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UNOPPOSED ESTROGEN IRREGULAR PERIODS and the PRE-MENOPAUSAL TRANSITION

Estrogen and Progesterone: Under normal circumstances, the two dominant female hormones, estrogen and progesterone take different and complementary roles. Estrogen is a growth hormone. It stimulates growth in the lining of the uterus, the muscle of the uterus, the ducts of the breasts, abdominal fat, and the bones of growing adolescents. Progesterone helps to control that growth. Under Progesterone's influence, the lining of the uterus matures, stops growing thicker, and gets ready to receive an egg. Breast tissue also slows growth and gets ready for milk production. Estrogen tends to turn on certain genes that promote growth but also may stimulate the growth of cancer. These so-called Oncogenes, or cancer genes, are turned off by Progesterone. Estrogen and Progesterone balance each other in many ways. Estrogen stimulates fat production, Progesterone fat burning. Estrogen retains fluid. Progesterone promotes fluid elimination. Estrogen is a brain stimulator, promoting verbal thinking, and libido but also increasing migraine headaches. Progesterone induces calm, reduces migraines, and improves sleep. Estrogen enhances immunity, thickens gallbladder secretions, and retention of Copper. Progesterone quiets immunity, thins gallbladder secretions and increases Zinc, lowering Copper. Both sets of hormone functions are needed, but they must be in balance.

The Loss of Progesterone: Progesterone is only produced in the second half of the normal 28-day menstrual cycle. Only if a woman produces a healthy egg will the ovary add Progesterone to the Estrogen and Testosterone it is already producing. Many young girls just beginning their periods don't produce good eggs. They either make too little Progesterone or none. They usually outgrow this problem as they mature. Other women have poor hormone control centers and rarely produce eggs. This is the most common infertility problem in the U.S. As women age, all women have fewer and fewer eggs. Those that remain are more frequently defective. After age 35, most cycles do not produce a healthy egg. Progesterone production gets weaker and less frequent with time. Estrogen production, however, can remain strong.

<u>Unopposed Estrogen:</u> Estrogen without Progesterone, or too little Progesterone, is unopposed Estrogen. The ovaries don't usually begin producing Progesterone until about **Day 13** of the cycle and that production usually lasts about 13 days. This leads to the familiar 28-day cycle. Without Progesterone production and then its loss at **Day 26**, there would be no period on **Day 28**. As the days of just Estrogen drag on, the lining of the uterus gets thicker and thicker. Eventually, the lining is too thick to hold together. It begins to break down in irregular bits and pieces. This leads to **irregular bleeding.** Sometimes the bleeding can be very **heavy**, perhaps with **clots.** If the woman has **Fibroids**, they can grow bigger and bigger, making bleeding problems even worse. If she has **Endometriosis**, the pain can be worsened.

<u>The first years of periods</u>: Young girls having their first periods frequently don't produce eggs. Their cycles can be at irregular intervals and be heavy or light. With imperfect ovulation, Progesterone levels are not

adequate or well timed. Cramps, heavy bleeding and PMS are common. Supplementation with real, bio-identical Progesterone can work wonders.

As a woman ages: As women age, they have fewer and fewer eggs. Fertility is greatest in the late teens and early twenties after a girl's cycle gets organized. After that, there is a slow decline until around age 35. By the late 30s, the number of viable eggs is significantly reduced and fertility rates decline more rapidly until menopause. Progesterone levels may be too low or none at all. Estrogen is still made. It is even possible that estrogen levels may be higher than those of a younger woman. This results in Estrogen Dominance, a situation of normal or high estrogen levels without sufficient Progesterone to balance it.

Real, Bioidentical Progesterone can be given from 17 to 21 days in the second half of the cycle, restoring the normal rhythm, restoring normal cycles and balancing unopposed estrogen.

General Problems of Estrogen Dominance Estrogen promotes fluid retention, and carbohydrate cravings, resulting in weight gain. It increases nervous tone, and acts as a stimulant but may produce or worsen migraines. Sleep is not restful because of interruption of the dream cycle (REM) sleep. Because of immune system stimulation, unopposed Estrogen may be involved with the increased incidence of many autoimmune diseases in women in their late reproductive years and also gallbladder disease. After years of Estrogen excess, the constant growth stimulation of the endometrium and breast tissue may lead to cancer. Progesterone has been proven to protect against endometrial cancer but no long-term studies have been done to demonstrate natural Progesterone's protection from breast cancer. We do know that women with Estrogen dominance have higher breast cancer rates. Restoring Progesterone can reduce weight gain, reduce migraines, restore restful sleep, reduce gallbladder problems and help protect against endometrial and probably breast cancer.

<u>Gynecologic Problems of Estrogen Dominance</u> Unopposed Estrogen is the central cause of irregular, heavy periods. It promotes the growth of fibroids and is probably involved with the growth of endometriosis. Proper Progesterone replacement or supplementation solves the majority of bleeding problems. These are the problems that most commonly lead to Hysterectomy, Endometrial Ablation and Uterine Artery Embolization. With proper use of Bioidentical Progesterone, Hysterectomy and Endometrial Ablation rates could probably be reduced by 75-80%.

<u>Peri-menopause and Menopause:</u> From five to ten years prior to menopause, progesterone is rarely produced, resulting in Estrogen Excess. Eventually, estrogen levels fall also. If Estrogen is replaced, Progesterone must be replaced also. Many women after Hysterectomy are given only Estrogen replacement. This is because of the bad side effects of the synthetic artificial **progestins**, the imitation Progesterone. **Real, Bioidentical Progesterone is needed to balance the replacement Estrogen being given.**

Replacement Therapy Between age 30 and 55, individual hormone needs vary. One woman might not need any added hormones: another needs only Progesterone; a third needs all three hormones, Estrogen, Progesterone and Testosterone. The first step is blood work to evaluate her status. In many younger women with irregular cycles, heavy bleeding or hot flashes, what is needed is progesterone in a cycling pattern. In later years, as estrogen levels fall, estrogen is added. Testosterone is the last hormone to decline. Many women make adequate testosterone even into their 70s. If levels are low, bioidentical testosterone is available. Of course, if the ovaries have been surgically removed, all three hormone levels are reduced. Sometimes, sufficient estrogen and testosterone can still be present, converted by the body from hormones produced in the adrenal glands.

<u>Summary:</u> Many women produce Estrogen without the balancing benefits of Progesterone. This can lead to irregular or heavy periods, weight gain, migraines, sleep disturbance, PMS, fibroid growth and cancer. By adding Natural Bioidentical Progesterone many of these problems can be corrected or controlled. The need for surgeries like hysterectomy, endometrial ablation and uterine artery embolization can be markedly reduced.