EDITORIAL.

THE ORGANIC ASPECT OF SHELL SHOCK.

During the war, popular interest in 'shell shock', and the emotional tone which invested the question, made unbiased inquiry difficult. This popular interest in the problem has now largely disappeared, and it is possible that the War Office Committee which is at present sitting may be able to discover sources of information which were not available during the epidemic of war speculations. Valuable aid might be sought from those who dealt with the cases in the front area itself. Unfortunately, the conditions there—the stress of work, and the many conflicting duties of the front line—made systematic investigation almost impossible, and it is doubtful whether any considerable amount of accurate information is now available.

A case of 'shell shock' as seen in a home hospital has little in common with the case observed a few minutes after the explosion which gave rise to it. In cases of true 'shell shock' the early condition is an organic one; the later condition seems rather to be due to a neurosis which supervenes upon the original state, especially perhaps in those where early treatment has been improper. That the early case of true 'shell shock' may undoubtedly exhibit an emotional state is recognized by all, but underlying it there are certainly signs of organic lesion. These signs are transient, but clearly marked, and it is perhaps their fleeting character which led many to accept the view that the tremendous forces of an exploding shell usually gave rise to disturbances of a purely 'functional' character only. Inequality of the pupils, vertigo, inco-ordination of possibly cerebellar origin, impairment of the tendon reflexes, and even the presence of an extensor plantar reflex, may be noted; the cerebrospinal fluid may exhibit raised pressure, increase of its cellular and chemical constituents, and the presence in it of red blood-corpuscles. To these may be added organic signs like those which are associated with hyperthyroidism—exophthalmos, von Graefe's sign, dilatation of the pupils, and increased frequency of the heart-beat. Even in cases where a nervous breakdown occurred as the result of an explosion not near enough to concuss the soldier, these latter organic signs were almost invariably present. It is a common statement that such a nervous
breakdown is due to the emotional 'mental' reaction to the explosion. To say this, however, is to put the cart before the horse. Every one who has experienced an unexpected explosion in his near vicinity knows that the shock effect occurs before he has time to be aware of the nature of its cause. He starts and shakes before he has time to orient himself to the cause of the explosion. It is far more likely that the emotional 'psychic' state which follows an explosion is due to the antecedent organic reaction of the nervous system than that the organic state—that which gives signs like those associated with hyperthyroidism—arises after the soldier has pondered over the nearness of his contact with death.

The real problem of shell shock is to seek a means of curing this early neurological state before it is allowed to become crystallized, for insistence upon the 'mental' cause of the condition by those who had no experience of its early stages largely obscured the necessity for neurological investigation during the war.

The soldier, with his true knowledge of the actual conditions, was prejudiced by the manner in which the problem was treated at home. He knew that in some cases men do break down in the line from hardship and from horror; he knew that such a breakdown was sometimes anticipated by the soldier as a means of escape from the line; he knew that in other cases the result was due to actual explosion. The unfortunate and inaccurate use of the term 'shell shock' tended to a grouping of all these cases in one class, and the soldier was inclined to give the whole class the character of its worst component.

Few have much respect for a fellow man who leaves his comrades in the lurch, and the undoubted leniency with which we treated these cases during the war made the 'common-sense' soldier fear that the morale of his troops might suffer if what he considered to be an amateurish mode of treatment was allowed too much scope among the fighting battalions. He was, however, misled in making this sweeping generalization. We may postulate that the 'shell shock' of concussion falls more or less indiscriminately in its incidence, and that the breakdown due to an explosion which does not concuss often affects the best material. It is our hope that the War Office Committee will discover a method of curing the neurological state which is certainly the prime factor in the former class, and probably also in the latter, and of preventing the late neurosis which so often supervenes. A proper knowledge of the etiology and nature of the primary state, and a consideration of the treatment given in civil life to cases of cerebral concussion, would no doubt aid them, and it is to be hoped that the possible analogy of the two conditions has not been lost sight of. To those familiar with the great insistence rightly placed on
absolute rest and quiet in civil cases, the haphazard treatment of shell concussion during the war appears an incredible folly.

There is one other organic aspect of 'shell shock' which we venture to commend to the Committee's attention. A common type of nervous breakdown commenced gradually, and reached its climax after or during a period of stress. Such patients lost their memory for details, and their interest in life; they became inefficient soldiers, and were sometimes reduced in their rank or relieved from their command. Sometimes they recovered after a short period of rest, to break down again at a later period. A point which we would like to emphasize is that not infrequently among such cases were found those which displayed an almost unnoticeable sluggishness of their pupils in reaction to light, slight inequality of the tendon reflexes, and a positive Wassermann reaction. Cure in such instances is more likely to be permanent if vigorous antisyphilitic treatment is given in place of psychological treatment.

Cases of this nature offer an interesting field of inquiry. It may be suspected that early cerebrospinal syphilis is a disease which may appear and again disappear almost spontaneously. The very slight early symptoms—often exclusively 'mental'—do not of themselves suggest the nature of the condition. Their spontaneous disappearance in the state of rest and quiet which accompanies the psychological treatment of shell shock may suggest that the treatment has effected a cure. It is of importance to know whether any considerable number of 'shell shock' cases have subsequently developed organic nervous conditions of syphilitic origin; and when any case with a similar history is claimed as having been cured by psychological means, the cure cannot be allowed in a strictly scientific sense unless the Wassermann reaction has been shown to be negative.

Indeed, we can hardly suggest a more important point to the War Office Committee than the necessity for a complete serological examination of the cerebrospinal fluid in all cases of breakdown, whether due to concussion, shell fright, or to a more gradual result of war stress. Especially as regards the last of these would we emphasize the importance of bearing in mind the great incidence of syphilis in the male population; the attested fact that parenchymatous and interstitial syphilis of the nervous system often develops with extreme rapidity after stress, accident, or concussion; and the possibility that milder forms of these conditions appearing in the circumstances of war may spontaneously resolve.
Editorial: THE ORGANIC ASPECT OF SHELL SHOCK.

J Neurol Psychopathol 1921 s1-2: 49-51
doi: 10.1136/jnnp.s1-2.5.49

Updated information and services can be found at:
http://jnnp.bmj.com/content/s1-2/5/49.citation

Email alerting service

These include:
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/