SHARSHERET®
The Jewish Breast & Ovarian Cancer Community

The Power to Prevent: A Men's Guide to Cancer Risk Reduction
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Melissa:

We have a lot to get to, and I'm excited for us to get started. So welcome. Welcome. Thank you for joining Sharsheret this evening to discuss a topic that you might not expect a woman's cancer organization to address. Men's health. In the past several years, Sharsheret has worked to ensure that men's health, especially as it relates to hereditary cancer, becomes a priority. Tonight is actually our fifth annual men's health webinar. So let's begin by answering that question, right? The most common question we received in advance of tonight's webinar. Why would Sharsheret, an organization that supports women facing breast cancer and ovarian cancer, host a webinar on men's health?

We know that many of the genetic mutations that increase diagnostic risk of breast cancer and ovarian cancer increase the risk of other cancers as well. Some of those include prostate cancer, melanoma, pancreatic cancer, colon cancer, and male breast cancer. We also know that men and women carry these mutations in equal numbers and pass them down to their children in equal numbers, no matter that child's gender. And so therefore, we know that this is not just a women's issue. This is not just a men's issue. This is a family issue. This is a community issue. So once again, thank you for joining us tonight to be a part of this important conversation.

Tonight, we're going to focus on risk reducing opportunities across the spectrum, from genetic testing, to cancer screening, to lifestyle behaviors, for men who are at known heightened risk, as well as for men without any known mutations or strong family history. Before we begin, I have a few housekeeping items to share. If you would like to remain private, you have the option to turn off your video and rename yourself, or you can even call into the webinar. Instructions are in the chat box for both options.

We now have closed captioning available. To display live captions on the bottom bar, click captions, and then show captions. You may have noticed you were muted upon entering the Zoom. Please stay muted during the call. If you have any questions, please feel free to send them in the chat and we will do our best to answer the questions. I want to thank our generous sponsors for this program whose generosity really does allow us to continue to provide support and education. Ambry Genetics, AstraZeneca, the Max & Anna Baran, Ben & Sarah Baran and Milton Baran Endowment Fund of the Jewish Community Foundation of Los Angeles, the Basser Center for BRCA, and the Cooperative Agreement 240061 from the Centers for Disease Control and Prevention.

I want to remind you that this webinar is being recorded and will be posted on Sharsheret's website along with the transcript. As always, participants' faces and names will not be in the recording. Again, we received a really solid number of excellent questions before today's program. If during the program you have a question that would benefit all participants, please enter it into the chat box. As a reminder, Sharsheret has been providing telehealth services to those impacted by breast cancer, by ovarian cancer, and those concerned about their risk for 25 years. As we move into the webinar itself, I want to also remind you that Sharsheret is a not-for-profit cancer support and education organization and does not offer any medical advice.

The information provided by Sharsheret and tonight's speakers is not a substitute for medical advice for a specific medical condition. You should not use this information to diagnose or treat a health problem. Always seek the advice of your physician or a qualified healthcare provider with any questions you might have regarding medical concerns or condition. Okay. We're going to dive in.

Stories are important to us at Sharsheret. They inform our work, they inspire us, and they make it so much easier to understand complicated medical information. I'm grateful that we have Bob with us tonight. He is a Sharsheret caller and has his own complicated story about cancer and genetics that he has agreed to share with us this evening. Bob, we are so glad to welcome you tonight.

Bob:

Well, thank you. I'm very, very happy to be here. My story began 29 years ago. And at that time, I was diagnosed with breast cancer. Completely out of the blue, no known family history. I remember I was home one night, scratching my chest, and I felt a small lump under my left nipple. And I wasn't too concerned, but I thought, "Well, next time I see my family doctor, I'll mention it to him." But then about three weeks later, I had bleeding from that nipple, and I knew that wasn't right. So I went to my family doc who sent me to a surgeon who did a needle biopsy and it was breast cancer.

And I knew in theory that men could get breast cancer, but it's kind of like knowing in theory I can walk outside and be hit by an asteroid. It's just so farfetched. It just didn't seem plausible. And it became even more surreal after talking to the surgeon and being scheduled for a mastectomy, writing down mastectomy in my date book. Bob Ritter and mastectomy didn't go in the same sentence. But there it was. I had a modified radical mastectomy. During the pathology, I had one positive lymph node. And that brought me to have chemotherapy for six months. And this was a whole rollercoaster.

And again, I was young, I was healthy. To have any cancer was a surprise to me. To have breast cancer was just jaw dropping. And in fact, you hear that expression of a person's jaw dropping open. And when I would tell people that I have breast cancer, I would literally see jaws dropping open. So it was just a bizarre experience. But I did well and I got involved in cancer advocacy. It gave me a mission, both in terms of male breast cancer and breast cancer more broadly. So through the years, I've been involved in this. About five years ago... Oh, I should mention that when I was diagnosed, genetic testing was not routine at a community hospital setting.

But through the years, I assumed I was BRCA2 positive because it fit the profile almost exactly. I'm Ashkenazi. My mother had pancreatic cancer. I was diagnosed at a very young age. It all fits BRCA2. Five years ago, I was diagnosed with prostate cancer. And at that point in time, we did do the genetic testing. It turns out I didn't have a BRCA2 mutation, but I do have a CHEK2 mutation. So it's in the same family. I'm sure we'll hear more about that later on. But I've been in this world for quite a while now. I'm doing well. And I've learned through the years that things happen in life and we deal with them the best that we can.

And I like to go to breast cancer events to literally be a face at the table, to be a man at breast cancer events. And certainly, the hereditary breast cancers, hereditary cancers are so important. And I'm delighted that Sharsheret is doing this presentation tonight and I'm delighted to be here and I appreciate the invitation. Yeah.

Melissa:

Bob, thank you so much for sharing your story. It's such an important story to hear. And I know that when people hear personal stories, it saves lives. We know it encourages them to follow up on something they've been meaning to do or to get genetic screening or things like that. So thank you for that tonight. Next we have with us Peggy Cottrell. Peggy is a certified genetic counselor and Sharsheret's genetics program manager. She is a graduate of the Sarah Lawrence College master of science in genetic counseling program. At Sharsheret, Peggy consults with women and families and men and families and answers individual questions, questions about family history, BRCA and other mutations and about personal cancer risk. And actually so much more. Welcome, Peggy. I'm going to get you to the screen and then I'm going to share your slides.

Peggy Cottrell:

Thanks so much, Melissa. And Melissa started off by mentioning a number of things that I know are on my first slide, so we're going to move through that one pretty quickly. So I want to start by saying one in

40, and that's how many people who have Ashkenazi ancestry who are going to test positive for mutation in BRCA1 or BRCA2. And that's significantly more than the general population of average ethnic background. And so it's very important here in our community that we talk about that. Now, this is not one in 40 men or one in 40 women, it's one in 40 individuals. And men just as likely as women to carry a mutation, but less likely to get cancer related to it.

And that's why sometimes, it can be hard to see the evidence of something running in the family tree. It's important for women to know when they're looking at their family history that they have to consider their mother's side and their father's side as well, because they could have inherited it from either parent, and unaffected men can pass mutations to any of their offspring. Next slide.

So men's cancers with BRCA1 and BRCA2 mutations are a little bit different than women's cancers. Probably the most common cancer is prostate. Women obviously don't get prostate cancer. But both men and women can get pancreatic cancer, melanoma, and men, male breast cancer, women, female breast cancer. And then women, of course, also ovarian cancer, which men do not get. Now, we're mainly talking about BRCA1 and BRCA2 tonight, but there are other hereditary genes that predispose to cancer. And so if you carry one of those other genes, the risk will be different than it would be related to BRCA1 and BRCA2. Next slide.

So there are many genes. And when the testing is done, it's no longer... We generally don't look just at BRCA1 and 2 on a test or just for Lynch syndrome, for example, which is hereditary colon cancer, but we look usually pretty broadly. And that's because with today's technology, it doesn't cost that much more to look at 100 genes instead of only looking at two. And so when you have a test done, it may look at genes that predispose to cancers that are not even in your family, because it's felt, while we're doing this test, let's just make sure that there's nothing that we're missing.

And I've listed here some of the genes that we find. Again, all of these are genes that can be carried by men as well as by women. And when you look at the little diagram here, you see the first one, multiple genes increase the risk of a single cancer. So here, breast cancer is surrounded by the pedals, which suggests some of the genes that predispose to breast cancer. But also multiple cancers can be associated with a single gene. And here, TP53 is one of the unfortunate ones that can really predispose to many, many different kinds of cancer. And so it's always going to be important to speak to your doctor and to a genetic counselor about your specific genetic result and understand what that means within the realm of your family history as well. Next slide.

So once someone has genetic testing done or sees that there's a lot of cancer in their family tree even if their results are negative for hereditary cancer, they're going to have to start thinking about screening. And the screening is going to be different depending on which gene we're talking about and the family history. So I'm not going to go into a lot of details of what the screening exactly would be like for each person with each gene and each scenario, but I'll just mention some of the tests that we consider. So if someone's at an increased risk for prostate cancer, their screening might include PSA, which is a blood test, or possibly a rectal exam to try to feel if there is something there that shouldn't be the way it is.

With pancreatic cancer, we used to consider pancreatic cancer really not a cancer that was amenable to screening, but screening now has been proven to be effective and can find cancers at an early enough stage to change the trajectory of the disease. And so the two screenings that are done, one is an MRCP, which is a specialized kind of MRI that looks at the pancreas and the ducts that are associated with it. And an EUS, which is an endoscopic ultrasound. And with these screenings, we can hopefully find pancreatic cancer at a point when it's treatable. Male breast cancer screening includes a breast exam by a doctor, sometimes a mammogram, but not always a mammogram. I think doctors are more likely to recommend a mammogram when it's a BRCA2 mutation.

And again, one of the things that Bob mentioned that he had as a symptom I've heard from many men diagnosed with breast cancer, which is a little bit of bleeding from the nipple. And sometimes, it may not even look like blood. It may look like an unusual spot on a T-shirt, and that's something important to be aware of. Melanoma screening involves a skin exam by a dermatologist. We believe we see an increase in melanoma risk with BRCA2 and some of the other genes that can be on those big panel tests that are offered nowadays. And then finally, colon cancer screening. There are a lot of other types of screening, like a Cologuard or a FIT test, which looks at blood in the stool. But really the gold standard is a colonoscopy. And colonoscopies are now recommended beginning at younger ages because we see more and more that younger people are being diagnosed with cancer. Next slide.

So how do you get a genetic test? And as a genetic counselor, I know I am well-trained to guide people in understanding what kind of genetic test will benefit them and interpreting the genetic testing that they've had done. And you can find a genetic counselor by looking on the website of the National Society of Genetic Counselors. We partner with another Jewish nonprofit called JScreen. And JScreen offers both a reproductive test for people who are trying to prevent things like Tay-Sachs or cystic fibrosis from being passed to their children, as well as a hereditary cancer test. And we have a coupon code with them that takes $18 off the program fee, which is $49. That would be the only charge if the test is covered by your insurance, but they offer an option if you don't have insurance coverage to get a cash price of $249.

And finally, if you have questions about whether you should have a genetic test done or you've had testing done and you have concerns about the results, you can speak to either myself or Bianca here at Sharsheret. You can email us and we'll get back to you and set up a time to have a conversation and try to answer your questions. And I think that's it for me.

Melissa:

Amazing. Thank you so much, Peggy. What a great introduction to how hereditary cancer mutations impact everyone regardless of gender. Next, we are joined by Dr. Darren Bryk. Dr. Bryk is a board certified urologist whose expertise spans the full spectrum of men's wellness. He completed his urology residency at the Cleveland Clinic and andrology fellowship at the University of Virginia. He currently works as a urologist at Urology Medical Specialists in South Florida and is affiliated at multiple hospitals in Broward and Palm Beach Counties.

In addition to being on Sharsheret's medical advisory board, Dr. Bryk is also on the advisory board of the Stardust Jewish Fertility Foundation. He's published multiple peer reviewed academic articles and textbook chapters and presented research at many academic conferences. And this is something unique. Dr. Bryk has made a media appearance on Fake Doctors, Real Friends with Zach and Donald. For those of you who missed that reference, they are the actors that were doctors on Scrubs, on that podcast. And the Art of Fatherhood podcast to discuss various urologic and men's health issues.

So Dr. Bryk, I am going to bring you to the screen and you're going to share your slides if you have.

Dr. Darren Bryk:

Yes.

Melissa:

Thank you so very much for being with us tonight. There you go.

Dr. Darren Bryk:

All right. Good evening. Thank you for having me. Can you see my slides okay?

Melissa:

Yep. We're good.

Dr. Darren Bryk:

Great. Great, great, great. Okay. So today, I was asked to talk about prostate cancer screening. And prostate cancer is one of the top cancer topics that me and my colleagues as urologists are managing and treating and screening for each day. Some prostate cancer facts. Prostate cancer is the most commonly diagnosed cancer and second leading cause of cancer death in men. And many men are diagnosed with prostate cancer in their lifetime, but most patients diagnosed with localized or low risk cancer. And the main way that we screen for prostate cancer, and this is talking about men of all risks is with the prostate-specific antigen or the PSA, which is a protein that's made by the prostate and is in the blood.

And the most important thing when discussing this with patients is talking about shared decision-making and talking about the risks and benefits and expectations, what PSA means, so that my patients can make informed decision. Why do we screen for prostate cancer? The main goal is to potentially find aggressive cancer or cancer that can eventually kill someone or cause a burden of disease and allow for treatment prior to the cancer spreading. Diagnosing cancer at an earlier stage is easier to treat and with a higher likelihood of success.

Interestingly, within the last decade or so, there's this back and forth of the benefit of PSA screening. And about in 2012, the USPSTF, the United States Preventative Task Force discussed that maybe it wasn't as beneficial to test for prostate cancer. And in doing so, PSA screening had decreased. What that led to and what we're seeing now actually is that the prevalence of prostate cancer mortality and also metastatic disease, which has significant burden and morbidity increased. This leads to us discussing... Some of the benefits are, again, that we can hope potentially find cancer at an earlier stage, prevent it from spreading and save lives.

Risks of screening are that in many men, the cancer that we find might be a low grade or slow growing and cancers that may actually never spread beyond the prostate, so thus, we're causing more of an anxiety in someone rather than potentially lifesaving. And prostate cancer treatments can incur significant risks. The main stay of treatment for prostate cancer is either radiation or surgery where we take out the prostate and reattach the bladder to the urethra. This is not part of the talk, but both of these have significant risks even many years down the line.

And lastly is that prostate cancer is slow growing. So within the first eight to 10 years of being diagnosed with prostate cancer, there are many studies that are showing that the overall survival from prostate cancer screening is really seen after 10 years. Meaning within 10 years, whether or not you go forward with something, there may not be a change. That being said, there is a lot of data that for men of a certain age, PSA screening is beneficial. And the American Urologic Association guidelines discuss initiating screening before men ages 40 to 50 or 45 to 50, but on the lower end for those who are higher risk. What is high risk? That's individuals who have a family history of prostate cancer, African ancestry may have higher risk, and then other genetic related cancers or genetic mutations known in their family or within themselves.

More about PSA. What other causes are there of PSA elevation? Meaning PSA is not a perfect test. We use it as a screening test for prostate cancer. And oftentimes, we will trend that result. But PSA can be elevated for prostate cancer. It can also be elevated for BPH or benign prostatic hyperplasia. As men get older, the prostate gets bigger and it can cause more PSA to be released into the blood. It can be

elevated for inflammation, infection, trauma. And there's some idea people used to say that the digital rectal exam or bicycle riding or ejaculation could cause elevation of PSA, but there's no good data for that.

What is an elevated PSA? Typically, we say the cutoff is four. And that's what you'll see if a man gets their blood levels checked that the cutoff is four. But there is data that likely a normal PSA increases with increasing age, meaning a PSA of four in a 40-year-old might be more concerning than a PSA of four in a 60 or 70-year-old. And I definitely find this to be important in talking about it with patients depending on their age, depending on their risk factors. Briefly about the DRE. This is mostly fallen out of favor. Especially as a screening method, it's more important for when there's an elevation of PSA. And you can see on the picture just because when you're doing a prostate exam, you're inserting your finger into the rectum. You can only feel a small portion of the prostate. So a man can still get... A positive DRE is more helpful than a negative one.

Men should be screened. Historically, people talked about testing PSAs every year, and I still do that for a number of my patients. But our guidelines discuss that even decreasing that interval, as long as you're getting them regularly, you can offer PSA tests about every two to four years. But a lot of this is based on personalized basis intervals with patients. Some patients like to do it every year just so that they can have it every year. And so patient preferences. The initial PSA level is important. Meaning if you start at a lower PSA, you're at a lower risk for developing prostate cancer in your life.

Life expectancy. As we discussed that if PSA is elevated but you have other medical issues that might lead to other kinds of morbidity or even mortality within 10 years, you may not need to check PSA anymore. What do we do if PSA is elevated? This is the next step is, so first, we might recheck a PSA to make sure that this is a true PSA. Sometimes, there can be some spurious values that are falsely elevated. We might do a prostate exam like we discussed. There are other biomarkers that we can do that can risk stratify and give us a sense of the likelihood of finding cancer if we were to proceed with a biopsy. MRI of the prostate has really become a big thing in the last 10 to 20 years because it gives a good sense of what the prostate looks like.

It doesn't diagnose cancer, or not cancer, but it might find certain areas of suspicion within the prostate. And then when we do a biopsy, we can target those areas. So this allows us to help find more clinically significant prostate cancer if it exists. And then we would potentially proceed with a prostate biopsy. One more thing about prostate screening, excuse me, would be that, for men who are at a higher risk based on their genetics, based on their family history, these are men who we might initiate more aggressive re-screening interval. So potentially doing it maybe even sooner than yearly, and potentially pulling the trigger on what a PSA elevation is, even if it's less than four.

There's a lot of ideas of what we can do for prostate cancer prevention. There's no one thing that will stop you from developing prostate cancer, but there is good data that a plant-based diet, low in saturated fats and animal fats can lower your risk of prostate cancer. Exercise can lower the risk of all cancers, but there is data in regards to prostate cancer. There are two medications called finasteride and dutasteride. These are medications that are often used for benign prostatic enlargement to help shrink the prostate and help men pee better, and there has been also shown to be a reduction in prostate cancer risk.

The counter to this was that in those same studies, those that did have prostate cancer were found to have a higher grade of prostate cancer. So we need to use this with understanding the specific findings in this. So it is unfortunately not the answer to all prostate cancer prevention because of that. A lot of other medications or supplements have been attempted to be studied to see, and they have not shown that there's decrease in prostate cancer risk.

So overall, boosting your health likely decreases your risk of developing prostate cancer and also will decrease your risk of the morbidity and mortality of prostate cancer because you're overall living a healthier life. This image is pretty busy. It's from our guidelines. And it shows most of what I just discussed, but discussing shared decision-making for prostate cancer screening, how soon we should evaluate prostate cancer and how often we should do it and what we do once there is an elevation in your PSA.

Again, thank you for having me. I'll definitely be able to answer a lot of questions, more talking maybe specifically about the genetics. But overall, prostate cancer screening saves lives and I talk to my patients every day and I'm checking PSAs more than once daily. So thank you for having me.

Melissa:

Thank you. Thank you so very much. That was a lot of really important information. And we are now going to add to that important information because I want to welcome Dr. Arkady Broder. Dr. Broder is a nationally respected gastroenterologist, educator and academic leader based at Saint Peter's University Hospital in New Brunswick, New Jersey. As vice chair of the Department of Medicine and chief of the Division of Gastroenterology and Hepatology, Dr. Broder has played a pivotal role in advancing digestive health, medical education, and clinical innovation within the institution.

He's established the gastroenterology fellowship program at Saint Peter's University Hospital, which has created a robust high quality training environment that serves as a critical pathway for developing the next generation of GI physicians. Dr. Broder holds an advanced subspecialty training in interventional gastroenterology with expertise in complex diagnostic and therapeutic endoscopic procedures, his proficiency in advanced endoscopy, including techniques that support early detection and minimally invasive treatment of gastrointestinal malignancies or cancers has significantly enhanced patient outcomes and elevated the standard of care at Saint Peter's.

I want to welcome you to the screen. And thank you so much. Dr. Broder has the challenge of not just speaking about pancreatic cancer, but also a little bit about colon cancer as well.

Dr. Arkady Broder:

Thank you. Let me share my screen. Can everyone see okay?

Melissa:

Yes. It's exactly the way it should.

Dr. Arkady Broder:

Great. Thank you very much. Good evening, everyone. And thanks for giving me an opportunity to speak. I will do my best to summarize and be efficient with the time in covering these two topics. I think, needless to say, we could spend a long time discussing either one and combining both. I will do my best to just give really truly a bird's eye view, a very broad overview of both topics, but happy to answer any questions as they come up. We'll tackle pancreatic cancer and pancreatic cancer screening first. It happens to be November is Pancreatic Cancer Awareness Month. So very appropriate. I'm sure the Sharsheret team was aware of that.

The pancreatic cancer diagnosis has really been in headlines for months and years now. Some of very famous actors, businessmen, very successful people unfortunately have succumbed to this terrible disease. And I think partly because it is so much at the forefront of what we see in the media, it feels almost as if everyone we hear about and know somehow suffers with this. Thankfully, that is really not

the case. In the general population, pancreatic cancer lifetime risk is still really very low, less than 1%. If I could leave you with a little bit of a positive feeling walking away from the discussion today.

In the US, about 13 cases per 100,000 years. Again, really a relatively rare malignancy. But if you look at all the people in the United States, overall population, we typically expect to see about 60,000 new cases a year. So certainly an important disease. And depending on which statistic you use, there are some years it's the third leading cause of cancer-related deaths. In general, the survival rate, and one of the reasons I think the discussion is typically heightened, remains abysmally low. The average survival rate, or five-year survival rate, which in oncology literature is akin to cure in a way, is roughly about 10% of all stages.

Needless to say, the later the stage, unfortunately more difficult the disease is to treat. And 85 to 90% of these cases really do remain sporadic. They're not genetically linked to our knowledge or linked to familial syndromes, although genetics play an important role. And as discussed earlier, very eloquently, we do have screening guidelines available to us precisely amongst those genetically predisposed, which I'll mention in a moment. However, overall, these are still sporadic cases. Some risk factors often get asked include age, male sex, smoking, obesity, diabetes, and chronic pancreatitis, and this is outside of the known genetic risk factors.

Despite all that, as of today, the United States Preventive Task Force and the various GI societies who set the guidance on how screening is done in the United States do not recommend routine screening for average risk adults, so most of the population. Who is at risk for potentially pancreatic cancer and may qualify for pancreatic cancer screening? Those with family history of two or more first degree relatives with pancreatic cancer or those with three or more affected relatives, not necessarily first degree, on the same side of the family, and certainly those with pathogenic or likely pathogenic genetic variants.

Again, it's more detailed than I'm presenting it, but that's the rule of thumb, and you can ask your local geneticist for more details. I do think it's worth sharing this slide to give everyone a sense of what we're talking about in terms of genetic predisposition. We mentioned two first degree relatives increase your risk, and the average risk increase is roughly about 12%. And greater than three first degree relatives, your risk goes up to 40% plus. So certainly, familial risk is present and qualifies for pancreatic cancer screening.

As far as the various genetic syndromes, I think the important ones maybe for tonight's discussion and this group is BRCA genes, both one and two do carry a risk of pancreatic cancer and qualify one for pancreatic cancer screening, as well as the melanoma gene, CDK, N2a. There are a bunch of others. And the Lynch syndrome genes that were mentioned earlier, which do overlap both with pancreatic cancer, colon cancer, and even breast cancer, do qualify pancreatic cancer screening.

When we talk about screening, I think it was mentioned earlier, the two major commonly accepted exams are endoscopic ultrasound and pancreatic MRI or MRCP. MRI, I think, is somewhat self-explanatory. It's a regular MRI with some unique technology that allows us to look at the pancreas more closely. As far as endoscopic ultrasound, the way I explain it to patients, it's a regular endoscopy if you ever had one, but we use a specialized tool with an ultrasound probe that lets us look really deep, deep inside, behind the stomach, at the pancreas more closely to screen for any unusual changes. It is recommended annually for those at risk. It doesn't specify which exam.

In our practice, we tend to alternate high-risk patients one-year MRI and alternating with endoscopic ultrasound because they do have different characteristics of finding subtle changes. And those who are at exceptionally high risk, whether it's genetic or already chronic pancreatic disease predisposition, we may screen even more closely every six months at times. The purpose of pancreatic screening, which is really not unique to pancreatic cancer itself, but really I think the core of any screening exam is to find lesions early, where if you're lucky, even precursors.

There's something called a PanIN, which is a pre-pancreatic cancer change that's a very rare, very unique, and very early stage change in the pancreatic duct that can lead to pancreatic cancer and can be picked up on endoscopic ultrasound. In particular, pancreatic cysts is a hot topic and discussion and beyond our scope tonight, but does fall within that category of potentially high-risk lesions that can be picked up on imaging to be addressed as needed. And really just to summarize a pancreatic cancer screening, it is available, it does involve an MRI or an endoscopic ultrasound, however, not recommended for the general population because it thankfully remains extraordinarily rare as opposed to those individuals who do have genetic or family history predisposition, in which case, a yearly screening is currently recommended.

I'm going to jump right into colorectal cancer. Everyone could take a quick stretch and shake. We're almost done. Colorectal cancer itself, I think, is something hopefully we're all much more familiar with, or at least the screening guidelines. I'd say since the '80s, this has been really at the forefront of screening. And although this is a men's health event, it really doesn't distinguish by chromosomal gender. There's maybe some slight variance in incidence of colon cancer slightly higher in men, it affects men and women almost equally. And so screening becomes important for both genders.

It is far more common. The current data suggests or estimates about 170,000 cases of colon cancer in 2025 alone in the United States. So that's roughly one in 20 people. That's a pretty sobering statistic in my opinion, unfortunately, and despite having robust screening available for colon cancer today. What I want to show here really, and again, I alluded to earlier, is that although we're doing a really good job at preventing and catching colon cancer in the screening age population, what we're seeing is amongst both men and women between the ages of 20 and 49, which is just below the screening age that was previously recommended, the incidence of colon cancer has continued to rise and continues to be observed to rise.

The question of why is a long discussion. There are lots of theories. In short, we don't know, unfortunately. What we do know is that it is a rising phenomena. And this is really the reason you may be aware the screening age had changed from 50 to 45 approximately five years ago. All men and women aged 45 of average risk, meaning they don't have genetic or family history concerns, should start screening for colon cancer. When it comes to screening, there's lots of choices. I really want to show the slide because although I agree entirely colonoscopy is the test of choice, I believe that the best test is the one that gets done.

So no matter how much I try perhaps or our community of physicians to convince our patients to get a colonoscopy, and as much fun as it sounds, for some reason, patients sometimes still refuse to do it. So that said, there are other tests available like the stool tests, both DNA-based like Cologuard and FIT and the old occult blood test. These are available, but do an okay job of finding colon cancer at advanced stages and a poor job of finding polyps, which is really what we're looking for. CT colonography, you may have heard of. It's a CAT scan-based colonography, which does an okay job of finding cancer, not a good job of finding polyps. And the secret you may have not been told or may not be told is it involves twice as much preparation for the procedure as a colonoscopy.

Anyone that's ever had a colonoscopy knows that's the only part that's not fun. The sleep is the best. It does not involve any sleep. So, so far, all the bad with none of the good. And they do instill air into the colon with the hose, which really just sounds like a colonoscopy to me in a CAT scanner. So I do not recommend it for most patients unless there really is an important reason. Flexible sigmoidoscopy is like a mini colonoscopy. Again, not something used today in most of the populated areas, academic centers. Some rural areas where they don't have access to gastroenterologists, they may have primary care doctors, nurse practitioners, other providers who are not trained in colonoscopy to do sigmoidoscopy, which is a simpler procedure.

As you could tell, it gets a little peak at part of the colon, so you're doing half the job or less. And really, if you're going to do this, do it all the way. And that's where the colonoscopy gold standard comes into play. Just one quick mention, honorable mention, blood-based testing for colon cancer. There's a lot of hype. New York Times wrote about it, so it's got to be true, I'm sure. But it's really, I think, still a developing field. Again, it's okay detecting cancer in later stages, but it's really terrible at finding polyps, which is really, again, what we want to prevent cancer from ever happening.

I hope everyone ate dinner, because this is my last slide. We're almost done. It's not as bad as it looks. But I do think it's important to get a sense of what we're talking about here when we talk about colon cancer screening and truly prevention. I like to break up the discussion into exactly those two terminologies. Our GI society and we've all really failed ourselves renaming colon cancer screening to just that. I really think it should be polyp screening or colon polyp screening because that's really where the value of the exams exists. What we want to do is we want to find a polyp in this stage here in the colon, colon lining polyp. This is what we see when we do your colonoscopy. We don't want it to get to this point. It's bigger, not so nice looking. Certainly, sorry, we don't want it to progress to colon cancer.

And we do that by catching it at either of these points, removing it, and preventing it from ever getting to develop into colon cancer. And so when you think about your screening exam and what you're willing to do, I think you really should discuss with your physicians what is the ability of the screening exam in finding colon polyps rather than colon cancer? Because if you're looking for colon cancer, you've already missed an opportunity to prevent it. And I will end with that. Sorry, I went maybe a minute or two over, but thank you for your time.

Melissa:

All good. Thank you very much. I am going to ask you to stop sharing your slides because we are bringing everybody out, all of our speakers. Let's see. That's spotlight. Okay. We have a few minutes to get a lot of questions in. I'm going to choose questions that impact the most number of people. So at Sharsheret, we've heard a lot recently about the rise in breast cancer diagnoses in younger and younger women. So I'm wondering, are you seeing that in the cancers you discussed today for men and women where appropriate? I know I saw in slides that the rise in numbers is getting higher. But the question is, are you seeing it in younger people? Anyone can jump in and start.

Dr. Darren Bryk:

I mean, from a prostate cancer perspective, I don't necessarily think there's any change in the younger people that I'm seeing. I definitely have diagnosed a handful of 40-year-olds and then talked to them about genetic screening. But I think the guidelines where they are have remained pretty stable. So yeah. It's not a top of mind like I've seen colorectal cancer, which Dr. Broder can speak more, seeing that higher prevalence.

Melissa:

Thank you. Dr. Broder.

Dr. Arkady Broder:

Yeah, definitely in colon cancer, we're seeing a continued rise in younger population under age 45, which is why the guidelines have shifted to start earlier. There's a whole host of reasons. The popular belief is environmental. We tend to do that in general in cancer literature. When there's a rise in something, it's got to be what we're eating, what we're exposed to. And maybe there's some truth to that, but really still unclear. The microbiome is often talked about. I think, at this point, in every cancer

type, but certainly in the GI cancers, that tends to be blamed as well. But unfortunately, we're not sure why.

As far as pancreatic cancer, it's not quite as much of a rise in terms of age of incidents. Still, the biggest spike in pancreatic cancer diagnoses is over age 55, which is relatively where it's been steady for a number of years now.

Melissa:

All right. Thank you. Thank you for that. I'm looking for the exact wording of the question, but I can't find that particular question. I just know it's an important one. So I will summarize. Which is, very often, as adults, I think men in particular, but adults in general tend not to go to the doctor unless they're ill. And so for someone who knows maybe there's some cancer in their family history, but doesn't know about their own personal genetic status and is feeling fine and asymptomatic, where should they start? They don't have a primary care physician. Who are they supposed to go to first to start this conversation about risk reduction and prevention?

Dr. Arkady Broder:

I think their primary care physician, in my opinion, they really should be taking the lead on arranging the various necessary cancer screening.

Melissa:

Okay. And for someone who is seeing a primary care physician and isn't being taken seriously in terms of genetic testing or things like that, Peggy, what's their recourse there?

Peggy Cottrell:

Well, you can certainly reach out to us at Sharsheret and we have our connection with JScreen. And if your insurance doesn't cover, you can have the test done for the cash price and answer the question whether there's something that you don't know about. And I will tell you, we have had a fair number of people over the years who test positive for a BRCA1 or 2 mutation in the absence of family history. It doesn't happen super often, but it's more likely to happen when somebody has Ashkenazi ancestry. So if it's something you're concerned about, you can be in touch with us and we can help you get that testing done.

Melissa:

Thank you. Thank you for that. Couple of questions. Somebody specifically asked if Dr. Bryk could briefly discuss fertility preservation for any male cancer patient.

Dr. Darren Bryk:

Definitely. For any man who is about in the process of undergoing some kind of spermatotoxic treatment, whether that's chemotherapy, and there's a number of chemotherapies and there's levels of how severe the chemotherapies are, or even radiation or surgery. Nowadays, there are older and older men who are hoping for fertility or being able to achieve fertility. So even guys who are going to be treated for prostate cancer, that can cause issues with fertility. And I see a handful of them. We can do a semen analysis with cryopreservation. These days, there are great at-home kits that I know my office has options for and you can even buy online where you do a sperm sample and you can ship it to these

companies' labs. And that allows for cryopreservation, which can then be used down the line for intrauterine insemination or IVF.

And sometimes, it's pretty urgent because if they need emergent chemotherapy, then we are often... Sometimes, not often, uncommonly, but I've seen it, consulted in the hospital and we have to try to figure that out. And this is very important to allow a man to continue to have fertility. Eventually, depending on what the treatment is, there may be some recovery of function afterwards. And if there is a chemotherapy that's used, we typically recommend waiting a year or two to see if sperm can be... Recovery of sperm production function. Eventually, if it's not possible, there are other options where we can do some kind of surgical sperm retrieval procedure and use that for IVF.

But there's a lot that goes into it, but it is possible. I think one of the issues historically is that a lot of urologists don't have that awareness maybe, like, "We need to get your testicle out for testicular cancer. Let's just go to it." But for all you know, we're going to take out one testicle. They have another one. But if the one that we're taking out is the better functioning one, then it's important to get that semen analysis done beforehand.

So it's definitely something that I discuss with all my patients who are undergoing any kind of treatment for urologic cancer that I'm involved in. But overall, oncologists often need to be the... The medical oncologists are very much involved as well.

Melissa:

Yeah. Okay. And obviously, prior to treatment is the appropriate time.

Dr. Darren Bryk:

Yes.

Melissa:

And nobody should ever hesitate to ask their oncologist if fertility preservation is an option for them and could they have that time to consult with a urologist?

Dr. Darren Bryk:

Right. Right. I don't have semen analysis done in my office specifically because it's not all what I see. But I send a lot of patients to the reproductive endocrinologists, who have embryologists, who have cryo preservation options, and they can do it there as well if it's more convenient.

Melissa:

Okay. We're going to ask two more questions. And in this case, both of those questions are, I'd like an answer from each one of you. So the first question is, what is the most exciting thing happening in your field with regard to cancer and what should people know about? Dr. Broder, do you want to start there?

Dr. Arkady Broder:

Sure. I think pancreatic cancer screening, honestly, just having that available to our patients has been a major breakthrough in our field. Just three, four years ago, having these discussions, I would resort normally to we have no way to screen and it's one of those elusive diseases. So that's been a major breakthrough for us. And certainly, as that develops and our screening exams get better, hopefully the treatments will as well.

Melissa:

Amazing. Thank you. Dr. Bryk?

Dr. Darren Bryk:

Yeah. I think the great newer and better technologies in regards to the MRI of the prostate, which has been around for a number of years, but that it's become more prevalent in its use with urologists and it helps... I mean, the digital rectal exam has very much gone down the wayside because if you have an elevated PSA, we can do an MRI which allows for better targeting to hopefully diagnose higher grade cancers if they exist and not diagnose as many low grade cancers. So that's definitely been a good adjunct test in addition to the PSA.

Melissa:

Okay.

Dr. Darren Bryk:

I guess I could answer the other question about, what should every guy know would also be that the benefit of PSA screening is because we're diagnosing prostate cancer before it's symptomatic. So the vast majority of men who are getting diagnosed with prostate cancer have no symptoms. And I hear that all the time, like, "I don't have any symptoms. How can I have prostate cancer, et cetera?" If you have symptoms related to prostate cancer, at that point, it's typically a more invasive and past the point. I mean, there's still treatments and that kind of thing. But that makes it more of an aggressive prostate cancer. So that's really the whole benefit of PSA screening is that we're diagnosing it early before it's caused any issues.

Melissa:

Much like colorectal cancer. Same thing.

Dr. Darren Bryk:

Right.

Melissa:

Peggy, do you have anything you want to add to this one?

Peggy Cottrell:

I think pancreatic cancer screening is, I think, amazing. But I should pick something different and I'll talk about improvements in fertility. And I think that when I was first doing this kind of work, it wasn't even routine for people who had BRCA mutations to be able to use IVF and pre-implantation genetic testing to be able to have kids who don't carry the mutation. And I think it's become a much better success in producing children and screening for hereditary cancer in embryos.

Melissa:

That's a good one. Thank you. Okay. I just have to ask this last question because I think it's a great place to end. But one sentence response, because we are almost at the end of time. So I told you this is our fifth year doing this webinar. Last year, somebody asked, "Any suggestions for how to get my brother, dad, husband, friend, et cetera, to take their risks seriously? If I could choose just one thing to nag

about, what should it be?" This year, somebody said, "My husband wants to know why if there's no family history, he should be worried." So they're basically the same question. I give you each a sentence to respond. Peggy, you want to start?

Peggy Cottrell:

Yeah. I think that if you are screening, you're going to be able to find things that you would never feel. And I know I've had colonoscopy results that I feel like I saved my life by going for that in a timely fashion and I've stopped that.

Melissa:

Yeah. Both doctors spoke about some version of that. Okay. Dr. Bryk.

Dr. Darren Bryk:

I mean, on a similar note, you can compare it to a car. How we get our cars inspected or maintenance or what have you before issues arise. Because when the issue arises, that's when it can be much worse when you have a flat tire on the highway kind of thing. So I see that as a similar idea. The goal is, knowledge is power. Knowing where you are, your risks, is helpful as long as you have doctors and counselors and other knowledgeable people to educate you on what that means.

Melissa:

Great analogy. Thank you. Dr. Broder, I'm going to give you the last word.

Dr. Arkady Broder:

Sure. Well, I think they both answered it so well. I don't know what to say now. I was going to use the car analogy too.

Melissa:

Oh, no.

Dr. Arkady Broder:

More of a driving with a seatbelt idea. It's not a problem till you get into an accident. But I can mix it up and end with. I get this question a lot, wives trying to convince their husband to get the colonoscopy. And I tell them, "Just get something done, even if it's a stool test. And if you have to, you can sneak some out and do a Cologuard and then let them know about it. So consider it."

Melissa:

Okay. That is definitely something to consider. I hope I'll never have to do that. Okay. Thank you guys all so much. I'm going to let people go back to their... Remove all spotlighted videos. Okay. I could do that. Although Peggy, you seem to be up there. Okay. There we go. Okay. So we get ready to wrap up. I want to remind you that Sharsheret's amazing genetics program has two fantastic genetic counselors. Peggy, who you heard from tonight. And her colleague, Bianca, who is on the screen and has been answering questions in the chat box behind the scene all evening. They consult with men, with women, with families, answer individual questions about family history, genetic mutations, personal risk, all free of charge.

The Sharsheret website also has a section devoted to men's health and genetics. The link in the chat box now will get you to that section. I want to thank Bob and Peggy and Drs. Broder and Bryk for your dedication to men's health and sharing with us tonight. I know we had a great impact. Once again, thank you to Ambry Genetics, AstraZeneca, the Max & Anna Baran, Ben & Sarah Baran and Milton Baran Endowment Fund of the Jewish Community Foundation of Los Angeles, the Basser Center for BRCA, and the Cooperative Agreement 240061 from the CDC.

Right now in your chat box is a link to a very brief evaluation survey. In addition to questions about tonight's presentation, there's an opportunity to order resources. So we have many that are appropriate, but two in particular, maybe three I want to highlight tonight. So one is just Men's Hereditary Cancer And Your Genetic Legacy. Another is Know the Facts for Men, which includes questions to ask your doctor, signs and symptoms, some genetic fast facts. And then there's Your Jewish Genes, which might also be of interest.

If you fill out the evaluation, you have an opportunity to just order those and we'll get them right out to you. We look forward to continuing this conversation with you. This is not the end. Keeping you up to date in new information and addressing all the diagnoses that are impacted by genetic mutations. Always remember we are here for you. Talking with one of our social workers, one of our genetic counselors. We're here, all free of charge, all confidential, to help you navigate a cancer experience from before diagnosis through long-term survivorship. Please do not hesitate to be in touch with us for any reason.

Again, our email is in the chat box, clinicalstaff@. And then finally, we'll put the survey link up one more time. Thank you for this evening. Thank you for joining us. Thank you to all of our speakers who shared their medical expertise and their personal experience. It was a wonderful evening of education. Goodnight.