CORRESPONDENCE

FRACTURES OF THE SPINE

Str.—With reference to Mr. R. Watson Jones’s article in the British Medical Journal of February 21st, 1931, and Mr. H. J. McCurrich’s clinical memorandum, published on March 5th, 1932, I should like to ask them if they think the prone position on the stretcher would be detrimental to the patient as regards his breathing and the action of the heart, bearing in mind that the patient is shocked. Certain experienced teachers of first aid of our organization think it would. In fact, some of the foremost leaders in the first-aid movement, whose opinion is entitled to consideration, inform me they would rather run the risk of the spinal injury and all that this means, than the risk of failure of the respiration or the circulation of the blood. Others equally deserving of being listened to are in favour of transport in the prone (extended or hyper-extended) position, giving every chance to the fracture and disregarding (or risking) cardiac or respiratory failure as the lesser of two evils. COULD MESSRS. Watson Jones and McCurrich reassure the first-mentioned that they might disregard cardiac or respiratory failure? Do the above authorities recommend turning the patient face downwards: (1) if found on his back, with the lower limbs paralysed? (2) when lying on his back, if a fracture of the spine is only suspected and there is no apparent paralysis of the lower limbs?

Some members of the Revision Committee of First Aid to the Injured would not allow first-aiders to transport, what they consider to be, a risk in turning the patient. If I remember correctly, Mr. Watson Jones laid it down that ‘all first-aid workers should be taught in the future that a patient with an injured spine must be carried face downwards.’ May one assume that he does not qualify this ruling at all?—I am, etc.,

C. I. ELLIS, Colonel,
Surgeon-in-Chief, St. John
Ambulance Brigade.

AMBULATORY TREATMENT OF FRACTURES

Str.—It was a pleasure to read Mr. R. Watson Jones’s letter in your issue of March 5th. Mr. Jones has experience in clinics dealing annually with 5,000 fractures, many of which he probably sees himself, and his opinion must receive great attention. It seems, however, that his meaning must be divined by reading between the lines of his letter rather than by accepting his words as they stand. Interpreted in an understanding way his remarks, which apparently apply to fractures of both bones of the lower leg, should receive very wide support.

It is quite true that many people keep such cases recumbent for an unnecessarily long period. Practically all lower leg fractures can be discharged from hospital in a few days; they soon cease to be ‘recumbent,’ and at the end of about six weeks are freely walking in suitable splints. If, for financial reasons, the patient must be able to start weight-bearing earlier, it is easily arranged for him to do so by fitting a suitable plaster with a protective heel. But a manual worker (say a dock labourer) recumbent for a few days and then allowed weight-bearing at the end of six weeks, will not return to full work later than a similar case allowed to walk at the end of two days. Surely Mr. Jones does not mean that the absence of weight-bearing for a few weeks entails the dreadful complications which he has so dramatically described, nor can he mean that he believes in dense adhesions arising as a result of disuse per se. True rest in a normal position is beneficial, and cannot give rise to adhesions, though these may result from trauma, whether accidental or deliberate, and stiffness is usual if a joint is fixed in a faulty or strained position. Similarly, decalcification of bone never occurs with rest for a reason.

HYDROCHLORIC ACID IN DIABETES MELLITUS

Str.—While deeply interested in Professor Henry Moore’s study of achlorhydria, published in your issue of February 27th, I cannot agree with his observations on the administration by mouth of hydrochloric acid in diabetes mellitus.

Since my investigations on gastric secretion in diabetes (a short communication on which, in the Glasgow Medical Journal, June, 1927, appears to have escaped Professor Moore’s notice), I have treated with the acid, in addition to whatever dietary or other measures may be necessary for the individual patient, practically every case of this disease coming under my care. In the out-patient department I find a large proportion of diabetic patients do quite well on quantitative diet plus hydrochloric acid by mouth, only a relatively small number requiring insulin in addition.

During the last five years, in Dr. Henderson’s wards in Glasgow Royal Infirmary, 145 diabetic patients have been treated on similar lines. These being, as a rule, more severe cases, a somewhat larger proportion required insulin treatment. In some cases, hydrochloric acid has been withheld till the patient has shown a more or less constant blood sugar concentration and urinary excretion of sugar under known conditions of diet and insulin administration. Thus we have been enabled to obtain charts showing the response on adding hydrochloric acid by mouth. The results, though not invariable, are very encouraging, and a noteworthy point is that several patients, who have come back on observation monthly over a period of years, can keep clear of urinary sugar and show normal blood sugar concentration on much smaller dosage of insulin so long as the acid is being taken.

After the first few months there is no difficulty in getting the patients to continue the treatment, as they have a greater feeling of well-being when taking regular doses of the acid.—I am, etc.,

Glasgow, March 12th.

EVELYN MCPHERSON, M.D.
able time; and why is it not seen in "non-fracture cases" in which recumbency is essential? As for the oedema, due to lack of tone in the musculature of the vessels, this is an attractive though highly speculative suggestion.

Common sense must be used in the treatment of fractures as in any other branch of medicine. Each case should be treated on its merits, and should be treated, not as a bone nor as a limb, but as a whole person. The procedure suggested of immediate weight-bearing, though yielding in skilled hands results just as good as moderate recumbency, has many pitfalls as a universal practice, and if used indiscriminately must lead to unfortunate results.

—I am, etc.,
Liverpool, March 12th.

BRYAN McFARLAND.

THE BARBITURATES IN ANAESTHESIA

Sir,—The leading article in the British Medical Journal of March 5th impresses me as a wholesale condemnation of the intravenous injection of barbiturates in basal hypnotic doses. If this interpretation be correct, it is unlikely to meet with the support of those who have had any considerable clinical experience with barbiturates of proven value, irrespective of pharmacological evidence.

With regard to basal hypnotism generally, it is stated in this article that "the possibility of toxic effects, particularly upon the liver and excretory organs, cannot be disregarded," and that "the barbiturates are cardiac depressants." Chloroform has similar properties: nevertheless, it is still in common use on the basis of clinical merit. Some further points require comment. It is said, for instance, that "the method [basal hypnotism] lacks the precision and fine control which can be obtained by inhalation anaesthesia," and then "the intravenous method ... allows the minimal effective dose to be determined accurately." Surely this is a little contradictory? The endorsement of the opinion of the Council of Pharmacy and Chemistry that "any advantages ... in the employment of barbiturates as basal narcotics or hypnotics can be procured by giving them by the mouth" does not help us much, since "accurate dosage, which is essential for successful basal anaesthesia, and which varies with each individual patient, is difficult to obtain." How, then, is accurate dosage to be arrived at in a practical manner other than by intravenous injection?

My own experience of intravenous administration of the barbiturates is based on nembutal (pentobarbital-sodium), which has proved superior as a basal hypnotic to other members of the group in a recent series of pharmacological experiments.1 An account of 180 cases has already been published.2 These administrations were by no means experimental, as nembutal had already established its worth in the hands of Lundy at the Mayo Clinic. Lundy informed me recently that he continues to use it. Since then I have given in addition 683 injections. The operations cover a wide field. They include simple procedures, such as dissection of tonsils, in which the presence of active throat reflexes at the end of the operation is all-important. They include such operations as lobectomy, and drainage of lung abscess, in which depression of respiration or circulation is a matter for grave concern. In none of these cases has there been any sign or symptom of the sudden circulatory and respiratory disturbances referred to in your article as "intravenous reflexes." In none has there been any clinical evidence of damage to the liver or excretory organs. On the other hand, the approval of the method by patients is unqualified, as evidenced by the demand for its repetition when a subsequent operation has been necessary.

The merits and disadvantages of basal hypnotism in anaesthesia need not be discussed here. They are already well known. The agent, or combination of agents, to be used may be a question of choice. No matter what the choice may be, since individuals vary in their reaction to most drugs, the question of accurate dosage will remain a matter for fine discernment on the part of the anaesthetist, where safe and effective results are essential. I am satisfied that intravenous injection of nembutal, combined with a suitable dose of morphine hypnotically, provides at least one safe and accurate method.

—I am, etc.,
London, W.1, March 12th.

I. W. MAGILL.

THE COMMON COLD

Sir,—Since the report in the Journal of February 18th of a discussion on "The common cold," opened by Sir Thomas Horder at the Royal Society of Medicine, some very interesting letters have appeared in later issues, particularly those of Lieut.-Colonel R. H. Elliot on February 27th and Dr. Douglas Webster on March 5th.

Colonel Elliot's treatment seems to be rather complex, and from a scientific point of view leaves one guessing which of the many activities is the effective agent in relieving the complaint. Personally, if I were asked to choose the factor of greatest value, I would say wearing the inhaler and mask—this without giving any credit to the medicament employed. On the principle of assisting Nature's efforts their use seems to be scientifically correct, because it keeps the entering air warm and maintains warm moisture in the nose, pharynx, and larynx. This ensures the full activity of the cilia and respiratory currents, both of which keep these cavities scavenged and ventilated.

The first effect of a cold is to dry the lining of the nose and upper airway, and, in the absence of moisture, the cilia become paralysed and motionless. There is considerable evidence to show that this paralysis is due not to any toxins resulting from the infection, as ciliary motion can persist so long as ample fluid is present in which the cilia can move. In the dry nose the respiratory air currents make no physiological contact with the mucous membrane, thus preventing evaporation, and so causing stagnation of air in the sinuses, with defective ventilation. Sneezing and spasmodic cough are Nature's way of producing the necessary secretion to moisten the uncomfortable dry mucous membrane, and both cease when sufficient is poured out. The use of fluids in the nose in an acute nasal infection is a potent source of evil, as it is liable to cause sinus and middle-ear trouble, and removes the physiological secretion which Nature soon supplies as a protective measure, and for which washes are a poor substitute.

Dr. Webster emphasizes the use of heat as an activating agent in bringing about immunity to the infection, and I am in complete agreement with him in this. A hot bath—as hot as bearable and of sufficient heat to cause momentary "goosiness" of the skin of the limbs—to which is added about two pounds of common washing soda, and taken before the last meal of the day and some hours after the previous meal (for digestive circulatory reasons), is invaluable. The immersion must not exceed one minute, so that the skin becomes absolutely dry after towelling, because if perspiration follows the bath the immunity effect seems to be greatly diminished, probably due to a fresh loss of heat. To arrive at the best heat for the bath the thermometer is of less value than the hand for testing the tolerance of any given individual.

1 Barlow and others: Anesthesia and Analgesia, 1931, x, No. 6, 255.
2 Magill: Lancet, 1931, i, 74.