also noticed that birth control pills made her condition worse. Frustrated, depressed at not being able to live life to the fullest and confused at all her investigations, including her C.T. scan being normal and because people were beginning to wonder if she suffered from some psychological problems, she finally landed up at a headache and migraine clinic.

Her oral contraceptives were stopped, a migraine diet was stipulated and Vinita was put on specific anti-migraine drugs, some to be taken on a regular basis, some to be taken just prior to her period. She was treated with anti-nauseants and ergotamine tablets to shrink the dilated blood vessels in her head. Within two months, her menstrual migraine attacks had markedly diminished and the ones she did get were tolerable. Now she needs consultations only occasionally and is doing well.

Does this pattern sound familiar to you? It is well established, from studies all over the world, that migraine is primarily a woman's affliction. Experts estimate that about three out of four migraine sufferers are female. In childhood, migraine sufferers are more likely to be male than female. After puberty however, women with migraine outnumber their male counterparts. Among females too, the peak incidence of first migraine occurrence is around the age of 12 to 15 (puberty) and the headaches increase with menstruation, pregnancy, consumption of birth control pills, with hormone replacement therapy (HRT) and menopause, and after a hysterectomy. Migraine headaches are rare before the age of 10 or after 60 years. Migraine attacks occur with menstruation in 40 per cent of women and occur exclusively with menstruation (true menstrual migraine) in 10 per cent.

The feminine domination of this disorder emerges only after puberty and the occurrence of migraine waxes and wanes along with changes in the female reproductive cycle. It is now established that there is a powerful interaction between the migraine process and the fluctuating female hormones. Migraine can be caused by both decreased or increased oestrogen levels.

While, in males, the predominant hormone testosterone remains constant all month long, a woman's predominant hormone — oestrogen — does not. Women secrete high levels of oestrogen in the third week of their cycles with the levels falling by the time of menstrual flow. This fluctuation in the hormonal level could be the triggering mechanism. Further evidence for a correlation between migraine and hormonal events comes from the observation that women have more headaches while on oral contraceptives, and that migraines usually disappear during the second trimester of pregnancy when hormonal stability occurs. So it follows that a drop in oestrogen levels brings on a migraine attack and it may be prevented by a stable oestrogen environment.

Research the world over is now focusing on measurement of hormonal levels in women. It is reasoned that headaches may also be controlled by maintaining a suppressed, low level of serum oestrogen in women with unresponsive migraine. If menstrual migraines cannot be controlled with the usual anti-migraine medications, then one may consider hormonal therapy. Oestrogen replacement by an estradiol skin patch can now provide a stable oestrogen level and may help control menstrual migraine when applied several days prior to the onset of menstruation. This type of hormonal manipulation may, in the future, be a method of controlling migraine when standard medications fail.

Knowing whether your migraines are related to menstruation or not can give you a distinct advantage in preventing them. You should increase your body awareness, so that you will be able to more accurately predict the type of food or drink which will set off a headache.

Many migraineurs also suffer from the premenstrual syndrome (PMS), a combination of symptoms that include water retention, irritability, anxiety and depression. Both migraineurs and women with PMS should pay special attention to their diet during the week before their period. They should not miss meals or start dieting just before their period.

Exercise is also extremely useful in preventing menstrual migraines. It helps by increasing the levels of brain endorphins and improving circulation.

In spite of the best efforts of both the doctor and the patient, migraines can often become worse during the early part of pregnancy, at menopause or with hormone replacement therapy, all because of fluctuations in the hormonal levels. At such times, one may need to have joint management between the headache specialist and gynaecologist.

With migraines being a common problem, where even the most aggressive management can only reduce the frequency and severity, but cannot totally eradicate the headache, there are now a number of headache and migraine clinics established all over the world. At these, migraine patients are seen by specialists who have the expertise, time and inclination to sort out the headache problem and to find out reasons for treatment failures.

One such clinic has been established at the Jaslok Hospital and Research Centre, Bombay. Here, patients with such refractory recurrent headaches are analysed and offered appropriate treatment and an attempt is made to help them get on with their lives.

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