Perimenopause Uncovered: What Every Woman Needs to Know Transcript

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Intro to Perimenopause

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And since the progesterone is produced mainly after ovulation in that beautiful phase, second half of the cycle levels drop in population become infrequent.

The lower levels of progesterone from to regular periods, most likely the shortening of the cycles that will be symptoms of patients groups conflict when they come to me, that got me.

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Hi everyone, it's Doctor Jen. Today I wanted to do a solo episode and talk to you guys a little bit about perimenopause. Perry, menopause seems to be a topic of misinformation on the internet and on social media, so I need to break a few things down and just have you guys chill with me and and learn a little bit.

Because knowing more about perimenopause, about your hormones in the body, can really not only help you with understanding the process you're going through, but empower you and also have you breathe a sigh of relief because you're like, oh, these things are kind of normal.

So perimenopause refers to the transitional period before menopause, when a woman's body begins to undergo changes in hormone production. This leads to irregular menstrual cycles and symptoms like hot flashes, mood swings, and changes in our metabolism.

During this time, the levels of our reproductive hormones estrogen and progesterone fluctuate widely, which is the primary reason for symptoms women experience.

Now, when are you going through perimenopause? It depends. Ask your sister. Ask your mother. Ask your grandparents when they went through menopause. And then you can kind of decipher when perimenopause cause could be.

It could start in the mid 30s or mid 40s and it could be ten years long.

Normal Menstrual Cycle Basics

I see women starting perimenopause about ten years with their symptoms, about ten years before menopause. So first before we talk about the changes that happen, what is a normal menstrual cycle.

So in a normal menstrual cycle, four main hormones work together to regulate ovulatory menstruation. This is the follicular. Stimulating hormone FSH luteinizing hormone LH estrogen and progesterone.

The different phases of the cycle follicular phase is approximately day one, which is the first day of bleeding through day 14. So FSH early in the cycle V2 cherry gland releases follicle stimulating hormone, otherwise known as FSH, which stimulates the growth of the follicles, otherwise known as eggs in the ovaries.

Estrogen. As the follicles grow, they produce estrogen, particularly estradiol. This is the most potent form of estrogen. Estradiol helps building up the uterine lining.

The endometrium in preparation for a possible pregnancy. To make that endometrium nice and comfy for that egg that is fertilized. Ovulation is around day 14.

You get an LH surge mid-cycle. This is that luteinizing hormone. A spike in the latch triggers ovulation the release of mature egg from the ovary. So a lot of women get those LH strips to see if they're ovulating or not.

And I recommend that a lot to my patients to see when they're ovulating. Sometimes people obviously a little bit earlier than day 14, sometimes a little bit later than day 14.

So those LH trips are nice because then you can tell. And that will help with natural family planning. So also around ovulation estrogen peaks. So right before ambulation estrogen levels peak signaling, the pituitary to release LH.

Then you have the luteal phase. Day 14 to 28 progesterone after ovulation the leftover follicle called the corpus luteum starts producing progesterone.

Progesterone helps maintain the uterine lining in the case of a fertilized egg. When it implants, if there is no fertilization, both estrogen and progesterone levels drop towards the end of the cycle, leading to the shedding of the uterine lining.

But progesterone does peak in the luteal phase, and we do have higher progesterone than our estrogen levels. So progesterone is that dominant for her own throughout the cycle.

Estragon progesterone work together balance estrogen builds up the uterine lining and progesterone progesterone stabilizes it. Estrogen is often called the growth hormone, while progesterone is more known as the calming hormone because it opposes some of the overstimulating effects of estrogen.

So what happens during perimenopause? Okay, menopause is a time of hormonal chaos. And a lot of my patients, a lot of my female patients, they're all also in chaos, too.

And I tell them they come into my office, they're so upset, they're told by their primary care doctor, totally gaslit, that it's all in their head, that they're just depressed, or they have too many kids and they give them an antidepressant.

No, you're in hormonal chaos. But that doesn't mean that we can't calm the chaos. So the key changes that the ovaries start to produce, start to become less responsive to the signals from the brain, the FSH and LH.

This is because, the follicles aren't as robust, you know, as who when you were 19. But this leads to an erratic production of estrogen and progesterone.

And this hormonal fluctuation causes many of the symptoms associated with perimenopause. So estrogen levels during perimenopause, these estrogen levels, they fluctuate wildly.

It's like a wild ride. Sometimes estrogen can be excessively high for short periods, but other times it can be plummeted very low unexpectedly. So some women can experience estrogen dominant symptoms during early perimenopause, where the estrogen levels remain relatively high while the progesterone levels are then falling, and this can cause symptoms like heavy periods like out of nowhere or breast tenderness among my patients, like think that they're pregnant and then it it's not it's very menopause mood swings and bloating.

And these mood swings are one of the big symptoms that are terrible. And then we're having progesterone on the

other hand, which is just gradually declining.

So this is actually one of the first hormonal changes in perimenopause is the decline in progesterone the ovaries. They don't have this regularly. And since the progesterone is produced mainly after ovulation in that luteal phase, second half of the cycle levels drop in ovulation become infrequent.

The lower levels of progesterone can lead to irregular periods, most likely the shortening of the cycles that will be sometimes a patient's first complaint.

When they come to me that yeah, my cycles are like 24 days and they used to be 28. Anxiety is big. It is so big.

Hormonal Changes in Perimenopause

I mean, the amount of women that come to me in their 30s or late 20s sometimes even, and they have this anxiety and it's gone with progesterone. Then correctly, that will be another day.

We will talk about testing anxiety so that, yes, sleep disturbances and PMS like symptoms, maybe they've had them, they've worsened, or maybe they have them even from high school, which means they probably had some progesterone deficiency then too.

Or estrogen dominance. But this is because progesterone is calming and stabilizing and the effects are diminished as progesterone lowers. And then we have those erratic estradiol estrogen spikes.

The brain also compensates for the ovaries lack of responsiveness by producing more of a sage in an attempt to stimulate ovulation. But the ovaries often don't respond effectively, leading to those irregular cycles.

So these fluctuating hormone levels cause a variety of symptoms. The irregular periods menstrual cycles may become shorter, longer, heavier later. And I hear it all for my patients coming in hot flashes.

And this is a sudden waves of heat due to erratic changes in estrogen levels, mood swings and irritability caused by hormonal imbalances, especially with that falling progesterone.

Steady decline occur during sleep disturbances. Low progesterone can affect the brain's calming mechanisms in women and perimenopause. I specifically give them oral progesterone because oral progesterone is going to affect in a positive way that gathers sector and stimulate that gamma receptor, and the sleep will be improved.

And then vaginal dryness, estrogen levels influence the moisture in the vaginal tissues. So where we have the estrogen receptors and these levels fluctuate and women may experience dryness and discomfort, maybe even like a heavier feeling, especially for women that have had kids when they have that heavy feeling in the pelvic floor.

Now, what about weight gain? Well, insulin resistance during perimenopause is a common issue, and it's related to the changes in hormone levels that occur during this transition.

So let's understand a little bit more why insulin resistance happens during perimenopause. So let's go back to the basics. What is insulin. Insulin is a mirror produced by the pancreas that allows the cells in the body to take up glucose, sugar from the bloodstream and use it for energy.

Without insulin, glucose remains in the blood, leading to those high blood sugar levels, which over time can cause damage to the organs and tissues. And it turns into type two diabetes.

Insulin sensitivity is when cells respond to insulin, they easily absorb glucose from the blood, and those blood sugar levels are stable. And you can see this in a continuous glucose monitor.

Patients that have insulin sensitivity and are eating food that is appropriate. They have those steady levels okay. In contrast insulin resistance occurs in the cells become less responsive to insulin.

The pancreas has to compensate by producing more insulin to try to force glucose into the cells. This leads to hyperinsulinemia. And this is elevated insulin levels and can eventually result in high blood sugar levels contributing to type two diabetes.

This is why I love a humor. I ask for humor. Romeo homeostatic model assessment for insulin resistance because we look at the fasting insulin in the fasting glucose and gives us a good picture if the patient is insulin resistance or heading that way.

So estrogen decline and insulin sensitivity because these hormones as certain and progesterone were there which they're primarily involved in the reproductive system.

They also have significant effects on metabolism fat storage and insulin sensitivity. So estrogen has a protective effect on insulin sensitivity. It helps regulate body fat distribution and enhances the body's ability to use insulin effectively.

Estrogen promotes a more favorable fat distribution, particularly keeping fat stored in the subcutaneous under the skin tissues. In perimenopause, as estrogen levels decline, more fat tends to accumulate in that visceral area around the internal organs in the abdomen, and the inflammatory visceral fat is associated with insulin resistance because it releases inflammatory substances called advocate genes, which interfere with insulin's ability to fluctuate properly.

And this visceral fat is where perimenopause and then menopausal women really complain about gaining weight. Host. For menopausal women, 20 pounds is the average weight gain.

So we want to stop that early and get things under control. Estrogen also helps the body process glucose more effectively, increases glucose uptake in the muscles, and stimulates the liver to be more sensitive to insulin.

So when estrogen levels decline or fluctuate or drop during perimenopause, these metabolic processes become less efficient, leading to reduced insulin sensitivity.

Opposite of what we want estrogen also improves mitochondrial function. This is the powerhouse energy producing parts of the cell. When estrogen levels decline, the ability of the cells to efficiently use glucose for energy decreases, leading to more glucose remaining in the bloodstream.

Symptoms: Periods, Mood, Sleep, and Vaginal Dryness

And while progesterone plays a calming and stabilizing role in many of the body's systems, it can have a more complex relationship with insulin. So high estrogen levels during perimenopause, which isn't as common, but when the position is higher, it can slightly reduce insulin sensitivity, and this is even more noticeable in that luteal phase of that menstrual cycle.

After ovulation, that second half, when progesterone peaks. But this reduction in insulin sensitivity is usually balanced by estrogen in premenopausal women.

However, during perimenopausal, that fluctuation of both hormones can disrupt that balance, and then low progesterone periods when progesterone levels drop during perimenopause, particularly in the later stages.

Or I see it in the early stages because of so much stress and cortisol, the hormone pathways favoring that cortisol. So we're seeing the low progesterone.

It can contribute to insulin dysregulation. So the mechanisms behind this insulin resistance during perimenopause. Visceral fat accumulation is a big concern because as those estrogen levels decline, that fat redistribution occurs with more fat in the belly, visceral fat and in the belly around the organs.

It releases substances like free fatty acids and pro-inflammatory cytokines TNF alpha and interleukin six, and these

interfere that insulin signaling pathway, making the body less responsive to insulin, leading to insulin resistance.

And that's why it's so hard when people have that visceral fat to lose weight. Genetically, they could be a non responder to caloric deficit. And then they're producing all these inflammatory cytokines.

So think of your body cells as locks and insulin as the key. Normally insulin fits into the locked the cell receptors easily allowing glucose to enter into the cells.

But when visceral fat increases. It releases substances those inflammatory cytokines that gunk up the lock, making it harder for insulin. The key to fit.

As a result, glucose can't enter the cells easily, and the body's compensates by producing more insulin. And we see you using the FSA insulin labs. Also during period menopause, the decline in estrogen leads to an increase in systemic inflammation.

Estrogen has so many important roles in our body, and estrogen normally has anti-inflammatory properties, helping to keep inflammation in check. But without enough estrogen products, low grade inflammation sets in, and this further disrupts insulin signaling.

Pro-inflammatory molecules such as C-reactive protein and cytokines interfere with that insulin receptor on the cells, leading to insulin resistance. What about muscle?

Estrogen helps maintain insulin sensitivity and skeletal muscle in the liver. In muscle, estrogen promotes glucose uptake by enhancing insulin's ability to activate glucose transporters on the muscle cell surface.

But when estrogen declines, muscles become less efficient at taking up glucose from the bloodstream. Now, in the liver, estrogen helps regulate glucose production.

But without enough estrogen, the liver tends to produce more glucose, even when blood sugar levels are already elevated and this excess glucose in the bloodstream worsens insulin resistance.

So you could see how this can be a big problem and how women get stuck. Now it's not over yet. As the cells become resistant to insulin, the pancreas tries to compensate by producing more insulin, and that leads that hyper insulin anemia.

High insulin levels then promote fat storage, especially in the visceral area, creating that vicious cycle. Insulin resistance leads to more fat storage, which leads to greater insulin resistance.

Perimenopause and Insulin Resistance

And this cycle is particularly challenging during the perimenopausal time due to shifting hormonal landscape. Yes, and it is super frustrating. I see a lot of women with a now. I also to have a lot of high roid issues so the thyroid can get out of whack during perimenopause too.

The thyroid gland plays a crucial role in metabolism, energy regulation and hormonal balance during perimenopause. Fluctuating estrogen levels can affect thyroid function in several ways.

The thyroid binding globulin estrogen increases the production of TBG, which is a protein that binds thyroid hormone in the bloodstream. So when more thyroid binding globulin is present, less active thyroid is available, so this can result in symptoms of hypothyroidism.

When we're hypothyroid, we have symptoms like fatigue and weight gain, brain fog. But the total thyroid hormone can appear normal. This is why you want to check out for.

Also, perimenopause can be a trigger for autoimmune thyroid disease like Hashimoto's, as the immune system

becomes more reactive during this time. This is similar to when women develop Hashimoto's post partum.

So what are our options? One option for managing premenstrual Perry menopausal symptoms is botanicals. We can do a few things. We can try something like biotechs or chase tree berry for a couple of months.

This works by promoting more release of progesterone in the body. It won't help with more of the sleep symptoms anxiety. But sometimes we try this in younger patients.

But if my patients are really in perimenopause, really and in a couple of years, then sometimes we just go to bioidentical progesterone and bioidentical hormones are chemically identical to the hormones produced by the human body.

Progesterone therapy can help balance out the fluctuating and declining levels of this hormone in perimenopause. What's nice about bioidentical progesterone?

As I said, I do like the oral dosing from a compounding pharmacy. Extended release, otherwise known as E4 m, and this can counteract estrogen dominance.

Progesterone balances estrogen by helping to regulate the effects of high estrogen levels and that, as we spoke about earlier, can causes mood swings, breast tenderness, heavy periods.

Progesterone has a calming effects on those gathered receptors in the brain and the nervous system, and can help support sleep and improve sleep quality.

Progesterone can promote relaxation and help reduce the anxiety irritability, which are common in the perimenopause time due to fluctuating hormones and can support regular menstrual cycles by providing that additional progesterone during that video phase can help regulate the menstrual cycles that have become so erratic.

Some of you might be thinking, well, you were saying about the insulin resistance and estrogen being low, why not replace estrogen during perimenopause as well?

Esther Dale, his most potent form of estrogen. It's the primary estrogen produced by the ovaries during perimenopause, when those estrogen levels fluctuate unpredictably.

Adding additional supplemental estradiol during this time could potentially worsen the problem of estrogen dominance. This is concerning, especially in the earlier stages of perimenopause, when those estradiol levels could spike or radically.

This could lead to worsen of symptoms like breast tenderness, bloating and mood swings, heavier periods, or breakthrough bleeding as excess estrogen without enough progesterone support can overstimulate the uterine lining and also the concern for the breast, the breast health and concern for increasing risk of breast cancer, with really adding on estrogen to high, fluctuating estrogen.

This is super tricky because during perimenopause, estradiol levels can be naturally high at certain times and low at others. It's also really hard to test and track.

Getting more estradiol can add fuel to the fire, with levels are already high, exacerbating symptoms and possibly causing bad outcomes. What about astral?

So astral is a weaker form of estrogen compared to dial, and it's often used topically for localized symptoms, particularly in the vaginal area and in skin.

Thyroid Effects and Hormone Treatment Options

This could be an option when working with a board certified doctor with hormone training from a compounding pharmacy. So estradiol for vaginal dryness estrogen, especially astral, can help maintain the thickness and elasticity of the vaginal tissues and encourages lubrication and applying a small amount of estrogen locally can help alleviate vaginal dryness, irritation, discomfort during intercourse without causing the systemic effects that a stronger estrogen like estrogen estradiol may induce.

Now, this is still going to be absorbed systemically. And you can check this, but it is a weaker estrogen. It's not going to have those stimulatory effects on the breasts and the endometrial lining.

Like yesterday I'll. Show it can also help the skin with aging by stimulating collagen production improving skin elasticity. When we lose our estrogen our skin suffers.

You can tell who's on bioidentical hormones and who's not in the post menopausal phase. I can tell by how they talk, how their skin looks, how they walk, even so, astral can help that skin.

Applying astral to the face can help reduce that dryness, improve texture, potentially decrease some wrinkles as estrogen helps retain moisture, promote healthy skin.

Once again it is absorbed so you're not going to be rubbing it all over your body. And this is astral only. And this is how the advice and guidance of a board certified physician.

So astral does have lower potency because it's a weaker estrogen. That's your dial. So it's not going to lead to the same degree of systemic estrogenic effects okay.

So it's less likely to cause the side effects of estrogen dominance. It's more localized. So when we're applying to the vaginal area the skin looks mainly at that site of application providing relief from those perimenopausal symptoms, but without raising overall estrogen.

Estrogen levels throughout the body. So in summary, perimenopause leads to the fluctuating levels of estrogen and progesterone with declining estrogen as an insulin resistance.

By promoting that visceral fat accumulation, increasing inflammation, and reducing muscle and liver insulin sensitivity, thyroid function. Fire dysfunction can be worsened during perimenopause due to that interplay between estrogen and thyroid hormones.

Bioidentical progesterone can help balance estrogen and reduce some of the stress related insulin resistance by regulating progesterone levels and modulating cortisol levels.

Estradiol supplementation during perimenopause can worsen estrogen dominance and insulin resistance. It's not recommended you're playing with fire. There, and astral is a weaker estrogen that can safely, with the physician guidance, be used in small amounts for localized treatment without contributing to insulin resistance.

So it's a little wrap up of perimenopause. Let's go through testing another time and maybe give some case studies. But I do want you to know that you are heard.

You are not alone. You do not need an antidepressant and you will get through this. I hope you guys enjoyed. Please share this episode. If you have a friend going through some symptoms or you're going through it right now yourself and just want to be heard, so please share it.

Thank you so much. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health. Each day is a new opportunity to make choices that empower your well-being.

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