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(12) "Concerning Diet in Nervous Disorders," New York Med. Journ., 1912.

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(16) At Detroit Session of Amer. Med. Assoc., June, 1916; Thera-peutic Gazette, April, 1917.

(17) Journ. Amer. Med. Assoc., 1916.

(1) Condensed from paper read before the American Medico-Psychological Association, 1916. Published in full in *International Clinics*, 1916.

## Clinical Notes and Cases.

Some Notes on Battle Psycho-neuroses. By E. FRYER BALLARD, Captain R.A.M.C.(T.), Medical Officer in Charge of Mental Observation Wards, Second Eastern General Hospital, Brighton.

THERE is nothing new in the symptoms comprising the syndromes—generically dubbed "shell-shock"—arising from the circumstances of battle. But to those of us who have had large numbers of these cases passing through our hands, new ideas have been suggested, or the confirmation of old theories brought home.

It is not proposed to describe symptoms in detail in this paper, nor to give statistics as to the percentage of cases showing tremors, mutism, or what not—we are all familiar enough with the symptoms of hysteria, neurasthenia, etc.—but to study the question broadly, if briefly, from the ætiological standpoint.

First of all it may be said at once that loss of consciousness from physical or atmospheric concussion due to "blowing up" or burial is, in the vast majority of cases, merely the last straw in the production of the psycho-neurosis.

A considerable number of cases break down without any such incident, or, if such occur, subsequently "carry on," to break down later without a second concussion. Concussion in civil life does not result in psycho-neuroses in normal persons. It is not the blow on the head nor the loss of consciousness that is the root cause of "shell-shock"; this accident simply "knocks out" the control—that is to say, the "censor" is thereby broken through.

Let me hasten to deny the impeachment that the writer is a sexual psycho-analyst—a suspicion likely to follow upon the use of the term "censor"! One can adhere to the general psychological theory involving a belief in the subconscious, suppression of emotional complexes, the censor, and sublimation, at the same time entirely denying the universality of sexual causes of psycho-neuroses and psychoses. If anything has utterly confounded the sexual theories of the Freudians it is the study of shell-shock. It must be perfectly patent to the most bigoted sexualist that the instinct involved in shell-shock affections is that of self-preservation, and not sex.

The two main syndromes met with in shell-shock are-

- (1) Those of the anxiety neurosis type, manifesting tremors, sweats, palpitation, anxiety, somatic apprehension, insomnia, etc.
- (2) Hysteria, comprising dissociations of consciousness, e.g., delirium, stupor, automatism, amnesia; and somatic episodes, e.g., deafness, dumbness, anæsthesia, paralysis, etc. A third type of hysterical manifestation is fits. These may be clinically "hysterical," hystero-epileptic, or typically epileptic. The last frequently supervene after a latent period of apparent health in shell-shocked soldiers who have sustained no head injury, who have no personal or family history of fits, and who show no signs of the epileptic temperament. Whatever the clinical character of the fits may be, they are hysterical in origin, even though they may become chronic as the result of cerebral habit after the need for suppression is long past (see below).

Other symptoms worthy of mention are vertigo—exceedingly common, and only very rarely terminating eventually in *petit mal* or fits; it is probably vasomotor and of neurasthenic origin; and stammer, without anxiety symptoms, which is probably a psychasthenic sign (*i.e.*, a disguised expression of an over-excited instinct of self-preservation).

Vomiting is not common, but when it does occur may be

very severe. It is always caused by emotional factors—not diet—and may be cured by psychical means.

In the vast majority of cases of shell-shock, both the anxiety syndrome and hysterical symptoms manifest themselves during their course; and in a considerable proportion fits have occurred. But where a somatic hysterical episode (e.g., dumbness) is successfully maintained, the anxiety symptoms (and often signs) are absent—that is to say, a man cannot be hysterically deaf and dumb, for example, and at the same time acutely anxious, agitated, and frightened when fully conscious. The reason for this will appear later.

Two physical signs sometimes seen in agitated cases are Romberg's sign, and "trombone" movements of the tongue on protrusion. The importance of bearing these signs in mind lies, of course, in their usual incidence in general paralysis of the insane and tabes. If purely functional (i.e., shell-shock), they are accompanied by inco-ordination of other types, tremors, and the physical signs of fear generally, and, moreover, by mental anxiety and keen power of auto-criticism. So much for symptoms.

Put briefly, the ætiological hypothesis, which seems to cover all these facts, is as follows:

Soldiers under fire, especially shell-fire, being human beings with human instincts, are afraid. The instinct of self-preservation is in arms. If the instinct were allowed expression as instinctive action the soldier would run away. He does not do so. If he admitted to himself and continually contemplated the struggle between his instinct to run away and his duty or necessity to remain, he would become agitated and betray the physical signs of a fear, which might perhaps conquer. What is he to do, then? He simply does what we all do under analogous conditions: he banishes the struggle from his mind (i.e., he suppresses it into the subconscious), and as far as possible allows the fear some play in a disguised form, such as anger, etc. (i.e., he sublimates). Eventually one of two things happens. A time comes, if he continues under the same conditions, when he can no longer suppress—the censor fails. This failure may be brought about by any incident, ranging from definite shell-concussion to seeing a pal wounded, or by no special incident at all. The result is that the fear-complex arises reinforced in full consciousness once more. If he does

not re-suppress, all the symptoms and signs of fear occur, and he has agitated neurasthenia or the anxiety neurosis. If he struggles to re-suppress and fails he may have fits.

The second event that may occur is the development of an hysterical episode. If he is able to suppress for a prolonged period under fire without sufficient sublimation, and nothing occurs to break down the censor, or when it is broken down he succeeds in re-suppression, then he eventually develops as an instinctive compromise some hysterical episode, e.g., dissociation of consciousness, dumbness, paralysis, etc. The theory of the production of these episodes, which I have endeavoured to explain elsewhere, is briefly as follows:

As the result of continual suppression of the instinct and of continual stimuli tending to excite it (possibly also in part as the result of constitutional tendency in some cases), the instinct enters into a stage of chronic hyperexcitability, which in part constitutes the hysterical temperament. This involves, of course, an extra liability to hysterical episodes. The over-excited instinct results in physiological over-activity of the censor (over-suppression), and hence in the cutting off from consciousness not only of the fear complex, but other stimuli afferent to consciousness as well, e.g., kinæsthetic sensations, ordinary sensations, etc. Thus are somatic episodes, such as paralysis, anæsthesia, etc., produced. The fact that the soldier is fairly happy, i.e., free from anxiety symptoms, when he has a somatic episode, is the result of the instinctive compromise constituted by the episode. The fear complex is still suppressed, but the instinct finds disguised expression as the episode, achieves its ends, and there is then, of course, no conflict.

Very marked over-action of the censor cuts off afferent stimuli to consciousness from wide peripheral areas, and so produces the hysterical states of dissociated consciousness.

The actual site of the somatic episode is in some cases probably determined by associative memory, and often cannot be accounted for. In other cases its position is easily explained, e.g., the exceeding commonness of deafness and dumbness is due to the over-suppression of the instinctive desires to listen and to cry out with fear.

With regard to prognosis and treatment. Severe types that exhibit well-marked symptoms after six months do not recover in the Army. A considerable proportion of those who "recover"

in hospital break down again at their depôts or command depôts, often with symptoms dissimilar from those they originally presented, and not uncommonly with fits (failure of attempts to re-suppress).

Since shell-shock is essentially mental in origin (whatever processes of auto-intoxication supervene)—electricity, radiantheat baths and other machinery, are perfectly useless, except as vehicles for suggestion. Ten minutes' conversation daily with anxiety types, together with the assurance that they will not be sent on active service again for many months, if ever, does more good than all the devices of the engineer or plumber.

Of course the proper treatment for shell-shock soldiers (I mean severe types) is analogous to that of civilians suffering from the same psycho-neurosis arising from other causes, vis., after a few weeks in hospital, complete removal from the environment, at all events for a time, in which the illness arose. These soldiers ought, therefore, to be given not less than three months leave, then be sent to a convalescent home, from there to a command depôt. If they subsequently break down they are no use for the field, and never will be. But under this régime I am perfectly sure many men now discharged as permanently unfit, would have been fit for some category.

So far as hospital treatment is concerned, in addition to the measures outlined above, it is found useful to keep anxiety types in bed in the open air in the morning and to allow them out walking with their pals (not escorts) in the afternoons. For medicine, bromide of ammonium with syr. glycerphos. co. is probably as good as anything. Hysterical somatic episodes e.g., dumbness, are usually cured without difficulty by hypnotic suggestion. What the writer generally does is to tell the patient he is going to bring his voice back in a day or two; to refer to his impending cure each day on seeing him. Then in a few days the suggestion of cure has become a faith (more or less subconscious). The patient is put to bed in a single room, given a few drops of chloroform or ether on a mask with the suggestion that after he has counted one hundred slowly to himself he will sit up and say: "Oh, I can speak," and will continue to speak. This method usually succeeds at the first attempt. Hysterical fits occasionally precede the return of speech, so it is well to be on the watch for these.

In some cases real partial anæsthesia, that is to say, the attainment of the stage of excitement, is necessary.

Two words of warning regarding the cure of somatic episodes may not be out of place.

One is that in recent shell-shock cases removal of the episode, as one would expect, results in agitated neurasthenia. mental wounds still gape and are not sufficiently healed to dispense with the dressing supplied by the episode. As a general rule also patients who manifest physical signs of fear (though feeling comfortable) as well as a somatic episode, should not be cured of the latter until the former disappears, or the same result may occur. In these cases the instinct is so overexcited that it requires some other outlet than the somatic episode; this it finds in tremors, etc. The other point to remember is that, when the patient sits up and says: "Oh, I can speak," and continues to talk as he is told, he may be in a hypnotic sleep. One case at this stage I told to keep on repeating "Mary had a little lamb" so that he should not forget that he could talk! Then I left him thinking all was well. Returning to the ward after half an hour, to my suprise I found the patient sitting up in bed still repeating that choice poem like an automaton, and for aught I know he would still be repeating it now, if it had not suddenly dawned upon me that he was hypnotised and asleep! I then woke him up and was thankful to hear him vary his remarks by the bewildered exclamation: "Where am I?"

## Part II.—Reviews.

Sixty-fifth Report of the Inspectors of Lunatics (Ireland) tor the year ending December 31st, 1915.

The times are out of joint, and if lunacy reports are somewhat belated just at present we must remember that even they, like many matters still more important, must bow to the stringency of circumstances during periods of difficulty and stress such as we are now, and have for some time past been, experiencing. Moreover, it need not occasion surprise if the bulk of such documents is much reduced. The Report of the Irish Inspectors is largely curtailed in size, its dimensions being, in fact, 60 per cent. less than those of the Report for the previous year. This diminution in size is mainly due to the omission of the reports on inspections of the individual asylums which have up to this been