

published a large section (paragraphs 31–49) presented some proposals for reform. These included increased use of informal procedure to clear up complaints quickly, and the setting up of about 12 regional panels, each with a legally qualified lay chairman, to deal with cases requiring formal investigation.

The Third Report was approved at the Special Representative Meeting and at the Special Conference of Representatives of Local Medical Committees in June 1966.<sup>3,4</sup> But in November the annual conference of the Executive Councils Association passed a resolution opposing the proposals for regionalization, and further opposition has since come from some local medical committees. At its meeting on 5 January the General Medical Services Committee debated the proposals at length (see *Supplement*, p. 19). The Committee gave overwhelming support for the recommendations in the Third Report, and the next step is for further negotiation with the Government and the preparation of new regulations. All doctors will hope that the new machinery will prove effective in creating a procedure that is not only just but seen to be so.

## Puzzle of Stupor

What is stupor? Textbooks differ on the details of a definition, but few authorities would disagree with the three cardinal features outlined by J. Hoenig and J. G. Toakley<sup>1</sup>: “(1) There is absence of speech and movement, with the exception of respiratory and, often, eye movements. Whether this absence is complete or partial, and whether it can be temporarily overcome by external stimuli seems to be more an indication of the degree of stupor. (2) There is relative preservation of consciousness, and (3) the patient experiences the akinesia and the mutism subjectively as a volitional act, often delusionally motivated.”

Since the concept of stupor was first introduced by the early French psychiatrists it has continued to attract clinical and experimental observations. Some neurologists prefer to call it “akinetism.”<sup>2</sup> An early clinical subdivision into “anergic” and “delusional” stupor<sup>3</sup> corresponds, as A. Hoch pointed out,<sup>4</sup> to the “benign” and “malignant” categories which he related to the affective and schizophrenic (usually catatonic) disorders respectively. Attempts have been made to find relationships between somatic changes and the psychomotor symptoms in both these main groups of the psychoses. For example, S. Smith eliminated neurological disease and studied his stuporous patients’ responses to barbiturate and methedrine, their autonomic reactions and electroencephalographic recordings, and their metabolic, endocrine, and liver functions, but he was unable to detect “any persistent or pathological findings of any significance.”<sup>5</sup> A stuporous state sometimes appears in the course of various somatic diseases, especially the encephalitides and some types of cerebral lesion. Post-mortem studies have shown that stupor can occur with “lesions involving the central portion of the brain stem between the anterior end of the third ventricle and the medulla.”<sup>6</sup> Attempts to analyse the reaction in functional terms have been made with electrophysiological techniques, and the results have pointed to “interference by the lesion with the deep structures related to the ascending reticular formation.”<sup>7</sup> Pharmacological studies have also been made, for stuporous states can be induced by several drugs in

animals,<sup>7</sup> and in man intravenous barbiturate has long been known to remove stuporous symptoms, at least temporarily, in many cases.

But while its physical basis remains obscure no comprehensive view of the psychopathology of the stuporous reaction can be complete without regard to its psychological aspects. Indeed, states of stupor take their place among other disturbances of consciousness as one of the “psychogenic psychoses,”<sup>8</sup> and a category of “reactive confusion” is included in the Eighth Revision of the International Statistical Classification of Diseases. Many well-authenticated descriptions of stuporous reactions to such adversities as imprisonment and the stress of war have led to their classification as quasi-hysterical states. G. D. Godenne<sup>9</sup> has published an interesting case history of “recurring hysterical pseudostupor” in which physical investigations had been conducted with particular care.

One of the obstacles to a clear view of stupor is its relative rarity. Most authors have been able to report on only a small number of personally observed cases. In a useful study M. P. Joyston-Bechal<sup>10</sup> has recently identified 100 case records of patients in stupor admitted to the Bethlem Royal and Maudsley Hospitals during 1948–61. Follow-up information was obtained on 97 of these patients for a period of at least two years, in the majority of cases by personal interview. For the purpose of his investigation he adopted a clinical description in place of a definition—“the basic triad consisting of akinesia, mutism and relative preservation of consciousness”—and he added to this core of symptoms information on their duration, the presence or absence of sphincter disturbance, the patient’s capacity for voluntary feeding, and response to external stimuli. From these data a diagnostic “profile” was constructed to distinguish stupor from coma, sleep, and psychomotor retardation, and also to grade its severity.

With this information Joyston-Bechal has confirmed that stupor is a non-specific symptom associated with the diagnostic categories of depression, schizophrenia, organic psychosis, and mixed neurotic state. It did not seem to be characteristic of any particular type of mental disease. The diagnosis was made on the basis of other clinical features and in a few cases only on follow-up. In fact in a small proportion of cases the diagnosis could not be established even with the help of the follow-up data. The outcome of these patients depended on the underlying illness. Joyston-Bechal also found that there were no obvious physical or personality factors associated with stupor; the likelihood of multiple attacks of stupor in the functional psychoses was approximately one in three; and, while some patients’ memory of the stuporous period was complete, others showed a partial or total amnesia. No clear relationship was established between the severity of stupor and either diagnosis or outcome. Finally, only a minority of patients responded temporarily to intravenous barbiturates, and electric convulsion therapy proved to be the most effective physical method of terminating the stupor. There is clearly much more to learn about this puzzling psychobiological reaction.

<sup>1</sup> Hoenig, J., and Toakley, J. G., *Psychiat. et Neurol. (Basel)*, 1959, 137, 128.

<sup>2</sup> Williams, D., and Parsons-Smith, G., *Brain*, 1951, 74, 377.

<sup>3</sup> Newington, H. Hayes, *J. ment. Sci.*, 1874, 20, 372.

<sup>4</sup> Hoch, A., *Benign Stupors*, 1921. London.

<sup>5</sup> Smith, S., *J. ment. Sci.*, 1959, 105, 1088.

<sup>6</sup> Brain, Lord, *Diseases of the Nervous System*, 1962, 6th ed., p. 820. London.

<sup>7</sup> de Jong, H. H., *Dis. nerv. Syst.*, 1956, 17, 135.

<sup>8</sup> Faergeman, Poul M., *Psychogenic Psychoses*, 1963. London.

<sup>9</sup> Godenne, G. D., *J. nerv. ment. Dis.*, 1965, 141, 670.

<sup>10</sup> Joyston-Bechal, M. P., *Brit. J. Psychiat.*, 1966, 112, 967.