

## Case Study #2: Premenstrual Syndrome

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**History:** Sherri, a 26 year old college student, presented with moderate to severe PMS, with uterine cramping that was at times “crippling.” Other accompanying symptoms were breast swelling and pain, irritability, digestive problems, and food cravings. Sherri related that these symptoms had begun when she was in high school. For many years she used non-steroidal anti-inflammatory drugs and had tried birth control pills at one point that diminished the severity of the PMS, however, she was concerned with the long-term complications with the drug and discontinued its use three years ago. In the last year she has tried the herb *Vitex agnus-castus* without dramatic results.

Sherri’s diet is somewhat consistent with the average college student: she does not eat on a regular schedule and consumes whatever happens to be at hand. She does not drink milk but eats a great deal of cheese. Coffee, bread, pasta, chicken, turkey, potatoes, and some vegetables are the typical foods eaten. Sherri eats a lot of snack items such as cookies and chocolate--especially premenstrually when her cravings are “intense” and “unstoppable”.

About five days before the onset of menstruation, Sherri begins to have uterine cramping, swollen and painful breasts that reach full intensity in three days. The cramping can be incapacitating and is usually responsible for one or two days spent at home. During this same period of time she is irritable and depressed. The day Sherri begins to menstruate her symptoms diminish quickly.

**Discussion:** Premenstrual syndrome is a psychoneuroendocrine disorder with biologic, psychologic, and social parameters. It is both difficult to define and controversial because of its extraordinary frequency. Up to 90% of women suffers from recurrent PMS symptoms; 20-40% are mentally or physically incapacitated, and 5% experience severe distress.

The classic criteria for PMS requires that the patient have symptoms in the second half of the menstrual cycle and a symptom-free period of at least seven days in the first half of the cycle. The symptoms must occur in each of three consecutive cycles and be severe enough to require medical advice or treatment.

Symptoms commonly experienced by PMS sufferers include abdominal discomfort, breast tenderness, bloating, headaches, sleep changes and mood swings. In all, more than 150 symptoms have been related to PMS.

The cause of the symptom complex is unknown, but several theories have been proposed--the most commonly cited being an estrogen-progesterone imbalance. Based on the clinical observation that non-steroidal anti-inflammatory agents often relieve symptoms, another theory proposes that excess or abnormal prostaglandin activity may also be a cause.

Painful menstruation, or dysmenorrhea, differs from premenstrual syndrome in that symptoms occur at the onset of flow. The mechanism of the pain has recently been attributed to higher concentrations of prostaglandins in sufferers.

**Examination:** A careful physical examination is important in elimination organic causes localized to the reproductive, urinary, or gastrointestinal tracts. Pelvic examination was

unremarkable. Breast examination did reveal diffuse tenderness as well as multiple cystic areas that prompted me to refer her for breast thermography. Sherri's thermogram demonstrated no irregularities (i.e. she was low risk for breast cancer). Incidentally, breast thermography can be an important marker for cancer in fibrocystic patients, because studies have demonstrated a 5-year, 43% incidence of cancer in women with an abnormal thermogram, as compared to a 3% incidence in normal thermograms.

**Tests:** Because cyclic hormonal imbalances are thought to be responsible for the majority of PMS symptoms, I performed a hormone test that measures estrogen, progesterone, DHEA, and testosterone throughout the entire menstrual cycle. The results of Sherri's test demonstrated a relative progesterone deficiency late in her cycle, and an increase estrogen early in her cycle.

**Treatment:** I started with Sherri at day twelve of her cycle. First and foremost she needed to make significant changes in her diet.

For many women, excess estrogen is at least part of the cause in generating PMS. Diets high in animal fat and low in fruits and vegetables promote excessive estrogen. Methylxanthines, such as caffeine, have a deleterious effect on the detoxification pathways of the liver—resulting in a decrease in estrogen breakdown and an increase in PMS symptoms, particularly breast pain. So Sherri stopped eating all dairy products, cut out the coffee and chocolate, decreased meat consumption, and increased fruits and vegetables. I encouraged her to purchase organic produce because the pesticides that are sprayed on fruits and vegetables are estrogen-like compounds that can accumulate in body tissue, mimicking an excessive estrogen syndrome. She also increased water consumption to one quart per day.

A balance of fatty acids is also important. Because most persons eat a lot of vegetable oil, the amount of omega-3 fatty acids is low, by comparison. Therefore, one of the supplements I prescribed for Sherri was evening primrose oil.

The acupuncture regimen we started with consisted of weekly treatments designed to balance the liver meridian. Generally, there are points along this and sometimes the spleen meridian that are extremely tender (much more tender than in a woman without PMS) and when needled greatly reduce symptoms. With Sherri, and with most cases of PMS that I treat, an acupuncture treatment once per week for one month, and subsequently once per month just before the usual onset of symptoms, is enough to control the PMS.

After each acupuncture treatment I manipulated Sherri's lumbar spine, and sacrum. This therapy has been demonstrated to decrease symptoms associated with dysmenorrhea by altering prostaglandin levels in the blood.

To balance the hormonal imbalance I prescribed a weak phytoestrogen formula to be taken throughout Sherri's entire cycle, slightly increasing the dosage for two weeks at mid-cycle. To remedy the progesterone deficiency, Sherri used a sublingual natural progesterone for the last two weeks preceding her period. In essence, this regimen artificially creates levels of hormones as they should be physiologically. Patients can usually discontinue supplementation after several months.

**Results:** Sherri's symptoms were dramatically reduced within two months. Her diet was much improved and she was no longer craving "junk" food, even right before her period when her cravings had been so terrible in the past. She was able to discontinue the natural hormonal supplementation after four months, and no longer needed therapy at that point.

Premenstrual syndrome generally indicates a condition of sub-optimal health. When a woman's diet consists of nutritious whole foods, her underlying body physiology is able to function as nature intended—without the myriad of symptoms associated with PMS.