Life after Surgical Menopause for the Hereditary Risk and Cancer Community

National Webinar Transcript

August 7, 2025

Presented by:

About Sharsheret

Sharsheret, Hebrew for “chain”, is an international non-profit organization, that improves the lives of Jewish women and families living with, or at increased genetic risk for, breast or ovarian cancer through personalized support and saves lives through educational outreach.

With regional offices in the Midwest, Northeast, Southeast, West, and Israel, Sharsheret serves 275,000 women, families, health care professionals, community leaders, and students. Sharsheret creates a safe community for women facing breast cancer and ovarian cancer and their families at every stage of life and at every stage of cancer - from before diagnosis, during treatment and into the survivorship years. While our expertise is focused on young women and Jewish families, approximately 25% of those we serve are not Jewish. All Sharsheret programs serve all women and men.

As a premier organization for psychosocial support, Sharsheret works closely with the Centers for Disease Control and Prevention (CDC) and participates in psychosocial research studies and evaluations with major cancer centers, including Georgetown University Lombardi Comprehensive Cancer Center. Sharsheret is accredited by the Better Business Bureau and has earned a 4-star rating from Charity Navigator for four consecutive years.

Sharsheret offers the following national programs:

The Link Program

Peer Support Network, connecting women newly diagnosed or at high risk of developing breast cancer one-on-one with others who share similar diagnoses and experiences

- Embrace™, supporting women living with advanced breast cancer
- Genetics for Life®, addressing hereditary breast and ovarian cancer
- Thriving Again®, providing individualized support, education, and survivorship plans for young breast cancer survivors
- Busy Box®, for young parents facing breast cancer
- Best Face Forward®, addressing the cosmetic side effects of treatment
- Family Focus®, providing resources and support for caregivers and family members
- Ovarian Cancer Program, tailored resources and support for young Jewish women and families facing ovarian cancer
- Sharsheret Supports™, developing local support groups and programs

Education and Outreach Programs

- Health Care Symposia, on issues unique to younger women facing breast cancer
- Sharsheret on Campus, outreach and education to students on campus
- Sharsheret Educational Resource Booklet Series, culturally-relevant publications for Jewish women and their families and healthcare Professionals

Disclaimer

The information contained in this document is presented in summary form only and is intended to provide broad understanding and knowledge of the topics. The information should not be considered complete and should not be used in place of a visit, call, consultation, or advice of your physician or other health care Professional. The document does not recommend the self-management of health problems. Should you have any health care related questions, please

call or see your physician or other health care provider promptly. You should never disregard medical advice or delay in seeking it because of something you have read here.

The information contained in this document is compiled from a variety of sources (“Information Providers”). Neither Sharsheret, nor any Information Providers, shall be responsible for information provided herein under any theory of liability or indemnity. Sharsheret and Information Providers make no warranty as to the reliability, accuracy, timeliness, usefulness, or completeness of the information.

Sharsheret and Information Providers cannot and do not warrant against human and machine errors, omissions, delays, interruptions or losses, including loss of data.

Pnina Mor: Welcome and thank you for joining us for tonight's webinar. I'm Pnina Mor, I'm director of Sharsheret Israel Support Services. I just want to give all a few housekeeping items. Today's webinar is being recorded and will be posted on Sharsheret's website along with the transcript. Participants faces and names will not be in the recording.

You may have noticed that you were muted upon entering the Zoom. Please stay muted during the call. We will hold a Q&A (question and answer) session at the end of the presentation. If you have any questions during the presentation, please type them into the chat box and we'll try to get to as many as possible during that session.

I want to remind you that Sharsheret is a national and international not-for-profit cancer support and educational organization, and does not provide any medical advice or perform any medical procedures. Our full medical disclaimer is in the chat.

Okay. This is our second Israeli webinar in our new series highlighting cancer experts from Israel. Sharsheret opened its office in Israel just over a year ago to expand Sharsheret's mental health support and educational programs. We are now offering English speakers confidential and local one-on-one emotional support and mental health counseling, patient navigation to work through the complex Israeli medical system and peer support to connect with other Israeli women facing similar diagnosis.

If you or someone in your family or someone you love is facing breast cancer or ovarian cancer, or they have an increased genetic risk for cancer and is living in Israel, please don't hesitate to reach out to us. Below is our Sharsheret Israel website and my contact information.

The topic of this evening's webinar is the challenges facing women dealing with surgically induced menopause, which in simple language means removing healthy, functional ovaries as a risk-reducing procedure and menopause as a result of cancer treatment. Menopause is accompanied by many physical and emotional symptoms including mood swings, hot flashes, decreased energy, sleep disorders, decline in sexual drive, osteoporosis, and the list is never-ending.

Tonight we'll hear Dr. Srebnik's insights to this challenge. But before we welcome Dr. Srebnik to the screen, I'm happy to welcome Shira who will share her story. Shira?

Shira: I just unmuted. Hi, everybody. Thank you. I'm very, very happy to be here. My name is Shira. I currently and have been living in Israel for the last 12 years. I am 48 years old. When I was 32, I was diagnosed as a, BRCA1 carrier. I was told that I would be, chances are I would've received cancer. If I didn't go and get tested

for it that the chances of me getting cancer, breast cancer specifically were 88% and then ovarian cancer was 45%.

So I knew that my window of opportunity for taking care of my own health was in my hands. And then that window was closing. So at 36, I went ahead and I got a bilateral prophylactic breast mastectomy and I was encouraged to have my ovaries removed by the age of 40. Everybody kept saying 40 was that kind of magic number. I had till the age of 40 to take care of my ovaries. And I knew that it was going to come with some challenges, that long laundry list that Pnina was discussing. I experienced all of those things.

At the age of 40, I was now already living in Israel and I was being kind of taken by my hand with the Noga clinic in Shaare Zedek. I went ahead and I had my surgery done at Shaare Zedek Hospital, which is significantly different than the way things are done in America. I had to go through a board. I had to be approved. They issued me a date to have my surgery and I had to spend the night before in the hospital getting all set up, which was a lot different than the way things were run in America.

I had also met with a male doctor who encouraged me to have my HRT therapy in place the second I finished the surgery. And so within a week of having my ovaries removed, I instantaneously experienced what it meant to have a hot flash. I really had no control over my mood swings. I was definitely sleep-deprived. There were a lot of issues that definitely came about, and therefore I knew I had to get on the hormone replacement therapy.

They said that the best thing for me to do would be to go on the patch system, which meant alternating stickers, kind of like a hormone in these stickers that I would place on my body and alternate every three days from one side of the body to the other side of the body. And to say that that didn't come with its own set of problems, it most definitely did. The stickers themselves would get caught on my clothing. I would sometimes forget, maybe it would be two days, maybe it would be three days.

And the doctor as well had encouraged me to fabricate my period because I ended up maintaining my uterus, but I had both my ovaries and my fallopian tubes removed. They wanted me to still fabricate a period. He said I didn't need one once a month, but once every three to four months was sufficient.

So here I am now in charge of my own body, really in my hands, and I went about this process of alternating the patches every few days, every few months I'd fabricate a period, and this went on for about two and a half years.

At around Corona times, I had these surgeries done in about 2017, 2018. When Corona hit, the patches were no longer being sold in this country. They could no longer receive them in this country. And I remember spending a good few weeks running around super farm to super farm, chasing these patches to no

avail. And I ended up getting in touch with Pnina who then was able to change my prescription from this patch form to a pill form, which personally was much better. It just meant really the pills going into my bloodstream immediately.

So it was like this for about a year or so, I was on one milligram of estrogen and then I ended up spotting. So I had to up my dosage to two milligrams. So to say that things weren't necessarily so smooth, they were as smooth as they could be smooth, but it really meant me taking the bull by the horns and leading my own medical journey and taking care of my health the way that I knew that I could do best.

And so I am still on these pills. I am thank God alive and well, and I am here to help in any way I can. If anybody has any questions, I'm more than happy to answer. But this is definitely a lifelong journey. It is not something that just you have your over years removed and that's the end of it. You still have a significant amount of life left and a significant amount of health to take care of and people who are relying on you and counting on you, and here I am alive and well to tell the tale, but it is definitely something that you need to be responsible for and not to be afraid of and to really just go ahead and do it because no one else is going to take care of your health but you.

So thank you. Anybody else?

Pnina Mor: Okay. Shira, I want to thank you very much. I just want to make something clear. I didn't give you the prescription. I arranged for you to get a prescription.

Shira: Correct. But you were very instrumental. It was a rather trying time.

Pnina Mor: Okay. And really thank you very much because hearing your own personal story, it gives us an insight to what actually happens and how you faced it and where you are today. So thank you very, very much.

Shira: Absolutely. My pleasure.

Pnina Mor: Okay. All right. We are going to continue. We are honored to be joined this evening by Dr. Naama Srebnik-Moshe who is director of the Reproductive Endocrinology Services at the Shaare Zedek Medical Center. Dr. Srebnik is a specialist in obstetrics, gynecology and fertility. She's a senior physician at Shaare Zedek Medical Center and the Department of Obstetrics and Gynecology and the IVF in Vitro Fertilization Unit. But she not only works full time in the hospital, but she's involved with other organizations like Sharsheret where she is one of the member of the Medical Advisory Board, as well as other organizations and societies.

Just to give you an idea, and these are only some of them, the Israeli Society of Pediatric and Adolescent Gynecology, the Israel Menopause Society, where she's actually responsible for their website, the journal website, as I said before,

the Israel Association of Obstetrics and Gynecology and the Israeli Fertility Association and ESHRE, which is the European Society of Human Reproduction and Embryology. With all that, she's also a senior lecturer at the Faculty of Medicine at the Hebrew University and she's a coordinator of the BRCA medicine course at the Tel Aviv University.

She's recipient of numerous awards as a result of her research in the field of fertility and topics related to the BRCA mutation carrier status. From a personal friendship, I can tell you that Dr. Srebnik puts her whole being into delivering treatment and care for that whole long list of her medical professionalism. She's something special. So go ahead.

Naama Srebnik-M...: Oh my God. I'm excited. Okay. So hi, everyone. After this amazing introduction, I would like to dive into our issue. So let's start talking. I will share my screen, we'll start talking and at the end we'll even have some time for questions.

So life after surgical menopause. You just heard Shira and I think that what she was very shortly briefing, the very short story that she tried to put into a few minutes is a life story because it is challenging. It's not something simple. Sometimes we know that mastectomy is a large operation, very complicated, and you have to really think about it. And that the surgical menopause, the BSO is very simple. You just go in, you go out and in an instant your ovaries are out and oh my God, what just happened to my body? And women are not prepared. So we need to prepare. And a part of it is what we're going to do today.

Okay. So we all know I'm not telling you anything new that the chances of cancer diagnosis with BRCA1 intubation carriers are very high. I'm going to focus on the ovarian cancer risk that we know that for BRCA1 carriers, we're talking about a cancer risk that starts increasing around the age of 35 to 40. And for BRCA2 carriers, it's a little bit later.

So this is why we recommend the risk-reducing bilateral salpingo-oophorectomy in order to decrease this ovarian cancer risk. And it's something that is well known and it's kind of obvious that everyone needs to go this operation really to save lives. But what is the impact of removing functional ovaries? Now we know that functional ovaries at the age of 40, they're very functional because we have our periods, we ovulate. Everything is very, very hormonal. But even if you were diagnosed at the age of 50, and if you still have estrogen in your system, even when you're postmenopausal, but very young postmenopausal, that means you're a year or two after your periods stopped, you still have estrogen in your system.

So this operation might not go without implications. So why is it so important? Because we know that there are many tissues in our body that have estrogen receptors. It's the cardiovascular system. Of course, it's the breast, it's the liver, pancreas, adipose tissue. We all are familiar with the fact that people in menopause, the fat distribution changes from thighs to abdomen. We know that things are changing. Bone marrow, musculoskeletal system, kidneys, our

lungs, everything has something to do with estrogen. And we now took this estrogen from our body.

So that might cause a lot of complications in the next years. But the main long-term consequences of early menopause that are documented in studies are the following. We're talking about vasomotor symptoms, we're talking about sexual dysfunction, vaginal atrophy, and all around the urinary system. More signs of atrophy and relatively more events of infection in the bladder. Overactive bladder is more common after menopause.

And we also talk about cognitive decline and Parkinson's. We talk about cardiovascular risk. We are talking about death, increased death, and of course the bones are affected by the loss of estrogen. So this is not something like a naive event. We need to address this major event of salpingectomy of early menopause that we go into.

Now the symptoms as Shira pointed and also Pnina are very wide. But the most common ones are the hot flashes and chills, sleep disturbances, mood swings, thinning of the hair, dry skin. But I don't want to focus on the symptoms.

The symptoms are something that we need to treat. Okay? There's no question about it. It might be hard. We might need to adjust the dosage. We need to start from one milligram then add to two. Some of my patients even get three milligrams of estrogen in order to fix this symptom issue. But that's not the only thing. And the reason I want to focus on the risks of early menopause is because I see many women that choose not to take hormones and I do want to prevent that.

So let's start with the cardiovascular risk. So this is a large study that was published in 2020 about a type of menopause, age of menopause and the risk of cardiovascular disease. It's a large study of 200,000 women. They're not BRCA carriers, okay? They were women from 10 different studies that all the data was collected and they were trying to see what age or what is the impact of the age the woman undergoes menopause to the cardiovascular risk.

So I just want to show you that there is a difference between natural menopause and surgical menopause. If you go to the right, the risk is higher. So you can see that after surgical menopause, the risk is higher significantly than natural menopause. And that's because women that go into natural menopause, even if in the same age, they might all be under 40, okay? They still have some estrogen in their system, their ovaries are not dead. They're still a little bit active. But if the surgeries are in the pathology, then you have no estrogen.

So the risk of cardiovascular disease and the risk of stroke is significantly higher. And as you can see here, we're talking about twice as much risk if you're under 40 and you chose not to take hormonal therapy. But if you do take hormonal

therapy, you manage to fix it, but not completely. That means that even when we do give the treatment, then we need to make sure we give enough treatment and for enough time and not to take hormones for one or two years and then say, "Oh, that's enough for me." We have to take the hormones at least until the age of natural menopause, which is 51. And I personally think that we need to even increase the time that we give the medication because as I showed you, women in natural menopause still have estrogen in their systems.

So I really believe that we need to give hormonal therapy for a longer time for an older age. And also we have to make sure we give enough estrogen and it cannot just end with a medication. It has to also affect our lives. We have to make sure that we are physically active and that we keep our weight. And we will talk about this in a minute.

Okay. So let's talk a little bit about mortality. This is another large study. 26 studies piled into a collection of all the data of women undergoing surgical menopause. And you can see that all-cause mortality was higher in women that underwent the surgery under the age of 45, which is basically everyone with BRCA mutation because we do recommend the operation to be done until the age of 40 or 45 depends on your mutation.

Mainly it's because of cardiovascular death. Almost twice as much as we said before. And we're talking about dementia risk and Parkinson's disease. And these are not things that you can just dismiss.

The bone health, of course, is also something we have to address because it's measurable. We can do bone density tests and we can see where are the bones and we can see that women that don't take hormonal therapy after their menopause, then there is a decline in bone health and this can cause fracture. And we know that a hip fracture is also a cause for death. 33% of people undergoing hip fracture at the older age will die at the year, the same year that the fracture happened.

So if what we want to do is we want to prevent, the main thing in medicine is to prevent disease and not to fix it and treat it. So as you can see, if women were taking hormonal therapy, then the rate of women suffering from osteopenia, from decreased bone health was much smaller than if you didn't take any medication. Okay? 16% compared to almost 50%. So we do have something in our hands that can alleviate the risks of surgical menopause and also treat the symptoms. And it's highly important to make sure that you get the medication.

We have other health issues, as I said before, and this is a large study done in the Mayo Clinic in the states of women undergoing surgery under the age of 50. They were followed up for 14 years, which is quite a long time. And they checked 18 different health situations. What you can see is that depression was higher, depression rate. Of course, yeah, you're menopause at an early age so you have depression. No. I'm just kidding.

Hyperlipidemia, cardiovascular disease as we said before, but also, which is kind of interesting, also, risk for asthma, risk of lung disease, osteoporosis, of course, as we talked before. So we need to address these issues and this is why the treatment is so important. And all the guidelines talk about the need for hormonal therapy in women in early menopause.

Okay. So we're talking about this is a North American Menopause Society. They changed their name, but I never remember the new name, so I still call them the same. This is from 2022. But as of today, they haven't change their recommendation. That we're talking about hormonal therapy and this can help menopausal symptoms, bone loss, heart disease, and cognitive decline and dementia. And younger women may require higher doses. And this is the main issue that we need to remember. That all the medications that you can buy, they're all a very low dose.

We all kind of post a trauma, post-traumatic from the time that the medical society was very afraid from hormones. They were very afraid because everyone thought that hormones cause cancer. Breast cancer specifically. We're going to talk about it in a minute. And this is why people stopped prescribing hormones to women and women were suffering. And it's not that they didn't care. They thought that the risk is so high they don't want to give medication.

Now we know that they were wrong, but from those days, the pharmacies and the companies lowered the dosages of the hormones. So now if you want to have a higher dose of treatment, you need to combine your own medication, take this from here and this from that, or take two pills a day. So it's more complicated and it's higher amount to adjust the dose for the specific patient, but it's worth it.

So how do we know that it also helps women with BRCA? So we have several studies. This one is the one that only talks about symptoms that you can see that women that did get HRT, hormonal therapy, is significantly improved their symptoms compared to what they had before. Okay? We're talking about sexual function, we're talking about other symptoms, endocrine symptoms, hot flashes and everything else. But we are still in this era that people are afraid. Oh, hormones equals breast cancer and we have a high breast cancer risk. So why should I take hormones? Okay. So let's address this issue.

Breast cancer risk with HRT for carriers. So we have several studies. These are only some of them. We have several studies that examine this specific question, because you are a special population of patients. As you can see, most of the studies show that there is no increased risk of breast cancer in women undergoing surgical menopause and receiving hormonal therapy.

Some of the studies even showed a decrease in the breast cancer risk. Maybe because the women are more aware of their health, they're more into clinics following them up, follow up and testing. We don't really know. But we do know

that medication, hormonal therapy for carriers at the age of 40 to 45, even until 50 for several years, do not increase the risk of breast cancer.

And there is even one study, amazing, that talked about a decreased risk of almost 20% of breast cancer risk for every year the woman was taking estrogen-only replacement therapy. So this is really stronger evidence. So when we look about risk factors for breast cancer, this is not related to BRCA carriers. This is the general population.

At the ages of 50 to 59, you can see that if there are 23 cases of breast cancer for every thousand women, at these ages. If you take hormonal therapy, the increased risk is maximum four more patients. But if you take estrogen-only treatment, then it decreases your risks in four less patients. If you're overweight, your BMI is over 30. Look at the impact on your breast cancer risk. This is so much more important than taking hormones or not taking hormones. And we do know that menopause causes weight gain because our metabolic rate decreases. So we eat the same, but we increase our weight.

So if I manage to give you a treatment that will keep your weight and you won't gain it and you won't become overweight or obese, I will decrease your breast cancer risk. Drinking alcohol also increases the risk of breast cancer and smoking and many other issues. So we have control over our breast cancer risk, not completely because BRCA is a much more significant issue than these small numbers, but if we manage to keep our weight, we do physical activity, we can affect our cancer risk.

Pnina Mor: Naama, excuse me. One second. That last table that you just showed, if you can go back to it. Is that applicable to anyone or just BRCA carriers because there are people in the audience who are not carriers.

Naama Srebnik-M...: This is not for BRCA carriers. This is for general population at the ages 50 to 59. There is no data here of who is a carrier and who is not. Okay? It's information from the UK, a national collection of their data on breast cancer risk. Okay?

Pnina Mor: Thank you.

Naama Srebnik-M...: This is not specifically for carriers. So what are the other strategies that we can do to decrease our breast cancer risk? First of all, there's no other answer than mastectomy. Because if we really want to decrease the risk, we just need these amazing body parts out. But it's a complex decision. It's very hard to make this decision and we do understand that. So we have some other strategies that we can do in order to decrease the risk of breast cancer when you are taking hormonal therapy.

One of the issues that need to be addressed is do we want to offer hysterectomy? Why should we consider hysterectomy? I will show you in the next slide that, well, if you don't have a uterus, you don't need progesterone.

And the progesterone is probably the thing that increases the risk of breast cancer among all the HRT treatment.

So if there is a reason to do hysterectomy, for example, if you're very young and you have many years that you will need to take hormonal therapy, you should consider having a hysterectomy when you're taking out your ovaries, or if you have uterine prolapse, if there are other reasons, if you have myomas (fibroids) or any other reason you should consider hysterectomy, this is the time to discuss it, okay? Because if we don't have a uterus, we don't need to give progesterone.

Another option is give you natural progesterone. We have many studies showing the natural progesterone does not increase the risk of breast cancer because it's very similar to what our body was producing, or there is also the option of no progesterone at all. I think that what Shira was getting is kind of a treatment plan that she was receiving progesterone every three months and this is what she was talking about producing her menses or bleeding. But there are also medications that don't have progesterone at all. And this is also an option specifically to women who are high risk or for women that don't tolerate progesterone because of the side effects. There are HRT treatments without progesterone that still keep our uterus safe.

So why is the progesterone such a bad guy? So this is that study 2002 that stopped women from receiving hormones for 20 years. In this study, there were two main groups. One group had a uterus and they were receiving a specific estrogen with a specific progesterone, and they showed that the combined therapy increased their risk of breast cancer compared to the women that received placebo. But if you were hysterectomized, you did not have a uterus, you were getting only estrogen, then your breast cancer risk was lower than the placebo group.

Meaning, what they thought is that the progesterone is a problem. But progesterone is a name. We have almost three types of different progesterones, progestins specifically, okay? We have the natural, we have dydrogesterone, we have norethisterone, et cetera. We have many, many types. We cannot compare this progestin to the other.

And as you can see here, the women that received estrogen only, in this specific study, the treatment did only good, it decreased the risk of a coronary heart disease, decreased the risk of breast cancer, and decreased all cancers, decreased fracture risk and diabetes and many other things. So this is what we aim to do, this is a treatment that I want to give you. Okay? So if you don't have a uterus, then it's very simple, but even if you do have a uterus, I need to find a medication that will be as similar to this.

So even if I give you treatment, hormonal treatment, I don't increase your risk of breast cancer. Okay? So as I said, the strategies are either giving natural

progesterone or lowering the amount of progesterone and trying to tailor the treatment to the specific patient.

Until when are we going to treat? So that depends. All the guidelines say you need treatment until the age of menopause, which is around 51. But at the age of 51, you may still have symptoms. If you try to stop, you might have hot flashes because 80% of women when they are menopausal at the age of 51 or 52 have symptoms. So why are you, the BRCA carrier, need to be punished because you have a BRCA mutation?

Okay. So we can decide that we want to continue the treatment specifically to women that have symptoms. But as I told you at the beginning, I specifically believe I don't have any data to support this belief that I have is that women that undergo surgery are not like other women that have early menopause because there is no estrogen whatsoever. And I really think that giving treatment for longer time for the age of 55 is even better. But this can be discussed with your gynecologist or menopause specialist.

And the reason I don't fear hormones so much is due to what we discussed earlier and because you have a very large cup full of risk for breast cancer and the hormone therapy is just a drop in that cup. So even if there is an increased risk, it's probably not significant. So we can feel very confident in giving and getting treatment and making sure that we don't suffer from other issues.

Tailoring the treatment might be complex, as you can see, there are many types of women, many types of bodies. As we look different, our body inside is different. So one woman will be fine with one medication and the other one will need a different medication, and a third will need a higher dosage with a third medication. So it might need tailoring and you need to be very, very patient.

Usually what I do with my patients is they get a prescription to start the day after the surgery and they start the medication. We meet after a month because I need to know if they're fine or not. They're supposed to be the same as they were before the surgery. And if they're not the same, I will increase the dose, I will change the medication and until I find the right one for that patient.

So it takes time and you need patience and you need to be able to suffer a bit because we might not be able to find the right specific amazing treatment for you on the spot, but it will work. And it's a long distance one because now you're 40 and you need to take this treatment until the age of 51 at least. So it's worth this effort even though it's quite complicated.

I want to talk a little bit about the non-hormonal options because some of us, some of the women already had a breast cancer diagnosis and this is how they found out that there are BRCA carriers and not all of them are eligible to get hormonal therapy. So we know that if you can't take hormones then it's quite complicated. All the medications that I can give don't affect this risk of

dementia, of coronary heart disease. We will have to work much harder to decrease that risk, but at least for the symptoms, we have some options.

So what are the options? We have options of herbal medicine. Most specifically in Israel, we talk usually about black cohosh but also on a complex of many herbal medications together. We can talk about acupuncture, about CBT, psychological treatment, and we also have very new drugs that are new on the market. One of them is already in Israel, the other one is coming to Israel. And I know that both of them are in the States. They are specifically working on the hypothalamus which controls our body temperature.

And it's a medication that counteracts the effect of not having estrogen. And it works very, very nicely on hot flashes. The new medication also can affect sleep deprivation, but we know that we have more options, although they're not perfect and they're not hormones. But we do have something in our arsenal.

One more thing that we need to discuss before I will open this meeting for questions is androgen treatment. Androgen treatment is a big black hole and that is because there are no studies on women and androgen treatment. And almost nowhere in the world, is the androgen treatment listed for women. So what we do is we give a medication that is for men and we try to adjust it, both the dose and the treatment protocol for women. But we do know that the North American Menopause Society and other societies related to menopause talk about the need of androgen treatment in women that suffer from hypoactive sexual desire disorders.

Now a regular woman has two places that the androgens are produced. One is the adrenal gland and the second is the ovary. Even a menopausal women will still have androgens from her ovary, less, but she will have. So the chances of suffering from this disorder are quite low for women that go into natural menopause. But if we took out your ovaries, then the chances of you suffering from hypoactive sexual desire disorder are much higher, although the adrenal gland is still working.

So it's not automatic that you need test testosterone treatment, but there is quite a good chance that you will need it. So we're talking about five to 10% of women undergoing surgery that will need testosterone treatment. We don't have enough safety data regarding BRCA carriers and testosterone treatment, but we do know that breast cancers usually don't have receptors for androgens. So it's probably safe, although we can not say that for sure.

The treatment protocol is quite complicated, as I said, but there are many ways to overcome this issue, and it's quite common that a woman that underwent BSO, bilateral salpingo-oophorectomy, will need testosterone treatment as an add-on to the estrogen treatment that she is receiving.

Other health recommendations is just make sure that you're taking vitamin D and calcium and do physical activity because this can decrease your cancer risk and it will keep your weight and it will make you healthy and it will decrease your risk for cardiovascular disease and probably many other things. We recommend usually doing a bone density scan when you go into menopause so we can follow up and see that you are receiving enough hormones. It's kind of a way to make sure that the treatment is enough and try to make sure that your weight is stable and inside the limits of normal BMI and overweight is also okay, but don't go into the obese part.

So this is what I wanted to say in short, I'm open to discussion and questions because there are a lot of things that we can talk about and I thought it would be easier to just do it while questioning. Okay?

Pnina Mor: All right. So first of all, thank you very much. It's a great opportunity to get this information. There are some questions. I know some came in before the webinar and some that came in now. I will to share some of the questions. Is there a risk with hysterectomy beyond the typical surgical risk? For example, when it comes to hormones when one retains her uterus, are there extra risks?

Naama Srebnik-M...: It was thought that it might affect sexual function, but now we know that it doesn't affect sexual function. So the only risk is the increased risk of the surgery itself. And this is why if there is any other reason you need to do the hysterectomy then just jump on the option. And also, it needs to be discussed.

So I usually recommend hysterectomy for women that are very young, that will need to get hormones for a longer time. It can also be easier to control all the side effects because most of the side effects of hormonal treatment are due to progesterone. And if you don't have a uterus, you don't have to take progesterone, so you won't have side effects and you'll be happy and your doctor will be happy and everyone will be happy. So no, the only risk is the operating risk.

Pnina Mor: Okay. So on that issue, somebody wanted to know if it's beneficial to have an IUD containing progesterone along with estrogen only HRT? What are your thoughts?

Naama Srebnik-M...: Two issues about that. One is the cancer risk and the second is the treatment. For the treatment, it's very simple. If you have a progesterone IUD, then we love keeping it because it can help us not give you progesterone systemically. And as I said, you will have less side effects, probably, be easier to control the bleeding, the spotting, it's not bleeding. We don't want you to bleed.

So if you have an IUD, keep it in. It's also an option. Usually we can offer putting in an IUD while we're doing the BSO in the same surgery. So it's a good option. Cancer risk related, we don't really know. There are some studies saying that the risk of cancer, breast cancer is quite similar to taking contraceptive pills. So

we don't really know if it's safer than taking natural progesterone or other HRTs. But my “ani maamin”, I mean my belief is that, again, this should not be the issue.

The risk of cancer because of the mutation are so much higher than any medication that you will choose to take. So this according to my medical, I don't know how to say that, advice should not be a reason to choose or not to choose the IUD. It's much easier if you have an IUD to control the bleeding. That's for sure.

Pnina Mor: Okay. Could you address the difference between synthetic and bioidentical hormones? Are all lab HRT synthetic?

Naama Srebnik-M...: Okay. It's nice. It's a good question. Okay. Bioidentical hormones are a problem because there has not been studies and they're not authorized by anyone, not the FDA, not Israeli, not official. So bioidentical are a problem, especially the ones that you buy on iHerb without a prescription.

The estrogen that we have in the HRTs that we use, most of them are natural estrogen. They are synthesized in a laboratory, but they are equivalent to the natural estrogen; with the exception of two specific types that are not so common. If you want to have very natural hormones, they are available in the medical “box”,- regular estrogen, as well as natural progesterone. You don't need to go for the bioidentical that we don't have enough data on them.

Pnina Mor: Okay. I just want to remind participants here that there some questions we cannot address if it's a personal situation. So I may change them a bit. Like for instance, what are the advantages and disadvantages of a transdermal HRT patches? And we cannot actually relate to specific names or..-

Naama Srebnik-M...: Brands.

Pnina Mor: ... manufactural, what it's called? Oh, I can't say it in English either.

Naama Srebnik-M...: Nice. It's not only my problem. Okay. So transdermal and oral are a bit different. First of all, if you have any risk factors, we would rather give you transdermal. For example, if you're smoking, we would rather give you transdermal. If you're obese and you have hypertension and pre-diabetes, we would prefer to give you transdermal treatment because it's kind of less risky.

The other advantage of transdermal is that it does not affect libido. The oral can, it doesn't decrease, nothing decreases libido, okay? Nothing. Everything is good for libido, but the transdermal might be even slightly better. But the oral medication is sometime easier to use and also decreases lipids. So it's better for someone that has mild hyperlipidemia.

So basically at the end, you can choose whatever is easier for you to take. If it's easier for you to use a patch, go for the patch. If it's easier if you take a pill, take a pill. If it's easier for you to use a gel, go for the gel, or the only important thing is that you will take the medication at least until the age of 51. So whatever is easier for you.

Pnina Mor: Okay. I just want to remind the participants, we cannot open it for direct questions or if you have any questions, just put them in the chat. I'll try to get to as many as possible. Someone wrote about the problem of hypercoagulability, can they take hormones? What's available?

Naama Srebnik-M...: Okay. So that's a very good question. And that depends on the age and the type. Okay. So for example, some types of hypercoagulation mutations, if you'd never had a personal or family history you can get transdermal hormones. Others, we might decide with the hematologist that is treating this specific patient, that we will give anticoagulation treatment with hormones because we believe the hormones are so crucial. So we have several patients getting a type of anticoagulation with HRT and it's specific for each patient according to the risk, to the age and all those issues that we need to take under consideration.

Pnina Mor: So in continuation to that question, somebody asked if blood thinners are necessary with transdermal, that's what you said that would speak to the hematologist?

Naama Srebnik-M...: Yes. It depends on the type. On the type because there are several types that you don't need blood thinners with and others you do. So it's specific according to the family history.

Pnina Mor: Okay. What would you recommend or suggest for someone who had hysterectomy due to uterine cancer and they cannot take HRT?

Naama Srebnik-M...: Yeah. It depends. Some types of uterine cancer, they can't have HRT. It depends on the type and the spread and the grade and stage. So again, it's specific according to the age and the symptoms and we need to find something that is not hormonal. It's a discussion with the oncologists and with the gynecologist. We will try to find something. It's either this NK3 receptor antagonist or herbal medication or acupuncture. Usually, we try everything until we find something that helps.

Pnina Mor: Do you recommend doing a complete hysterectomy and ovary removal during a C-section delivery or would you advise against?

Naama Srebnik-M...: No. No. It's complicated and everything can bleed. It's not a good time. No. No. Separate operation.

Pnina Mor: Okay.

Naama Srebnik-M...: BSO but not hysterectomy. It's not a good idea.

Pnina Mor: And what about the risk of endometrial cancer with HRT?

Naama Srebnik-M...: Well, this is why we're giving progesterone. So the risk of very, very, very low, very low and they're treatable. Usually, the main symptom of endometrial cancer, the type is related to HRT, the symptoms are bleeding. So if you're bleeding, we will probably check your endometrium and then we'll know, then we'll treat, you won't even have to go hysterectomy. Usually we just finalize the treatment with medication. So it's not so complicated and the risks are not high. So this should not be an issue to think about.

There is a slight increased risk of endometrial cancer for BRCA carriers, but it's a different type. It's not related to HRT and it's not a reason to recommend hysterectomy.

Pnina Mor: Okay. And what do you think of the last research of removing tubes only, salpingectomy, as a preventive measure?

Naama Srebnik-M...: Okay.

Pnina Mor: It's a whole topic on its own.

Naama Srebnik-M...: It's a whole topic. There's a lot of talk about. There hasn't been yet a study with cancer prevalence, for the women that delayed the timing of BSO. Okay? So they don't have this data yet, so we can't say for sure if it's safe or not.

What is optional is if you want to remove your tubes at the age of 30, and then delay the oophorectomy to the age of 40, that you can do. But having oophorectomy at the age of 50 because you took out your tubes is not supported yet in the literature. It'll be in a few years, but not yet.

Pnina Mor: Is estrogen and testosterone the preferred starting treatment for HSDD?

Naama Srebnik-M...: Okay. Usually only estrogen is needed or with progesterone if you have a uterus. Testosterone is needed only in five to 10% of women. So I usually don't start with it. I give it a shot with the estrogen and a full dose and if still needed, then we add the testosterone. There's also testosterone ovules that you can insert vaginally that can also sometime do the trick, and if not then, you go for the full testosterone treatment.

Pnina Mor: One other question. Should you take progesterone even if you had your uterus removed? I think you addressed that.

Naama Srebnik-M...: No. It's a debate. The medical community thinks not, but there is specific researchers that think that progesterone might be important for the brain, but if any progesterone is needed, it needs to be the natural progesterone. Okay? So

if you take anything, it should be the natural progesterone, but there is no reason today to recommend this treatment if you are after hysterectomy.

Pnina Mor: Okay. We only have a few more minutes. So this was one question that came in during the registration. Any advice on what you can do if your body stops absorbing estrogen? The levels will go up, like this person was describing that levels may go up for a while, but then they drop again. What are your thoughts on that?

Naama Srebnik-M...: So we need to change the way of administration because some women when they take orally after a while for several reasons, it doesn't work anymore. So we switch transdermal or the opposite. We can combine medications. For example, a gel and a patch or a gel and a pill. It happens. It's quite common. And I think this is the way to address, just give it from different ways so it will be absorbed in different modalities.

I saw a question about until what age? So I'm just going to say that there is no limit. Okay. If you need the medication, if you need HRT for symptoms, there is no limit. You can continue until the age of 120. Bezrat Hashem okay? So as long as you need it, you can get it. Okay?

Pnina Mor: Okay. Actually, I think we only have a minute left and then I have to wrap this up. Let me see if I can find what it says in the chat. One more minute. Do the non-hormonal options that you suggested help when it comes to cardiovascular disease?

Naama Srebnik-M...: We don't know yet.

Pnina Mor: Or symptoms?

Naama Srebnik-M...: They help for symptoms. We don't know about the cardiovascular risk because there's not enough studies on that. For example, some of the herbal medicine might be beneficial, but it's not the same as HRT. That's for sure.

Pnina Mor: And at what point should an endocrinologist manage HRT versus a gynecologist?

Naama Srebnik-M...: Yeah. If the endocrinologist feels safe, not safe, you know?

Pnina Mor: Sure of himself?

Naama Srebnik-M...: Sure of himself, then he can do it. Great. It depends on... Not every gynecologist understands HRT and not every endocrinologist understands HRT. So you need to find the right doctor that understands and doesn't fear the medical treatment and it doesn't matter which kind of doctor he or she is.

Pnina Mor: Okay. So I think our time is actually up. I want to thank you very much and I do want to say that if someone has questions, you can send them to me and I will,

if Dr. Srebnik agrees, I will refer them to her and I will send you the answers by email or by WhatsApp and my information is in the chat. Okay.

So I just want to wrap up and thank you again and ask you all to please take a moment to fill out the survey. It's in the chat box. And I want you to remember that Sharsheret is here for you and we are here for you and your family in the US and in Israel.

We try to provide as best as we can, emotional support, mental health counseling and other programs to help you navigate you through whatever cancer experience you're having, or even if you're a high risk and you're having difficult time dealing with it, just turn to us, we're here for you. There is no cost. It's completely confidential. And again, our contact information is in the chat box. So thank you all for joining us. I hope you enjoyed it and good night.