Q: What are the treatment options for cyclical mastalgia?

A: Cyclical mastalgia is defined as breast tenderness occurring periodically throughout the menstrual cycle, usually during the luteal phase (a period of 10 days between ovulation and the start of menses). It is estimated that nearly 50% of pre-menopausal women experience some degree of breast tenderness during this phase of their menstrual cycle. Because of its common association with the luteal phase, cyclical mastalgia is believed to be related to hormonal changes. This condition can occur alone or as one of many symptoms seen in premenstrual syndrome (PMS)/premenstrual dysphoric disorder. In these cases, mastalgia is usually mild and does not require drug therapy. In many cases, pain is more chronic and associated with cystic changes in the breast. The most important step in the management of cyclical mastalgia and fibrocystic changes in the breast is ruling out malignancy. In some women, breast pain may be reduced when malignancy has been eliminated as the etiology of the symptom. There is no standard of treatment for mastalgia. Non-drug measures include wearing a supportive bra and decreasing the intake of caffeine, alcohol, and salt. Vitamin $B_6$ and vitamin E have been suggested therapies, but their benefit is limited. Evening primrose oil contains gamma linolenic acid (GLA) and is considered by some to be useful in both cyclic and non-cyclic mastalgia. Oral dosage ranges from 1-3 grams per day and adverse effects are minimal. Initial drug treatment of mastalgia usually consists of acetaminophen or non-steroidal antiinflammatory drugs (NSAIDs). If relief is not obtained using these approaches, referral to a specialist may be necessary. One study supports the benefit of a topical NSAID (diclofenac) in the management of mastalgia. Tamoxifen (10-20 mg daily for 3-6 months) has been used successfully in some women; however, relapse rates appear to be high. Progesterone has also been useful in small numbers of women with mastalgia. Danazol (Danocrine®), a weak anabolic/androgenic steroid is probably the most prescribed drug for severe mastalgia. Standard dosage is 100-400 mg daily in divided doses. Unfortunately, danazol produces frequent hormonal adverse effects such as hirsutism, acne, weight gain due to fluid retention, deepening of the voice, etc. Bromocriptine, a dopamine agonist and prolactin inhibitor, has also been beneficial in some cases of refractory mastalgia. Its high side effect profile limits its role in the treatment of mastalgia. Treatment of mastalgia is dependent on its severity and etiology. There are several options that can provide relief for women with this condition.

References:

Margaret A. Haberman, Pharmacy Clerkship Student   Jennifer L. Padden, Pharmacy Clerkship Student

The PIC Question of the Week is a publication of the Pharmaceutical Information Center, Mylan School of Pharmacy, Duquesne University, Pittsburgh, PA 15282