



Managing PMS Apr. 17, 2003

Background:

- *Premenstrual Syndrome (PMS)* occurs in 70-90% of the female population. PMS is a polysymptomatic disorder. Women suffering from PMS can present with behavioral symptoms (e.g., depression, irritability, tension, anxiety etc.), physical symptoms (e.g., migraines/headaches, breast tenderness, palpitations, bloating, musculoskeletal aches/pains etc.) or experience an exacerbation of chronic medical problems such as diabetes, asthma or psychological disorders. Typically the symptoms are present during the luteal phase of the menstrual cycle (i.e. the time between ovulation to menstruation); however, women may have symptoms that last anywhere from 3-21 days of their monthly cycle. The cause of PMS remains to be established. Current literature leans towards a link between PMS and a deficiency of central serotonergic activity.

Management:

Non-pharmacological:

- *Exercise:* Regular aerobic exercise three – four times per week and throughout the premenstrual phase. Exercise can reduce physical symptoms such as breast tenderness, abdominal cramping and fluid retention as well as emotional symptoms such as stress and anxiety
- *Relaxation:* Stress reduction through relaxation techniques i.e. reflexology, aromatherapy and yoga
- *Diet/nutrition:* Increase complex carbohydrates and green vegetables and decrease simple sugars, fats and processed foods. Eliminating caffeine reduces breast tenderness and low salt/low fat diet reduces fluid retention
- *Vitamin B6:* Studies have shown that pyridoxine improves symptoms of PMS. Pyridoxine facilitates the biosynthesis of certain neurotransmitters i.e. serotonin and dopamine which may be a factor in PMS (25 mg BID increasing to 100mg/day). The risk of peripheral neuropathy has been observed at higher doses.
- *Vitamin E:* 400-600IU/day may reduce breast tenderness
- *Calcium:* 1000mg/day may reduce water retention, cramps, mood changes and possibly food cravings
- *Magnesium:* 300-500mg/day during the luteal phase may improve symptoms of mood changes and fluid retention

Telephone: Professionals 1-800-667-3425 Saskatoon 966-6340

Consumers 1-800-665-3784 Saskatoon 966-6378

Fax: (306) 966-2286



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College of Pharmacy and Nutrition • University of Saskatchewan
110 Science Place • Saskatoon SK • S7N 5C9 • www.usask.ca/druginfo

Pharmacological:

- **NSAIDs:** Low dose NSAIDs (e.g. ibuprofen, naproxen or mefenamic acid) can be prescribed for short periods of time for effective pain relief
- **Oral contraceptives:** Combined or progestin only oral contraceptives suppress ovulation, thereby relieving symptoms of PMS
- **Fluoxetine:** Fluoxetine has gained approval for use in the treatment of PMS related mood disorders. It is equally effective if taken intermittently, i.e. during the luteal phase or on a continuous basis.
- **Diuretics:** If reduction in dietary caffeine and salt are not effective for the treatment of edema, spironolactone has been found useful

Premenstrual syndrome is a true medical condition that often is overlooked. It is also a condition that can easily be managed with non-pharmacologic methods. If symptoms were not adequately controlled, then it would be the place of the health care professional to intervene with therapeutic recommendations.

References available upon request

Prepared by Zahra Hirji BSP, Drug Information Consultant

Contact Pharmacy-Nutrition@usask.ca
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