:42.174 And we can easily see that with

NOTE Confidence: 0.849739877307692

00:23:42.174 --> 00:23:43.906 ultrasound if there is actually any

NOTE Confidence: 0.849739877307692

00:23:43.906 --> 00:23:45.454 other questions where we feel as

NOTE Confidence: 0.849739877307692

00:23:45.454 --> 00:23:47.030 though there could be additional

NOTE Confidence: 0.849739877307692

00:23:47.030 --> 00:23:48.378 abnormalities or anything subtle,

NOTE Confidence: 0.849739877307692

00:23:48.380 --> 00:23:50.300 then we would recommend

NOTE Confidence: 0.849739877307692

00:23:50.300 --> 00:23:53.050 to breast MRI and get that contrast

NOTE Confidence: 0.849739877307692

00:23:53.050 --> 00:23:54.922 enhanced evaluation for evaluating

NOTE Confidence: 0.849739877307692

00:23:54.922 --> 00:23:56.326 something more subtle.

NOTE Confidence: 0.849739877307692

00:23:56.330 --> 00:23:58.917 But that would be the mainstay with

NOTE Confidence: 0.849739877307692

00:23:58.917 --> 00:24:00.552 patients that do have mastectomy

NOTE Confidence: 0.849739877307692

00:24:00.552 --> 00:24:02.630 and then end up actually having

NOTE Confidence: 0.849739877307692

00:24:02.630 --> 00:24:04.754 a tram flap those of patients.

NOTE Confidence: 0.849739877307692

00:24:04.760 --> 00:24:06.458 Then again like you describe having

NOTE Confidence: 0.849739877307692

00:24:06.458 --> 00:24:08.690 tissue kind of placed and put in that area,

NOTE Confidence: 0.849739877307692

00:24:08.690 --> 00:24:10.320 there is actually then tissue

NOTE Confidence: 0.849739877307692

00:24:10.320 --> 00:24:11.950 to do an X-ray of.

NOTE Confidence: 0.849739877307692

00:24:11.950 --> 00:24:15.200 So if they do have a palpable area in a

NOTE Confidence: 0.849739877307692

00:24:15.292 --> 00:24:18.548 tram flap then it can be done using mammography.

NOTE Confidence: 0.849739877307692

00:24:21.840 --> 00:24:23.766 And I would say that sometimes

NOTE Confidence: 0.849739877307692

00:24:23.766 --> 00:24:25.404 on occasion the mammography is

NOTE Confidence: 0.849739877307692

00:24:25.404 --> 00:24:27.455 helpful because a lot of times these

NOTE Confidence: 0.849739877307692

00:24:27.455 --> 00:24:29.283 patients have post surgical changes

NOTE Confidence: 0.849739877307692

00:24:29.283 --> 00:24:31.641 like fat necrosis and they develop

NOTE Confidence: 0.849739877307692

00:24:31.641 --> 00:24:34.548 calcifications and so they have a very

NOTE Confidence: 0.849739877307692

00:24:34.548 --> 00:24:36.220 distinct appearance on mammography.

NOTE Confidence: 0.849739877307692

00:24:36.220 --> 00:24:37.900 And so then mammography can be

NOTE Confidence: 0.849739877307692

00:24:37.900 --> 00:24:39.793 helpful for us to delineate something

NOTE Confidence: 0.849739877307692

00:24:39.793 --> 00:24:41.573 that's normal like fat necrosis

NOTE Confidence: 0.849739877307692

00:24:41.573 --> 00:24:43.786 in a tram flap versus something

NOTE Confidence: 0.849739877307692

00:24:43.786 --> 00:24:45.596 that's abnormal like a recurrence

NOTE Confidence: 0.849739877307692

00:24:45.596 --> 00:24:47.348 at the edge of the flap.

NOTE Confidence: 0.838347402857143

00:24:47.420 --> 00:24:49.996 What about men who get breast cancer?

NOTE Confidence: 0.838347402857143

00:24:50.000 --> 00:24:53.800 If a man has developed

NOTE Confidence: 0.838347402857143

00:24:53.800 --> 00:24:56.095 breast cancer and we know that about

NOTE Confidence: 0.838347402857143

00:24:56.095 --> 00:24:58.539 1% of all breast cancers do occur in

NOTE Confidence: 0.838347402857143

00:24:58.539 --> 00:25:02.490 men and let's say maybe he's got a

NOTE Confidence: 0.838347402857143

00:25:02.490 --> 00:25:05.507 genetic mutation in BRCA 2

NOTE Confidence: 0.838347402857143

00:25:05.507 --> 00:25:08.950 and he has a unilateral mastectomy.

NOTE Confidence: 0.838347402857143

00:25:08.950 --> 00:25:11.398 So we know that he is still is at

NOTE Confidence: 0.838347402857143

00:25:11.398 --> 00:25:13.450 increased risk in the other breast.

NOTE Confidence: 0.838347402857143

00:25:13.450 --> 00:25:16.141 Does he need to get mammograms on a yearly

NOTE Confidence: 0.838347402857143

00:25:16.141 --> 00:25:18.808 basis just like his female counterparts?

NOTE Confidence: 0.838347402857143

00:25:18.810 --> 00:25:21.002 How do we screen for the other breast

NOTE Confidence: 0.838347402857143

00:25:21.002 --> 00:25:23.489 in men who are at increased risk

NOTE Confidence: 0.838347402857143

00:25:23.489 --> 00:25:25.280 of developing breast cancer?

NOTE Confidence: 0.863551024333333

00:25:25.290 --> 00:25:27.173 And that's actually a

NOTE Confidence: 0.863551024333333

00:25:27.173 --> 00:25:29.121 great question and I think it's something

NOTE Confidence: 0.863551024333333

00:25:29.121 --> 00:25:31.074 that we're always trying to pursue at

NOTE Confidence: 0.863551024333333

00:25:31.074 --> 00:25:32.887 least even within our research trying to

NOTE Confidence: 0.863551024333333

00:25:32.887 --> 00:25:34.545 figure out what is their risk profile

NOTE Confidence: 0.863551024333333

00:25:34.545 --> 00:25:36.250 and how often they should be screened.

NOTE Confidence: 0.863551024333333

00:25:36.250 --> 00:25:38.490 We will still actually do lifetime risks.

NOTE Confidence: 0.863551024333333

00:25:38.490 --> 00:25:41.390 And so if they do have a mutation or if

NOTE Confidence: 0.863551024333333

00:25:41.465 --> 00:25:44.167 they have also again lifetime

NOTE Confidence: 0.863551024333333

00:25:44.167 --> 00:25:46.932 risk of you know greater than 25%,

NOTE Confidence: 0.863551024333333

00:25:46.932 --> 00:25:49.290 we do have a subset of males that we

NOTE Confidence: 0.863551024333333

00:25:49.356 --> 00:25:51.306 do routine screening evaluation if

NOTE Confidence: 0.863551024333333

00:25:51.306 --> 00:25:53.704 they have that very strong evaluation

NOTE Confidence: 0.863551024333333

00:25:53.704 --> 00:25:55.236 and they would get

NOTE Confidence: 0.863551024333333

00:25:55.240 --> 00:25:56.740 mammogram on the other side,

NOTE Confidence: 0.863551024333333

00:25:56.740 --> 00:25:58.700 but I would say more often than

NOTE Confidence: 0.863551024333333

00:25:58.700 --> 00:26:00.912 not they end up not being greater

NOTE Confidence: 0.863551024333333

00:26:00.912 --> 00:26:03.291 than that lifetime risk and so then

NOTE Confidence: 0.863551024333333

00:26:03.291 --> 00:26:05.096 it ends up being symptomatic.

NOTE Confidence: 0.863551024333333

00:26:05.100 --> 00:26:07.152 If they have any abnormality that's

NOTE Confidence: 0.863551024333333

00:26:07.152 --> 00:26:09.385 felt on their routine

NOTE Confidence: 0.863551024333333

00:26:09.385 --> 00:26:11.755 follow up visits by their doctors,

NOTE Confidence: 0.863551024333333

00:26:11.760 --> 00:26:14.560 then we will do further evaluation with

NOTE Confidence: 0.863551024333333

00:26:14.560 --> 00:26:16.770 diagnostic exam with again mammogram,

NOTE Confidence: 0.863551024333333

00:26:16.770 --> 00:26:17.240 ultrasound,

NOTE Confidence: 0.863551024333333

00:26:17.240 --> 00:26:20.060 possible MRI to evaluate the abnormality.

NOTE Confidence: 0.893471035

00:26:20.400 --> 00:26:22.140 Perfect. Well, you know the

NOTE Confidence: 0.893471035

00:26:22.140 --> 00:26:23.880 other question that often comes

NOTE Confidence: 0.893471035

00:26:23.947 --> 00:26:26.215 up is that there's always new

NOTE Confidence: 0.893471035

00:26:26.215 --> 00:26:27.727 technology that's being developed.

NOTE Confidence: 0.893471035

00:26:27.730 --> 00:26:29.735 And oftentimes being marketed

NOTE Confidence: 0.893471035

00:26:29.735 --> 00:26:31.339 as straight to consumers,

NOTE Confidence: 0.893471035

00:26:31.340 --> 00:26:36.578 so things like Thermography or elastography.

NOTE Confidence: 0.893471035

00:26:36.580 --> 00:26:39.036 Can you talk a little bit about some

NOTE Confidence: 0.893471035

00:26:39.036 --> 00:26:40.911 of these technologies and whether

NOTE Confidence: 0.893471035

00:26:40.911 --> 00:26:43.960 you think that they play any role in

NOTE Confidence: 0.893471035

00:26:43.960 --> 00:26:46.284 terms of screening for breast cancer?

NOTE Confidence: 0.842079826666666

00:26:47.310 --> 00:26:49.462 Sure. I think it's always a good thing

NOTE Confidence: 0.842079826666666

00:26:49.462 --> 00:26:51.065 to always be thinking out-of-the-box

NOTE Confidence: 0.842079826666666

00:26:51.065 --> 00:26:53.417 what are different ways for us to

NOTE Confidence: 0.842079826666666

00:26:53.477 --> 00:26:55.382 evaluate these abnormalities and see

NOTE Confidence: 0.842079826666666

00:26:55.382 --> 00:26:57.978 and look at the characteristics of it.

NOTE Confidence: 0.842079826666666

00:26:57.978 --> 00:26:59.698 So these other imaging modalities

NOTE Confidence: 0.842079826666666

00:26:59.698 --> 00:27:01.350 such as Thermography and so on,

NOTE Confidence: 0.842079826666666

00:27:01.350 --> 00:27:03.162 what they're looking at is different

NOTE Confidence: 0.842079826666666

00:27:03.162 --> 00:27:04.370 characteristics of a cancer.

NOTE Confidence: 0.842079826666666

00:27:04.370 --> 00:27:05.690 So in essence,

NOTE Confidence: 0.842079826666666

00:27:05.690 --> 00:27:07.890 if the cancer has angiogenesis,

NOTE Confidence: 0.842079826666666

00:27:07.890 --> 00:27:08.874 that means some vascularity

NOTE Confidence: 0.842079826666666

00:27:08.874 --> 00:27:10.550 to it has blood flow to it.

NOTE Confidence: 0.842079826666666

00:27:10.550 --> 00:27:13.813 So we use contrast enhanced

NOTE Confidence: 0.842079826666666

00:27:13.813 --> 00:27:16.699 mammography and MRI to evaluate that.

NOTE Confidence: 0.842079826666666

00:27:16.700 --> 00:27:18.176 But then there's also a functional

NOTE Confidence: 0.842079826666666

00:27:18.180 --> 00:27:19.436 art to the cancer.

NOTE Confidence: 0.842079826666666

00:27:19.436 --> 00:27:21.006 And so the thermography is

NOTE Confidence: 0.842079826666666

00:27:21.010 --> 00:27:24.394 pretty much based off of that.

NOTE Confidence: 0.842079826666666

00:27:24.394 --> 00:27:27.161 The only issues with these types of functional

NOTE Confidence: 0.842079826666666

00:27:27.161 --> 00:27:30.475 methods that we just haven't gotten to

NOTE Confidence: 0.842079826666666

00:27:30.475 --> 00:27:33.235 the point where

NOTE Confidence: 0.842079826666666

00:27:33.240 --> 00:27:34.815 we can delineate them very well

NOTE Confidence: 0.842079826666666

00:27:37.750 --> 00:27:39.826 since they're sensitive but they're not specific.

NOTE Confidence: 0.842079826666666

00:27:39.830 --> 00:27:42.406 So in a sense they can show

NOTE Confidence: 0.842079826666666

00:27:42.406 --> 00:27:45.425 a degree of high,

NOTE Confidence: 0.842079826666666

00:27:45.430 --> 00:27:47.356 high signal in the sense where

NOTE Confidence: 0.842079826666666

00:27:47.356 --> 00:27:49.349 you're seeing a lot of uptake,

NOTE Confidence: 0.842079826666666

00:27:49.350 --> 00:27:50.966 but then you don't know what it is.

00:27:51.840 --> 00:27:53.290 There's an area of inflammation,

NOTE Confidence: 0.842079826666666

00:27:53.290 --> 00:27:55.126 is it actually a small cancer,

NOTE Confidence: 0.842079826666666

00:27:55.126 --> 00:27:56.690 is it an inflamed sebaceous cyst.

NOTE Confidence: 0.842079826666666

00:28:00.510 --> 00:28:02.225 And so that's the thing about these

NOTE Confidence: 0.842079826666666

00:28:02.225 --> 00:28:03.340 other functional based methods.

NOTE Confidence: 0.842079826666666

00:28:03.340 --> 00:28:04.810 And we still have to optimize it.

NOTE Confidence: 0.842079826666666

00:28:04.810 --> 00:28:06.892 So it's not mainstream and I

NOTE Confidence: 0.842079826666666

00:28:06.892 --> 00:28:08.570 think the the issue is

NOTE Confidence: 0.842079826666666

00:28:08.570 --> 00:28:10.894 that patients often then

NOTE Confidence: 0.842079826666666

00:28:10.894 --> 00:28:12.822 depend on these more functional

NOTE Confidence: 0.842079826666666

00:28:12.822 --> 00:28:15.402 based methods that don't have that

NOTE Confidence: 0.842079826666666

00:28:15.402 --> 00:28:17.445 specificity and then they're not

NOTE Confidence: 0.842079826666666

00:28:17.445 --> 00:28:19.671 doing the screening exams that have

NOTE Confidence: 0.842079826666666

00:28:19.671 --> 00:28:22.834 been proven to and that are still

NOTE Confidence: 0.842079826666666

00:28:22.834 --> 00:28:25.951 also non invasive and are more

NOTE Confidence: 0.842079826666666

00:28:25.951 --> 00:28:28.866 effective in detecting that cancer.

00:28:31.650 --> 00:28:34.394 Doctor Kiran Sheikh is an assistant professor

NOTE Confidence: 0.892266147368421

00:28:34.394 --> 00:28:36.332 of clinical radiology and biomedical

NOTE Confidence: 0.892266147368421

00:28:36.332 --> 00:28:38.789 imaging at the Yale School of Medicine.

NOTE Confidence: 0.892266147368421

00:28:38.790 --> 00:28:40.822 If you have questions,

NOTE Confidence: 0.892266147368421

00:28:40.822 --> 00:28:42.814 the address is canceranswers@yale.edu

NOTE Confidence: 0.892266147368421

00:28:42.814 --> 00:28:45.598 and past editions of the program

NOTE Confidence: 0.892266147368421

00:28:45.598 --> 00:28:48.024 are available in audio and written

NOTE Confidence: 0.892266147368421

00:28:48.024 --> 00:28:48.972 form at yalecancercenter.org.

NOTE Confidence: 0.892266147368421

00:28:48.972 --> 00:28:51.388 We hope you'll join us next week to

NOTE Confidence: 0.892266147368421

00:28:51.388 --> 00:28:53.225 learn more about the fight against

NOTE Confidence: 0.892266147368421

00:28:53.225 --> 00:28:55.050 cancer here on Connecticut Public Radio.

NOTE Confidence: 0.892266147368421

00:28:55.050 --> 00:28:57.594 Funding for Yale Cancer Answers is

NOTE Confidence: 0.892266147368421

00:28:57.594 --> 00:29:00.000 provided by Smilow Cancer Hospital.