DISCUSSION.

Dr. A. F. Hurst, Ascot.—I agree with Professor Guillain that torticollis has frequently an organic basis. The worst case of spasmodic torticollis I have seen followed an attack of malaria and lasted three years; when the malaria relapsed, the torticollis disappeared. In severe cases the therapeutic effect of malarial infection might possibly be worthy of trial.

The question of visceral tics deserves a little attention. Aerophagy or air-swallowing is thought to be associated with flatulence, but in cases which I have seen there has been normal acidity and normal motility of the stomach, and fermentation or flatulence has been entirely non-existent. Owing to the alleged flatulence the patient attempts to relieve his epigastric discomfort with repetitions of belching, which result merely in the swallowing of more air. Simple explanation and persuasion in most cases results in cure.

Tics of coughing also occur, especially in association with asthma. A frothy expectoration accompanied by cough in this condition is always a symptom of a tic-like character.

Dr. B. Sachs, New York.—No one can be expected to add much to the opening paper. Tic is, after all, a generic term. There are many tics and many causes, and their frequent psychogenic basis is significant, as is the association of mental instability with tics. Yet in many instances of ordinary kinds of tic no marked mental disturbance is discoverable. Typical examples of Gilles de la Tourette's disease are distinctly rare, though tricks and tics of speech are common. Echolalia and coprolalia are in my experience always associated with marked psychological disorders, and are, therefore, different from ordinary tics.

It is important to trace the cause or causes that lead to the beginning of those disordered and impulsive movements. So many begin in early life that it is essential to attack them at that period. Many a tic that has been carried all through life might have been checked if at its beginning the physician had been a severe disciplinarian. Kindly but firmly the youthful tiqueur has to be told that the tic must stop, and that he is the one to stop it, with such further assistance as the neurologist may suggest.

Dr. Stanley Barnes, Birmingham.—In my experience only those of a nervous temperament, mainly inherited, are liable to tics. I have been struck with the relative frequency of tics in Welsh as contrasted with Anglo-Saxon types, though I agree that no race can be regarded as exempt from them. In respect of treatment, I rely largely upon discipline, with which I occasionally combine a little drug treatment (bromide or hyoscine).

Dr. Grainger Stewart, London.—A tic can arise from a habit either of seeking a pleasurable sensation or of avoiding an unpleasant sensation. On the psychical side, an irresistible desire is usually in being, which becomes
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...painful if repressed. Apprehension also plays a part; for instance, in grimacing the fear of being seen is apt to increase the severity of the disordered movement. Tics are in no way related to hysteria; indeed, I consider the aerophagy referred to by Dr. Hurst a hysterical manifestation, and not a true tic. The majority, being psychogenic, can be influenced by appropriate treatment; I have had under observation a case in which a tic disappeared following the revival under hypnosis of a forgotten memory. Co-ordinated exercises are of special value in treatment.

Dr. R. G. Gordon, Bath.—The psychogenic factor in the genesis of tic has been duly stressed, but it is well to bear in mind that there may be factors of another series which determine the origin and type of individual tics in the psychopathic person. Torticollis, for example, may be started and maintained by fibrositis of the trapezius muscle, or by arthritis of the shoulder joint. These data are of particular interest from the standpoint of treatment, and in undertaking this it is necessary to examine the patient carefully for pathological conditions outside the nervous system.

Some of the so-called postencephalitic tics are associated with conduct disorders; in such cases psychotherapeutic treatment has proved of service in improving or abolishing the movements.

Dr. N. D. Royle, New South Wales.—I have sometimes found chronic arthritis of the cervical vertebrae in association with spasmodic torticollis in adults. The afferent side of the reflex movement arises from this local condition.

Dr. A. J. Brock, Edinburgh.—I agree fundamentally with the disciplinarian method treatment, but think that less emphasis should be laid on the individual symptom and more attention given to a hardening, as it were, of the underlying psychical asthenia.

Dr. P. C. Cloake, Birmingham.—It is of great importance to realise that closely similar movements may arise from disorder of neural mechanisms at very different levels, and that etiological differences are of prime importance in determining the line of treatment to be followed. This is true not only of tics but of various other neurological conditions, and, I believe, also of the respiratory sequelæ of epidemic encephalitis, which may in one case have their origin in rigidity of the chest wall and in another in brain lesions at various levels. A view of this kind allows a conception of disordered behaviour which is not interrupted by any distinction as between physiogenic and psychogenic. At the highest levels disorders of function manifest themselves as psychical disorders, and correlated physiological and anatomical changes may be unrecognisable. In the psyche, too, there are levels of function, and ample opportunity for other psychical motivations than that of seeking a pleasurable sensation.

Disciplinarian treatment is not synonymous with 'brow-beating'; the latter amounts simply to overcoming the unrecognised motives of tic by the stronger motive of fear or shame, and in the long run may do more harm than good.