Migraine—General Management

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Few conditions in medicine are so unpredictable in their response to treatment as migraine. The disorder is difficult to control in some patients, but nevertheless good results can be obtained if the problem is approached in a systematic and energetic manner. Nevertheless, before I start a detailed analysis of the therapeutic measures which are available, it should be noted that spontaneous remissions may be encountered. Not only may these last for some considerable time but they may then be succeeded by a period of greatly increased activity. It is also well known that when a patient is seen for the first time by a doctor who shows interest and is sympathetic to his problem, spontaneous remission may occur, even without any change of treatment.

In studying migraine it is clear that there are certain precipitating and aggravating factors which must be considered when the patient is first seen. The precipitating factors have been considered in the first article, and some of the important aggravating ones will now be described.

Aggravating Factors

When the doctor is faced with a patient whose migraine has become more troublesome and is not responding to the usual remedies, he should consider and exclude certain aggravating factors. Thus hypertension is one such factor, for it can excite or aggravate attacks of migraine especially in older patients. Hence the blood pressure should be taken periodically and if it is raised hypotensive therapy should be added to the treatment for the migraine.

Depression and anxiety are other aggravating factors and the patient may complain of two very different types of headache, which can be distinguished only by a careful and detailed history. In these cases in addition to the typical migrainous headache (which is often more frequent and severe) the patient will complain of continuous headache, which has often been present for weeks or months. The latter is often described as like a weight on the head, a tight band around the forehead, or a feeling that some object is crawling under the skin. There are usually associated symptoms of depression, such as loss of appetite and weight, insomnia, lack of concentration, irritability, and inability to cope with work. Clearly, therefore, both disorders must be treated if these patients are to be managed properly.

Cervical spondylosis may cause headaches which are not unlike migraine, especially in older people. The headaches are invariably occipital and are due to pressure by osteophytes on the upper cervical nerves, which supply the back of the head as they come through the intervertebral foramina. If migraine and cervical spondylosis coexist both conditions will require appropriate treatment.

In women the menopause is often a particular time when attacks of migraine become much more of a problem. This is not really surprising as hormonal disturbances are taking place at this time and there is quite often a menopausal depression as an additional aggravating factor. The management therefore is

threefold, in that the hormonal disturbance, the depression, and the migraine all have to be treated.

Finally, in pregnancy migraine clears up completely in about 80% of patients after the first two or three months, only to return within a few weeks of delivery. In the remainder the migraine may continue unchanged with regard to its frequency and severity, or rarely it may become very much worse—especially during the early months—and these cases, of course, pose great problems in their management and treatment.

Migraine and the Contraceptive Pill

In some patients undoubtedly the contraceptive pill produces a deterioration in their migraine, taking the form of either an increase in the frequency or severity of the attacks, or both. These patients tend to experience their attacks particularly on the first or second days while off the pill each month, though the attacks may occur at other times and especially in the middle of the menstrual cycle. In a few women focal symptoms may accompany the migrainous headaches for the first time. Nevertheless, in yet another group of patients there may be no change in the pattern of the migraine, and some may even report a distinct improvement, especially in the degree of severity of the attacks. In those patients whose migraine is aggravated by the pill the risk of the relatively rare permanent neurological deficit is probably slightly enhanced, and it would seem advisable to discontinue this form of contraception, especially when there are focal features to the attacks.

It has also been observed that headaches of the migrainous type may be precipitated by the pill for the first time in susceptible individuals, and especially in those with a family history of the disorder.

Underlying Cerebral Disorders

The vast majority of patients with migrainous type headaches have no underlying structural disease of the brain. Nevertheless, an intracranial neoplasm situated in the occipital lobe may give rise to headaches, vomiting, and visual disturbances and so simulate migraine closely. In these cases visual field defects which persist between the attacks, and later the onset of symptoms of raised intracranial pressure, should help to clarify the diagnosis. Angiomas or arteriovenous malformations either on the surface or in the substance of the brain may also cause diagnostic difficulties, as these patients often develop periodic headaches of a migrainous type beginning in early life. The presence of such a lesion, therefore, must always be kept in mind when the headache is persistently unilateral in the absence of a family history—and especially when there is a history of subarachnoid haemorrhage, focal epilepsy, or signs of motor or sensory dysfunction in the contralateral limbs.

It is always prudent to auscultate the skull for the presence of a bruit in migraine and particularly in a patient with this kind of symptom. Rarely an angioma may be situated in the posterior cranial fossa and produce symptoms of dysfunction of the brain stem and so simulate migraine of the basilar artery type. Nevertheless, in the latter the symptoms are transient and followed by a severe headache, whereas in the former the symptoms are continuous and there may be a progressive disturbance of function. The bruit in these patients is more easily heard by auscultation over one or other mastoid process.

Thus the occasional patient with a migrainous type of headache proves to have a difficult diagnostic problem, and in some the disorder is atypical or associated with epilepsy. It is in these patients that special neuroradiological and electroencephalographic studies will be required before considering their future management and treatment.

Preventive Therapy

It is not widely appreciated that there are drugs available which are specifically designed to reduce the frequency and severity of attacks of migraine. These drugs should be taken regularly by mouth and they contain phenobarbitone, ergotamine, belladonna, chlorpromazine, and prochlorperazine singly or in combination and in varying dosages. Good control of the attacks is established in many patients with a comparatively small dose of these particular drugs. If depression or anxiety are concomitant features, then antidepressants or tranquillizers may have to be given as well.

In the more resistant type of migraine other drugs are available which can be used with some degree of success. One such drug is methysergide (Deseril), a serotonin antagonist, which if used intelligently produces good results in some patients resistant to conventional drugs. The average daily dose of this drug is 1 mg thrice daily and each patient should stop treatment for one month in every six. The most common side effects consist of nausea, increase in weight, aching in the legs, giddiness, and symptoms of peripheral vasoconstriction which necessitate stopping treatment. It should not be given to patients with vascular disorders or oedema or to pregnant women. J. R. Graham³⁴ reported a few patients who developed retroperitoneal fibrosis, pleural fibrosis, or cardiac valvular fibrosis, but this was among half a million patients who had been treated with methysergide on a long-term basis. Nevertheless, all these complications are completely reversible on stopping the drug, and in any case they have not been reported since it was recommended that each patient should have a period of rest from it every six months. Methysergide is therefore a safe drug provided that satisfactory precautions are taken and the patient is kept under periodic observation.

A newer serotonin antagonist is Pizotifen (B.C.105., Sandomigran), which has also been used with some degree of success in some patients with resistant migraine.³⁵ Clonidine (Catapres) has largely attracted attention as an antihypertensive agent, but has recently shown encouraging results in the prophylaxis of migraine.³⁶⁻³⁷ It is given in a daily dose of 25-50 µg and side effects consisting of a dry mouth, mild depression, gain in weight, and minor gastrointestinal disturbances are relatively infrequent. Initial improvement in severity and frequency of headache seems to be well maintained in a large proportion of the patients.

Many other preventive therapies have been used in the prophylaxis of migraine but only with a limited degree of success.

Migraine Status

The term "migraine status" is reserved for confluent attacks of migraine and should be considered as a medical priority. These patients may have suffered excruciating headaches over a period of several days without remission and may quite often be seriously dehydrated from incessant vomiting. Fortunately the condition is relatively uncommon, but patients in status need massive medication consisting usually of antiemetics and powerful tranquillizers, such as chlorpromazine and parenteral barbiturates; they will nearly always require admission to hospital. Ergotamine preparations are prone to aggravate rather than ameliorate the status and so they should not be

considered in this situation. Corticotrophin injections should always be tried as this may be the only form of treatment which will produce a remission.

When the patient recovers from his status his migraine should be reappraised, particularly with reference to any stress factors or emotional problems which initiated the status. Preventive therapy will be invariably required thereafter in these patients.

Conclusion

Undoubtedly migraine is a multifactorial disorder and it is most important that each patient should be carefully analysed in the first instance from many aspects. The importance of a good doctor-patient relationship cannot be stressed too often, for this is a condition where psychological rapport is of great value and could well influence the success of treatment. Fortunately, also, a good ultimate prognosis can usually be given for in most patients the attacks tend to disappear with advancing age.

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