Indications for Leucotomy and Prognosis

Q.—What are the indications for leucotomy, and is any mental deterioration permanently arrested by the operation?

A.—The indications for leucotomy are certain forms of suffering which cannot otherwise be relieved, and the operation is seldom performed unless other methods of treatment have been exhausted. The symptoms which may be relieved by it are very diverse and include: (1) physical pain (for example, from malignant disease, neuralgia); (2) severe hypochondriasis, in which the patient is disabled by pains and discomforts for which no adequate physical cause can be found; (3) unbearable tinnitus; (4) excitement and agitation arising from delusional and hallucinatory symptoms in psychotic patients; (5) chronic depression; (6) chronic and disabling obsession states, anxiety states, states of tension. The principal effect produced by the operation is to reduce the patient's capacity to worry and ruminate about unpleasant feelings or ideas. Thus when the indication is organic pain, the patient continues to feel the pain, when present, but may cease to fear its reappearance when it has temporarily gone.

The results of the operation are also variable; defects due to the operation and permanent damage done to the personality have, however, been much less in evidence since the introduction of modified and bimedical operations. In favourable and well-chosen cases—for example, of involutional depression—there may be recovery almost up to a 100% level; as a rule, in most cases, some of the old symptoms remain, though the operation is still regarded as having been worth while. Some patients are not benefited. Mental deterioration due to progressive organic disease of the brain is, of course, not influenced by the operation.

Effect of Osteoarthrosis of Hip on Knee-joint

Q.—A patient has been advised an early arthrodesis for severe osteoarthrosis of one hip, as otherwise arthritis may supervene in the corresponding knee-joint. As she is only 40 years of age she is anxious to postpone operation for a year or two. What is your opinion of the prognosis regarding the knee if operation is deferred?

A.—There need be no fear that delaying operation will lead to the development of osteoarthrosis in the corresponding knee-joint. Although osteoarthrosis of the knee is occasionally coincidental with arthritis of the hip, there is no evidence that it is aggravated by the hip condition.

Pathogenicity of Streptococci and Factors Influencing It

Q.—How can one distinguish saprophytic from pathogenic haemolytic streptococci? What determines whether a given streptococcus will cause clinical illness in an individual?

A.—Practically all the haemolytic streptococci that produce sore throat, scarlet fever, or any of the pyogenic lesions in man belong to Lancefield's Group A; rarely they may belong to Lancefield's Groups B, C, or G. The identification of the group of a streptococcus, which is done by testing an extract of the streptococal culture with specific antisera, is without doubt the most useful test for distinguishing the streptococci that are potentially pathogenic from those that are unlikely to produce disease. Within Group A, however, there is no satisfactory method of distinguishing the more virulent streptococci from the less virulent. The production of the so-called M antigen is not a satisfactory criterion, because many strains that are certainly virulent fail to produce it.

Among the potentially pathogenic streptococci no specific factors are known to determine the outcome of an infection. Often it must be determined by the immunity of the individual. So far as the streptococci are concerned, immunity is largely type-specific, so that infection with one strain generates immunity against a second illness with other strains of the same type, but not against strains of the other 50 or more types that exist. When an individual who is a carrier of a streptococcus develops a streptococcal sore throat this is therefore probably more often due to his being infected by a new and, him, more virulent strain than to some "activation" of the strain that he has been harbouring. The same is probably not true of streptococcal otitis media and is certainly not true of staphylococcal boils, when infection is known frequently to be with the organism that has been carried in the nose and on the skin for perhaps many months. In such cases we must presume that trauma, some other microbial invasion, or some more general physiological change allows the streptococcus or staphylococcus to invade. The idea that the organism itself has changed is also a possible explanation, but there is no direct evidence in its favour.

Time of Death in Judicial Hanging

Q.—When does a person executed by judicial hanging actually die? Is consciousness retained for a short time after the rope has dislocated the upper cervical vertebrae?

A.—In the published minutes of evidence given before the Royal Commission on Capital Punishment 1 the panel of prison medical officers stated that under the present method of execution death was always instantaneous as a result of fracture-dislocation of the first or second cervical vertebra, or both, with destruction of the spinal cord at the corresponding level.

Psychological Factors in Psoriasis

Q.—What part do psychological factors play in the aetiology of psoriasis, and how rewarding is their treatment?

A.—A considerable number of factors may be identified as precipitating causes in psoriasis, although the essential nature of the disorder remains obscure. Among these aggravating factors psychological and psychiatric influences may be included. Their relative importance is very largely a matter of opinion, and in my own opinion not very great. It is in very few patients that psychiatric factors seem to be of great significance.

In the same way, psychiatric treatment is not usually of much direct value. It is, however, very desirable to foster the patient's morale so that he will persevere with other methods of treatment.

Correction.—The price of Sir Reginald Watson-Jones's book Fractures and Joint Injuries, 4th edition, in two volumes, is now £6 10s. per set, not £6 as reported in the Journal of September 17, page 724.

Books of "Any Questions"—The second and third volumes of "Any Questions?" are available, price each 7s. 6d. (postage 6d.), from the Publishing Manager, B.M.A. House, Tavistock Square, London, W.C.1, or through any bookseller. Each contains some 200 selected expert answers, and the third volume a cumulative index to the three published books.