cut down emergency evacuations from Churchill to Winnipeg, liberal phone consultation is encouraged. If possible when induction of labour is undertaken in Churchill it is planned about 12 hours before the next scheduled flight, so that if evacuation is required for failed induction a charter will not be necessary.

The principle of electively evacuating any patients with any past or present complications in pregnancy is closely followed. This in itself also causes problems, with patients having to leave home at 36 to 37 weeks' gestation and spend the rest of their pregnancy in the transient boarding centre in Churchill. This disrupts the family and the patient is usually lonely during the stay away from home. During this study women electively evacuated spent an average of 21·7 days (1-64 days) in Churchill before delivery. Including the postpartum stay and transportation, the average time away from home was about four to five weeks. One major factor influencing this time interval is those patients who are uncertain of their dates (303 (48·7%) of this group). Those who were unsure of dates were significantly less likely to spend fewer than three weeks away from home before delivery (43·5%) than those who were sure of dates (63%). Only 26 patients had minimal or no antenatal care and most attended the nursing station early on in their pregnancy. There is therefore both opportunity and a considerable onus on the nurse to try to pinpoint gestational age as accurately as possible by taking a history and by assessing uterine size bimanually.

In the context of modern obstetrics in the Western world it is difficult to defend patients delivering their babies in isolated areas without medical help or hospital facilities. In the present social and cultural context of the Canadian Inuit, however, this still seems to be desirable. The maternal and perinatal results of this five-year survey seem to support this. Indeed, comparing the perinatal and infant mortality figures shows that it is safer to be born in the settlement than to remain there for the first year of life. These results are due to experienced midwives (to whom the main credit must go), a liberal evacuation policy, close general practitioner involvement, and a specialist visiting and consulting service. Any reduction in the level of these services would be potentially disastrous, with the third stage of labour being the main threat to maternal life.

There are signs that the social and medical expectations of the Canadian Eskimos are changing, and many of the younger patients request and expect hospital delivery. This will probably be the main factor influencing the obstetric services to this area in the future.

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Personal Therapeutics

Treatment of migraine

DAVID THRUSH

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Migraine has a certain social respectability and is a convenient diagnosis for both doctor and patient. It is therefore often misdiagnosed, though occasionally it may be difficult to determine where migraine ends and tension headaches start—and often both occur in the same patient. Unfortunately there is no satisfactory definition for migraine, but I have found the following helpful—recurrent headaches with two or more of the following five factors: unilateral headache; nausea; visual or other neurological disturbance; family history of migraine; and history of bilious attacks, travel sickness, asthma, eczema, or hayfever.

Migraine has a wide range: some patients have only mild attacks and can continue to work, whereas others are totally incapacitated, so treatment must be tailored to the individual. Any precipitating factor (see table) should be identified from the history and if possible corrected; treatment may then be divided into managing the acute attack and prophylaxis.

Department of Neurology, Freedom Fields Hospital, Plymouth PL4 7JJ
DAVID THRUSH, MD, MRCP, consultant neurologist

Acute attack

Most patients with mild attacks are helped by aspirin or paracetamol with an antiemetic, metoclopramide (Maxolon) 10 mg, if nausea is a troublesome complication. For the more severe attack ergotamine remains the most effective treatment, though to my knowledge it has never been shown to be more effective than a placebo in a double-blind trial. Because nausea and vomiting are common side effects the aim is to give the

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smallest dose to provide maximum relief, and it must be emphasised that the ergotamine preparation or analgesic should be taken as soon as the attack starts. Although ergotamine sublingually or by Medihaler is in theory rapidly absorbed, I have not found these methods helpful and suspect that absorption from the buccal and respiratory mucosa is erratic. I prescribe one tablet of Migril (ergotamine tartrate 2 mg, cyclizine hydrochloride 50 mg, caffeine 100 mg), the dose being doubled or halved depending on the patient's response. If the headache continues I do not advise further tablets at 30-minute intervals as this seldom helps and more often potentiates the headache. Patients who cannot tolerate ergotamine by mouth can be taught to give it by subcutaneous or intramuscular injection, 0·25 mg, and despite the inconvenience of administration many prefer Cafergot suppositories (ergotamine tartrate 2 mg, caffeine 100 mg, belladonna alkaloids 0·25 mg, isobutyl allylbarbituric acid 100 mg). It is rarely necessary to advise the patient to lie in a quiet and darkened room as most already seek refuge in the bedroom and despite the misery of their symptoms many manage to fall asleep.

Patients must always be given instructions about the maximum amount of ergotamine that can be taken in one week, normally 12 mg, and because of the various medications available it is advisable also to tell the patient how much ergotamine is in each tablet. Some patients become dependent on ergotamine, and ergotamine headache is a definite entity that is not always recognised; both the patient and doctor mistakenly attribute the headaches to further migrainous attacks, more ergotamine is given, and a vicious circle is established.

I treat patients with complex migraine in the same way as those with classic migraine, although ergotamine must be used with caution if there is a prolonged aura. It should not be given in pregnancy or to patients with a history of ischaemic heart disease, peripheral vascular disease, or renal or hepatic disease.

Migrainous neuralgia (cluster headaches) is best treated with subcutaneous ergotamine, and prophylactic ergotamine should be given, either subcutaneously or by suppository, for the next five nights, after which the patient is allowed 48 hours free of drugs to see if the attack recurs. I find this a more difficult condition to treat than the textbooks imply, and often ergotamine has to be combined with some other means of prophylactic treatment.

Migraine status (recurrent attacks of migraine without remission) is a medical emergency. Patients are exhausted and often dehydrated and should be admitted to hospital, where they can be heavily sedated with parenteral barbiturates or chlorpromazine and the dehydration corrected. Steroids may have to be used on rare occasions.

Prophylaxis

If the attack can be anticipated (for example, menstrual migraine or relaxation migraine) Bellergal (belladonna alkaloids 0·1 mg, ergotamine tartrate 0·3 mg, phenobarbitone 20 mg) one tablet twice or thrice daily for the 48 hours before the expected onset is often successful, but other patients may benefit from Cafergot suppositories or prochlorperazine (Stemetil) 5-10 mg thrice daily. I find that patients with menstrual migraine rarely benefit from diuretics.

Once the frequency of attacks interferes with the patient's work or social activities I give prophylactic treatment. Prochlorperazine 5-10 mg thrice daily with or without an antihistamine, promethazine 25 mg at night reduces the frequency of attacks in most children and adolescents. Unlike many of my colleagues, I have not found clonidine or methysergide of value in adults and use pizotifen (Sanomigran) —another serotonin antagonist—0·5 mg thrice daily, the dose being increased if necessary to a maximum of 2 mg thrice daily. This does not have the serious side effects of methysergide, though regrettably some patients put on weight; other side effects—drowsiness, dizziness, nausea, and facial flushing—are uncommon. Propranolol, 80 mg thrice daily, is sometimes useful in those patients who have not responded to the above measures. I usually continue prophylactic treatment until the patient has had three good months, after which it is slowly reduced and stopped.

Patients with migraine often become anxious about their attacks; this precipitates further migraine attacks, and a vicious circle is established. Associated anxiety or depression must always be corrected by careful explanation, reassurance, and if necessary appropriate medication.

Common precipitating factors

Stress, anxiety, tension, depression	Irregular meals
Hormonal change, for instance, menstruation	Inclement weather
Diet—chocolate, cheese, citrus fruits, fried foods, milk	Sleep disturbance
Alcohol	Loud noises
Drugs—oral contraceptive pill	Bright lights

Despite advances in neuropharmacology and the introduction of migraine clinics, migraine remains an enigma. There is no wonder-drug, nor I suspect will there ever be. Provided the doctor is prepared to take a little trouble, however, the frequency and severity of migrainous headaches can be reduced. There are patients who are refractory to treatment. Some return to announce proudly that they have been cured by "fringe medicine," though within several months they often creep back with the same headache. Such patients are best treated with psychotherapy from the general practitioner, who knows both the patient and his background well. Surgery has no place in the treatment of migraine, and referral to the psychiatrist rarely helps and may unmask yet more problems.

Successful treatment depends on correct diagnosis, treating the patient as well as the disease, and spending time talking to the patient—a most neglected therapeutic weapon. The patient then realises that he is dealing with a sympathetic doctor; authority and confidence are established; and a satisfactory doctor-patient relationship is forged. When you see your next patient with migraine why not explain to him the mechanism of his symptoms?

Is there any remedy or preventive technique for red eyes caused by regular swimming in chlorinated baths?

The only method of preventing red eyes caused by swimming in chlorinated water is to wear protective goggles. Care must be taken, however, in removing these goggles as injuries have been caused by the fingers slipping and allowing the elastic headband to snap the goggles back on to the eye.

What are the value and advantages, if any, of orthopaedic beds?

Beds vary. They may be a very hard board with a thin covering or a luxurious soft feather mattress on a soft sprung base. It is now traditional to recommend a firm bed for sufferers with back troubles, and this problem can be approached in several ways. Either a Firm Edge moderately expensive spring-interior mattress on a sprung divan base can be ordered (a British Standard is available), which is satisfactory for most purposes; or alternatively, a solid wooden or slatted wooden base with a foam-rubber mattress of not more than 10 cm thickness also gives considerable support, and some people prefer this type of bed, but it is more expensive. A traditional curled-hair mattress and a hard base is an alternative, but this is even more expensive than the firm rubber mattress. Custom-built beds designed specifically to requirements of the client are also available, but needless to say they are astronomical in price. Orthopaedic beds are available and usually consist of a stiff Firm Edge sprung-interior mattress on a divan base. They are of no particular advantage. Perhaps the best method of dealing with this problem is to go to a large department store during the sales when, provided that it complies with the appropriate British Standard, it is usually possible to find something that is entirely suitable for patients with back problems.

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