

increased during the war by acute poisoning from the consumption of Chinese spirits. Among the officers, in whom it is common in peace, its increase was largely due, the author believes, to heightened susceptibility resulting from nervous exhaustion, it often occurred in young officers who had never taken spirits before this campaign.

Neurasthenic insanity was the most special form encountered. It was marked by depression, exhaustion, nervous irritability, accompanied by headache, restless sleep and apathy, with ideas of suicide and complete inability for exertion; at the same time these patients were extremely sensitive to every external impression; they could not endure society and at the slightest sound they trembled all over; in their broken sleep they lived over again the terrible events they had passed through. Most of them had obsessions and visual or auditory hallucinations. They saw piles of putrefying corpses; they could not escape from the smell of them; they felt themselves crushed by the weight of them. Sometimes they heard the cries of the wounded or the voices of their dear ones at home. Some, though not all, were able to judge their experiences critically, and most on recovery were able to recollect their condition. There was extreme hyperesthesia and irritability; not merely the touch but even the approach of a hand was sometimes unendurable, and sometimes the knee-jerk was so exaggerated that it involved a convulsion of the whole body, and an involuntary scream. Most of these cases recovered completely within four weeks. HAVELOCK ELLIS.

Two Cases of Destruction of the Lower Left Frontal Gyrus [Zwei Fälle von Zerstörung der unteren linken Stirnwindung]. (Journ. f. Psychol. u. Neurol., Bd. ix, 1907.) Liepmann.

Liepmann has contributed two cases to sustain the controversy raised by Pierre Marie, who has tried to show that the lower part of the third frontal gyrus has nothing to do with aphasia though injury to it may cause *anarthria*, i.e., difficulty of articulation. Marie regards the region about the nucleus lenticularis as implicated in motor aphasia.

The first of Liepmann's cases was an old woman admitted into the Charité Hospital in Berlin affected with senile dementia and delusions of suspicion. In the Charité Hospital she was seized with cortical motor aphasia. She became unable to utter a word, could not comprehend writing, reading, and could only copy writing. She retained the capacity of understanding speech. After being above two years in this speechless condition she died.

On examination the dura was found adherent to the skull, the convolutions small, the sulci deep and broad; in place of the third frontal gyrus there was a cavity over which the pia was stretched. Nothing remained of the gyrus save a piece about two centimetres broad in the front part. There were yellow spots on the vessels of the base of the brain. Marie's lenticular zone was unaffected.

While this case gave support to the old view advanced by Broca, the second one detailed by the Berlin professor seemed to strengthen the thesis of Marie that the third frontal has nothing to do with language. This was a case of senile mental decay. The man could still count, knew the multiplication table, and could read and write.

His speech was slow and somewhat deficient in sense, but he was talkative. He said that he had several paretic attacks which affected the left side. He died of failure of the heart's action after being four weeks in the hospital.

On examination, there was noted adhesion of the membranes with the skull, paleness of the pia, sclerosis of the vessels, and general atrophy of the brain, which weighed 1,200 grammes. There was extensive destruction of the lower part of the left inferior frontal implicating the whole of the pars triangularis and the anterior half of the pars opercularis. The foot of the gyrus and the pars orbitalis seemed to be intact. There is given an engraving of the lateral aspect of the left hemisphere. At the time of publication of the article the brain had not yet been sliced for further study. From such a serious lesion to Broca's convolution one might have expected a manifestation of motor aphasia, and as nothing of the kind appeared the injury discovered might be considered a confirmation of Marie's disbelief. On inquiry into the man's antecedents it transpired that ten years before he had a severe apoplectic attack with what was recalled as left-sided paralysis. For a fortnight he spoke a little, after which he became speechless. This mute condition lasted for three weeks, after which he began to learn slowly again to speak; but half a year elapsed before he regained ordinary speaking capacity. Writing was lost along with speech, although he was always able to understand what was said to him. The man was naturally right-handed. Liepmann's explanation is that at this time the patient had motor aphasia, and that during the ten years there was a restitution of the speech faculty by the vicarious function of other parts of the cortex.

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3. Pathology of Insanity.

On the Alkalinity of the Blood in Epilepsy [L'Alcalinita del Sangue negli Epilettici]. (Il Manicomio, N. 1, 1907.) Tolone, J.

Dr. Joseph Tolone, Assistant Physician in the Provincial Asylum of Catanzaro, has made some careful researches upon this subject, which has already been studied by several Italian and French observers.

He divided his patients into three groups. In the first, ten in number, the epileptic attacks recurred at long intervals; in the second group of four the intervals were short, sometimes two or three attacks in the day; in the third five cases the attacks habitually recurred from three to eight days. With all his epileptic patients the blood was less alkaline than with healthy persons. Where the fits returned after long intervals the alkaline reaction of the blood, though less than the normal, was higher than in the other groups. In those cases in which the intervals were short the alkalinity was lowest just before and after the attacks. In the group between those of medium frequency the degree of alkalinity rose almost up to normal and then sunk till the epileptic attack, after which it mounted.

Dr. Tolone put the question whether the diminution of the alkaline