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Perimenopause: The Ovary's Frustrating Grand Finale

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Women in midlife increasingly hear the words “estrogen deficiency” spoken as the ultimate in bad news. “Everyone knows” that low estrogen levels cause heart disease, osteoporosis, Alzheimer’s and frigidity. But as Dr. Susan Love (renowned breast surgeon and author of Dr. Susan Love’s Hormone Book) states, “If estrogen deficiency’s a disease, all men have it!” (1 [1]).

Our purpose here first is to put women’s midlife concerns into a new and more accurate hormonal picture. Specifically, I’d like to present new information about high estrogen levels in the perimenopause. Not low, not even normal, but estrogen levels that are higher than those of the (sexiest) 20 year old female! Secondly, I’ll discuss how a woman can tell when her estrogen levels are high and out of balance with progesterone, the other important hormone for women. And finally, we’ll review the many ways a woman can help herself through perimenopause, “Estrogen’s storm season!”

What is perimenopause?

Women have often called “menopause” everything they experience during the changing times of midlife, but now that we know about perimenopause, it’s important to use the right names. Menopause means that a year has passed since a woman’s last period. Perimenopause refers to the long and changing time until the end of no flow. The first change may be more PMS, night sweats, a new migraine, or sleep trouble and fatigue. On average the perimenopause lasts several years and commonly lasts six or seven. The good news is that perimenopause ends! I am an expert on the perimenopause primarily because I have now graduated! I survived a rough perimenopause and my own experiences told me that the experts had it all wrong about dropping estrogen!

What’s the evidence that perimenopausal estrogen levels are high?

A dozen or so studies in the last 20 years have set out to measure hormone levels in perimenopausal women. Each study reports the data and summarizes by saying that estrogen levels are dropping. Surprisingly, few bother to mention the high levels they found (2 [2]). When all of the studies are put together, and the average perimenopausal estrogen levels are compared with average levels in young

women, it is clear that the levels are higher, and significantly so (3 [3]).

Let's consider estrogen levels from 300 Australian perimenopausal women taken during the end of flow (2 [4]). The data presented as a scatter plot indicates a wide range of hormone levels. Not only are most of the levels as high or higher than the average end of flow estrogen level for 20-35 year olds but many are even higher than the average mid cycle estrogen levels (peak in the cycle) in 20-35 year olds. Clearly many of these perimenopausal women had very high estrogen levels. But what did the very good scientists say in summary about their data? "Perimenopause is characterized by dropping estrogen and inhibin levels and rising FSH levels" (2 [5]).

The study cited above (2 [6]) mentioned a strange hormone called 'inhibin'. I believe it is because inhibin, the normal brake type hormone begins to slack off in its job of keeping the pituitary's Follicle Stimulating Hormone (FSH) in line, that the perimenopausal ovary goes through its grand finale (4 [7]). FSH starts to increase, stimulates several rather than just one follicle (the nest of estrogen producing cells surrounding an egg) and estrogen levels increase and become unpredictable (3 [8]).

How can a women know when her estrogen levels are high or out of balance with progesterone?

There are many clues and they differ between women, and in one woman over time. Early in the process of my perimenopause, I dreamed I was going to have a baby and woke thinking I had really lost it! At fifty, with my two children grown, the last thing in the world I wanted was to be pregnant. But after some thought, I began to understand that it was my subconscious self's way of saying goodbye to the fertile part of my life.

Many of the things I felt in that dream, however, are also high estrogen signs: swollen and tender (sometimes lumpy) breasts, increased vaginal mucous and a heavy pelvic feeling almost like cramps or swelling. High estrogen and progesterone levels in pregnancy are normal and necessary, but in the perimenopause, estrogen is high but progesterone is not. It is this imbalance that can cause significant difficulties for many women.

Dr. Patricia Kaufert, a scientist from Winnipeg who has done one of the best studies about what women experience during perimenopause, found that women were likely to have a flooding menstruation just before their periods changed from regular to skipping(5 [9]). But heavy flow, bleeding at shorter intervals than 3 weeks, continual spotting or flow every two weeks, and clotting with cramping are all signs that estrogen is too high and progesterone is too low. Any period is too heavy if you soak more than 16 pads or tampons.

It is normal for the breasts to swell during the week before flow and it is sometimes normal to feel tenderness in the front or nipple area when estrogen hits a high midcycle peak. But swollen breasts most of the time, or front-of-the-breast soreness for more than a couple of days of the month means high estrogen.

During the perimenopause many women occasionally become forgetful and sometimes can't remember what they were saying. We now know that stress makes for memory problems. And the high estrogen levels of the perimenopause (on top of the necessary stress of moving through this major life change) make cortisol and other stress levels higher. No wonder it feels like PMS-city! One nurse said it very well, "At (peri)menopause life can turn into one long pre-menstrual experience. Hormones slap you up against the doors of your unfinished business" (6 [10]).

Are hot flushes (or flashes) from low estrogen?

If periods every month tell a woman that her estrogen level is normal, and if hot flushes are caused by low estrogen levels, how come so many perimenopausal women start having hot flushes when periods are perfect? The answer is that the brain has become used to the young normal estrogen levels and when it has been exposed to the high levels during the perimenopause, it rebels when those levels drop, even to what is normal. What happens with a hot flush is like what a drug addict goes through during withdrawal — a major brain discharge of stress and other hormones. It is this hormonal discharge (along with the flush) that causes the anxious feelings, nausea and chest pain as well as the feeling of heat and the sweating that go with them. So if someone tells a woman her flushes are in her head just tell them that “darn tootin” they are!

I first twigged that I was perimenopausal when I woke abruptly one dark November morning in 1990 feeling MAD! I looked for a cause — my dog and my partner were sleeping soundly, all was quiet in the house and the neighborhood. But my heart was pounding, my legs wouldn't lie still and I was ready to do battle. Then I felt a weak and woozy wave of heat and began to sweat. A day later my period started, and I had no more night sweats until the day before my next period. I had learned an important thing — in the early years of perimenopause, night sweats are a clue that your period is coming.

Another new observation is that women who have increased premenstrual symptoms early in the perimenopause are more likely to have a difficult time with hot flushes at the end of the perimenopause and in the early menopause. That information came from the same Australian study we talked about earlier (7 [11]). Perimenopausal premenstrual-like symptoms are caused by high estrogen levels. It makes sense that the brain would react when the high levels drop to normal or become normally low in menopause.

What can women do to help themselves through the rough times in the perimenopause?

The first and most important thing is to realize that, ready or not, this is a time of major change — change in body, even change in concept of one's self (8 [12]). A number of years ago I was captured on a National Film Board video “Is it hot in here?” saying I was only 22 times 2 and was looking forward to menopause as a normal phase of life! But, when perimenopause hit me, although my mind said I was okay with it, although I have all the children I ever wanted, and despite my fulfilling job and lots to look forward to, I went through times of real sadness. Losing youth, fertility and even predictable periods is a justifiable reason for feeling blue. It will help women deal with this natural sadness if they can talk with friends, family and perhaps even a counselor about these important and often hidden deep feelings. I also suggest reading a book by Vancouver counselor, Lafern Page, *Menopause and Emotions: making sense of feelings when feelings make no sense* (8 [13]). Your library, book store or health unit can tell you how to get your hands on a copy.

The next and most important thing is for women to take time to care for themselves. A friend of mine and important pioneer in the work of bringing perimenopause information to BC women, retired public health nurse, Pat Chadwick, says the first two letters of the word menopause are ME! That means women need to take time out for exercise, meditation, a cup of coffee with a friend, and to say no to more overtime, or continuing to make their 12 year old's lunch. I would also urge women to take a multiple vitamin so they have enough vitamin D (especially important because we can't make enough vitamin D through the slanty northern sunshine exposure we get in B.C. from October through March) and to get at least 1500 mg/day of calcium (which has recently been shown to help with PMS and which also helps sleep, restless legs and other nerve irritability signs).

To help women deal with hot flushes, they can take 400 to 800 IU of vitamin E each day, besides regular exercise, relaxation and slow deep breathing. Recent evidence also says that eating foods made from soy such as soy milk or tofu on a regular basis will decrease hot flushes (9 [14]).

Most important is what can women do about periods, flooding, cramps and the risk for anaemia? If a woman is regularly soaking over 12 pads or tampons during her whole period, I suggest she take one green iron tablet (ferrous gluconate) a day. This can be purchased from the drugstore without a prescription (but be sure to tell your doctor what you are doing). For cramps, as well as to decrease heavy flow, ibuprofen (Advil, Motrin or generic) 200 mg, can be used at the first hint of cramps and two or three times a day during flow. This has been shown to decrease the amount of blood loss. If the cramps are really bad, take two tablets initially and take one more each time you start to get the heavy pelvic feeling that cramps are returning.

If taking ibuprofen (and supplementing with iron) doesn't resolve the perimenopausal flow problems and risk for low blood counts and if bleeding lasts longer than a week or occurs at shorter than 3 week intervals, the family doctor should be seen. Physicians can give you a prescription for progesterone whose job is to prevent estrogen's over-stimulation of the lining of the uterus. Progesterone can also control and even stop flow. It should be taken days 14 to 27 after the first day of flow. It may be necessary to take high doses for a number of months. Unless both the woman and her doctor decide that at least six months of full or high dose cyclic progesterone hasn't helped significantly, there is no need for a referral to a gynecologist, an endometrial biopsy, a D & C or a pelvic ultrasound. Like the rest of perimenopause - this will get better!

Summary

So, let's review. We have talked about the perimenopausal puzzle of high rather than low estrogen and the paradox that many believe estrogen treatment will help. Now women will be able to recognize when estrogen is too high and will know that, although it is miserable, it is normal and will pass. They can figure out what is happening both when they get night sweats and when they experience PMS. Most importantly, when flow is abnormal and persists in being so, they can seek cyclic progesterone treatment to help bring their hormones into balance. And if they can't cope with PMS, sleeplessness and night sweats before their period, they should ask their doctor for the more expensive natural progesterone (Prometrium); 3 capsules at bedtime, days 14-27 of your cycle. My patients have found it made the transition easier.

Most of all, understand that you, like me, can survive the perimenopause!

Finally, as Ursula LeGuin, the science fiction writer says "The woman who is willing to make that change must become pregnant with herself, at last" ([10](#) [15]).

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