3. *German Retrospect.*

Percussion of the Cranium.

By W. W. Ireland, M.D.

("Neurologischer Centralblatt," No. 14.) Professor W. v. Bechterew treats of the conduction of sound and percussion of the bones of the skull and vertebral column. Dr. W. O. Kunew ("Wratch," 1893, Nos. 48 and 49) has already indicated a method of examination for suppurative inflammation of the mastoid process in disease of the middle ear. He employed a common india-rubber tube, such as is used for otoscopic examination. The ear-piece is inserted into the auditory meatus, and the funnel laid upon the mastoid process. If a tuning fork be now made to vibrate on the vertex of the head, the tone is always more distinct on the sound mastoid process than on the diseased one. He holds that examination of the conduction of sound is indispensable in deciding the question whether the mastoid process should be trephined or not. Diminution of the intensity and muffling of the sound of the tuning fork if conducted through the bone is an infallible symptom of deep disease, suppuration, caries of the bone, or new formation. This new method of diagnosis enables the surgeon to trephine early.

Dr. Gabritschewski invented a special instrument, called the pneumatoscope, by which he makes examinations of the walls of the thorax and cranium, but the short description of it given by Dr. Bechterew is scarcely clear enough to justify me attempting to render it into English.

In practising auscultation of the cranial vault Dr. Bechterew places an ordinary stethoscope on the suspected part of the skull, and, at the same time, percusses the neighbouring parts of the skull with the finger. In this way he compares the conduction of the sound in symmetrical or neighbouring parts. He finds the percussion sound of diseased parts duller and giving a different sound than in healthy parts. In a recent case of abscess of the cerebellum he found a muffling of the percussion note at the back of the head in the neighbourhood of the occipital protuberance. In a case of Ménière's disease there was observed a muffling of the sound on percussion of the mastoid process of the affected side of the head. For the more convenient use of percussion Dr. Bechterew has a tuning fork so connected with a galvanic battery that it emits a continued sound. By the aid of a double stethoscope he is thus able to compare the vibrations on corresponding sides of the head. An engraving of this instrument is given in the "Centralblatt." Dr. Bechterew observes that, in pursuing this method of investigation in cerebral or spinal diseases, great atten-

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tion should be made in distinguishing weak or superficial from strong or deep percussion. In the first case the spinal column may be struck with the finger or the percussion hammer; in the second case it should be struck upon a pleximeter. Through weak percussion localized diseased processes may be discovered, such as tuberculosis, periostitis, or syphilitic sclerosis of the bones. In these cases percussion must be done with caution, as even a slight pressure of the finger may cause great pain.

But, though percussion of the skull and vertebral column is to be avoided in painful affections, there are cases in which deep percussion is serviceable in bringing out diseased parts which show no sensibility to slight percussion. In this way Dr. Bechterew assures us he has often found an increased sensibility in one or other temporal region, with epileptics, as well as sensibility of the occipital region in affections of the posterior part of the brain. He has found deep percussion especially useful in affections of the spinal cord. In general local affections of the cord where the vertebral column is not affected no sensibility is shown to weak percussion; but let strong percussion on the pleximeter be used, sensitive or painful points are brought out, which indicate the seat of diseased parts in the cord or its membranes, syphilitic processes, or myelitic abscesses. This method of investigation sometimes enables us to localize the lesion when other means of diagnosis fail.

Hæmato-Porphyrinuria after Sulphonal.

Dr. Herting has published ("Allgemeine Zeitschrift," Li. Band, 1 Heft; see also L. Band, 5 Heft) three cases occurring in the asylum of Alt-Scherbitz in which porphyrohæmaturia followed the administration of sulphonal. The first patient was a woman aged fifty-three years, a chronic paranoiac, to whom sulphonal had been given to subdue excitement and cause sleep. After 128 grammes of sulphonal had been taken in 110 days some symptoms of intoxication appeared, heaviness in the legs, slight giddiness, and lisping speech. On the doses being lowered these symptoms soon disappeared. As the excitement increased two grammes of sulphonal daily were administered for ten days. One morning the patient could not keep from tumbling, and was put to bed. The next day the temperature rose to 39·3. There was want of appetite, sickness, and pains in the right hypochondrium. The urine was noticed to be red like wine. The patient gradually declined in strength, and died after three weeks. The examination did not throw any light upon the symptoms. The blood-coloured urine was found to keep a long time without decomposing; sp. gr. about 1026. It contained neither albumen nor sugar, but a few red and white blood globules and fatty granules, epithelial corpuscles, and some bluish red bodies. On a spectroscopic examination eight weeks after there were observed two

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absorption bands between 58·3 and 57, and between 55 and 53. From the reactions it did not appear to be hæmato-porphyrin, but some other colouring stuff whose nature was unknown. In the two other cases there were similar symptoms, but both patients recovered.

Dr. Herting has collected 28 cases in which the porphyrhæmaturia appeared in patients dosed with sulphonal. All these patients were women. Only one case is on record of a male so affected. The premonitory symptoms seem generally to have been those which follow the administration of large doses of sulphonal. Constipation was a common symptom. No explanation has been furnished why the female constitution should be so affected, nor did the examination of those who died throw light upon the symptoms.

Sulphonal is much used in German asylums, and the number of cases where unfavourable results followed bears a small proportion to those in which no evil consequences were noticed.

Dr. Erlenmeyer holds that sulphonal should be given with great caution, as in large doses it favours the passage into dementia; but Dr. Herting has observed nothing to confirm this view at Alt-Scherbitz. He gives instances of chronic patients taking sulphonal in large doses and entirely recovering.

Dr. Herting describes a case in which the hæmato-porphyrinuria seemed to him to follow the administration of trional and tetronal, but the patient had taken five grammes of sulphonal in eight days, immediately before the appearance of the symptoms.

Case of Poisoning by Trional.

Dr. Ewald Hecker ("Centralblatt für Nervenheilkunde," 1894, August) contributes a case of poisoning with trional. The patient was a lady, aged fifty, who had been ten years under treatment for melancholia. Being much troubled with sleeplessness she was given a gramme and a half of trional. She complained of sore throat and coryza, and remained two days in bed. On getting up she had a feeling of giddiness and uncertainty in her gait; on taking a walk she fell. These symptoms were put down to influenza. Dr. Hecker had occasion to be absent for ten days. On returning he found the lady's condition much worse. She fell when she tried to walk, forgot names, confused words, and was much affected in her intellect. It appears that she had been getting a gramme and a half of trional every evening for thirty-six days. Dr. Hecker now came to the conclusion that she was suffering from the effects of that drug. It was immediately stopped, the signs of advancing dementia gradually ceased, though five weeks elapsed before she was able to walk.

Dr. Hecker observes that the symptoms were not so specific as in the case described by Dr. Schulze, in the "Deutsche Medi-

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cinische Wochenschrift," 1894, No. 7. There was hæmatoporphyrin in the urine, and the patient died; whereas in Dr. Hecker's case no such symptom was noted, and the patient came back to the *status quo ante*.

Dr. Hecker quotes the investigation of Binz to show that after the use of certain hypnotics there is a slight but pervading coagulation of the protoplasm of the brain cells, which explains the abatement of function. Whether a similar coagulation takes place in natural sleep is doubtful. The newest investigations of Mosso indicate that the conditions under which artificial sleep is produced through soporifics are probably different from those which induce and accompany natural sleep. In his book, "Die Temperatur des Gehirns," Leipzig, 1894, Mosso publishes a series of experiments which show that in natural sleep the temperature of the brain at first remains unaltered, but sinks if the sleep be prolonged, whereas after the use of hypnotics there is a decided rise of temperature in the brain, while the temperature in the rectum is not altered. From this we may conclude that during artificial sleep there are more rapid processes of oxidation in the cells of the brain, which may leave behind them profound lesions of the nerve tissues.

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4. *Retrospect of Criminal Anthropology.*

By Havelock Ellis.

Caserio.

The greater part of the "Archives d' Anthropologie Criminelle" for last September is devoted to a medico-legal and criminological study of the events connected with the murder of President Carnot. It is drawn up by Drs. Lacassagne, Ollier, Coutagne, and others who conducted the autopsy and had some opportunity of examining Caserio. The latter, born at Malta-Visconti in Lombardy, was 20 years of age. His father was epileptic. Caserio emphatically denied that there was any insanity in the family, but the point was never really investigated; it has been stated that two uncles are in an asylum. Caserio's face, as may be seen from the portraits given, is rather pleasant; a few signs of physical degeneration are noted about his person, but they are of trifling character. There was a continuous smile, of spasmodic character, on his lips. He was tall, upper part of body well developed and muscular, head rather small and brachycephalic. His expression was gentle, but rendered ferocious by political discussion. It is noted that he had the lean and pallid air dreaded by Cæsar. His education was very elementary, but he was an insatiable reader, depriving himself of sleep to study politics. His memory, visual in character, was extremely

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