WHAT IS MIGRAINE?

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The first question which we should attempt to answer in discussing migraine, is just how common is this condition? What is its incidence within the general community? The text-book figures are too extraordinarily diverse to be convincing. The chief explanation for this lack of uniformity is that there is no general acceptance as to exactly what it is that constitutes migraine.

The conventional definition refers to a recurrent, unilateral headache, preceded by fortification figures, and culminating in vomiting. This is far too rigid. Were this to be accepted as our criterion in diagnosis, we would have to admit that migraine is not a particularly common disorder. But I do not believe it right to accept that rigid definition, because migraine can take on so many atypical manifestations.

For example, the clinical properties may differ not only from one patient to another, but also within the same patient at different times of life. Thus, if one takes a longitudinal view and studies the natural history of this disorder in a particular sufferer, one may often observe that as the years go by, the patient's migraine undergoes what the older physicians used to call a " metamorphosis ".

Thus, in early childhood, a migrainous constitution may manifest itself in the form of infantile eczema; a little later as travel sickness. At a slightly older age it can show itself as recurrent spells of vomiting, a syndrome which may be given various terms—the periodic syndrome, bilious attacks, acidosis, or cyclical vomiting. Then perhaps, at a somewhat later age, classical migraine may develop with its typical symptoms, persisting in this way through adolescence. In adult life, the sufferer may begin gradually to lose his vomiting.

He is then left with the periodic occurrence of fortification figures followed by unilateral headache. Still later in life one of two things may happen. The patient may lose his fortification figures altogether, so that the migraine is now represented solely by recurrent headaches. Or less often—he may lose his headaches, but continue to experience

frequent visual disturbances. We are bound to regard this as migraine even though it does not conform with the text-book definition. Or the patient in late adulthood may lose his teichopsia. He has already ceased to vomit. The headache may now disappear, but the patient may continue to suffer from time to time attacks of vertigo, a symptom which is undoubtedly a migrainous variant at times.

How then are we to define these diverse symptoms? Running like a scarlet thread through all these clinical variants is the commonest symptom of all, which is, of course, the headache. If I were compelled to make a definition, which I am reluctant to do, I would say that I would look with suspicion upon any patient who has a recurrent headache, not necessarily unilateral, of a clinical type which accurately reproduces itself on each occasion. There may be no visual aura, no nausea, and no vomiting. Prodromal symptoms of euphoria may appear, but often not. Polyuria after an attack is common enough, but it certainly is not an essential feature.

In an attack the patient may wish to get away into a dark room to lie down, but again not necessarily so, because many migrainous sufferers find that they are worse when lying flat, and better when propped up, though all of them dislike bright lights.

May I summarize by saying that migraine characteristically comprises a recurrent and incapacitating headache, which is specific to the individual? In other words, the patient cannot, as a rule, continue to work or play during an attack. Finally, the headache is typically ergotamine-sensitive.

That is the best I can do in the way of a definition. If you agree with that you must admit that migraine so defined is quite a common disorder. We have no exact figures, however, as to its frequency. We need accurate estimation of its incidence. Migraine is a condition which peculiarly leads itself to practitioner clinical research. Family doctors have the opportunity of observing very many people, not necessarily all of them sick; amongst those on their lists there must certainly be large numbers of migraine sufferers.

Having determined its approximate incidence within the community, we would like to discover whether it is correlated with any particular physical or mental make-up. Is there any particular bodily habitus which we can associate with migrainous patients? Are they fat or thin; stocky, athletic, or asthenic? Is there any special colouring concerned? Is any race affected to a greater extent than another? Is migraine associated with any one blood group? Such a line of approach would make a useful piece of clinical research.

If I am right in believing—as many of us do—that migraine is a stress disorder occurring in a person endowed with a given inherent

constitution or diathesis, then in any such person with this genetically determined vulnerability an attack of migraine constitutes a specific mode of reaction to any form of stress, internal or external. One would therefore like to know whether other stress disorders appear in migrainous persons more often or less often than in normal control subjects.

For example, are migraine victims, more or less, liable to develop peptic ulcers, coronary disease, rheumatoid arthritis, or colitis? My clinical impression—and it is only an impression—is that there exists a sort of negative correlation. Lifelong migraine seems in many individuals almost to confer a sort of protection against the subsequent development of other stress disorders. Of course, from time to time one sees in a patient symptoms of both migraine and duodenal ulcer. But I believe that this combination occurs less often than in the general population, and here is a line of investigation in which we can all contribute. Were it true, it would offer some measure of consolation to the migrainous sufferer, in that he or she is, to some extent, protected against wear and tear in other organs of the body.

It has been asserted that migrainous patients are not, as a rule, liable to upper respiratory infections. There is one anatomical structure however which perhaps bears the imprint of stress in a migrainous person. I refer to the cerebral arteries. I have the uncomfortable feeling that severe and recurrent migraine involves the cerebral vasculature, possibly to the extent of structural change. This again is one of the points which each of us might look for and check. Quite apart from cerebral arteriosclerosis, there is the question whether migraine predisposes to the development in later life of a temporal arteritis; or, as has also been said, of trigeminal neuralgia.

There is another clinical point which we ought to be able to settle one way or the other. One of the aetiological factors emphasized 25 years ago—but which we do not stress now—is the role of eye strain. Some ophthalmic specialists taught that migraine is predisposed to by uncorrected errors of refraction, particularly of the discordant type. With this idea in mind, it would be interesting to know what happens to a chronic migrainous victim when he loses the eyesight. Would his attacks of migraine continue in the same frequency or intensity? Supposing he lost the vision of one eye only? Would he go on having attacks or would he lose them? The question is quite simple, but I have no idea of the answer. Again, what is the incidence of migraine among the congenitally blind individuals? I used to believe that it was rare; today I am not so sure.

Lastly, I think we, as medical practitioners, require more information as to the tolerance towards ergotamine. Perhaps we are un-

necessarily nervous of long-continued ingestion of ergotamine. The drug houses are very scrupulous in this matter and often ordain that if a patient is in the habit of taking ergotamine tartrate periodically, he should limit his intake to just so many tablets a week. Yet, as we all know, scores of patients take this drug every day of their lives, without any obvious detrimental effect upon the cardiac or cerebral arteries, or any other blood vessels. If this is the case, it is as well that it should be known. because many of us are rather alarmed when our patients come and tell us that they take ergotamine tablets regularly every night on retiring. Sometimes the patient senses the uneasiness which the doctor feels and begins to lose confidence in the ergotamine. We need to know more about the possible complications and side-effects of ergotamine tartrate. Some patients proclaim that ergotamine tartrate is effective in relieving their headaches completely, but the drug produces such insupportable side-effects that they elect to give up treatment and to continue with the headaches. This experience varies considerably from person to person. It ought to be possible to alleviate these side-effects, so that our patients might continue to take ergotamine with benefit to their headache.

These are some of the points which occur to me whereby a clinician can do some useful fieldwork and contribute materially to the knowledge of this disease.

THE BACKGROUND OF MIGRAINE

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Migraine is essentially a disorder of function, conditioned in those with a constitutional predisposition, by the home and working environment. A change in the external environment, for instance a temporary move to an enclosed and protected one such as to hospital, will usually result in a mitigation of symptoms. Many find their migraine to be less severe while doing their service in the armed forces, though one patient had a return of his migraine when he was promoted to commissioned rank and had to shoulder more responsibility.

We will discuss two questions which need a good deal of further