NATIONAL HEADACHE FOUNDATION

HORMONES AND MIGRAINE

Migraine occurs more often in women than in men. Although migraine headaches are equally common in young girls and boys, the number of girls affected increases sharply after the onset of menstruation. It seems clear that certain hormonal changes that occur during puberty in girls, and remain throughout adulthood, are implicated in the triggering and frequency of migraine attacks in women.

The finding that 60% of women sufferers related attacks to their menstrual cycle supports this link between female hormone changes and migraine headaches. Attacks may occur several days before or during the woman's menstrual period. There are women who also get the headache mid-cycle, at the time of ovulation. Estrogen levels fluctuate throughout the menstrual cycle. The headaches typically occur in association with drops in the estrogen level. Few women (less than 10%) have headaches *only* with menses. Therefore, in most women, hormones are just one of many migraine triggers.

Triptans are the first line acute treatment for menstrually-related migraine. These medications should be taken early in the attack and repeated if necessary. If the attacks are predictable, short-term preventive therapy can be started one to two days before the anticipated headache. The nonsteroidal anti-inflammatory agents can be used for 5-7 days around the period and help reduce headache frequency as well as relieve menstrual cramps. Stabilization of hormones may also benefit the migraines. This may include an estrogen patch or estrogen pills taken the week of the period. Daily triptans taken around the period may also reduce the headaches. Daily preventive treatment throughout the month may be necessary if the headaches continue to be frequent.

Oral contraceptives may affect the incidence of migraine. This was more common a decade or more ago because of the higher estrogen content in birth control pills. Some of the current triphasic pill products may also exacerbate migraine. There are variable effects today with the availability of contraceptive pills, transdermal patch or vaginal ring. Some women benefit, some do not, and others have worsening of their migraines. For some women the use of the pill, patch or ring for three or four consecutive cycles, without taking any days off, may help to reduce the number of menstrual migraines from 12 per year to three or four.

Pregnancy also influences migraine. Some women with migraine find their attacks disappear completely, occur less often, or are milder during pregnancy. Attacks either worsen or remain unchanged in others.

As women near menopause, the estrogen levels may fluctuate more and trigger an increase in migraines. Daily preventive therapy may again be necessary if the headaches are frequent and the periods are unpredictable. Women who go through natural menopause may have fewer headache problems than women having hysterectomies. In menopause, the use of continuous estrogen replacement without any days off helps to minimize migraine for many women. The dose should be the lowest effective dose. Synthetic estrogens (made in the lab) and skin patches may be better

tolerated than products containing Premarin®. Natural hormone products have not been carefully studied for their effect on headache. Progesterone agents rarely have an effect on migraine.

The use of the birth control pill or hormone replacement needs to be considered within the light of the type of migraine, smoking history, and other medical factors such as high blood pressure. For some women the use of hormonal therapies may put them at increased risk for serious medical consequences. Discussion with your physician is of importance to weigh the benefits and risks.