

# Periscope.

## CLINICAL NEUROLOGY.

RAPPORTO TRA ACCESSI EPILETTICI ED AUTOINTOSSICAZIONE (Relation between Epileptic Seizures and Autointoxication). Luigi Roncoroni. (*Archivio di psichiatria*, etc., 1900, xxi. No. 6).

At present the doctrine of autointoxication in epilepsy rests upon very contradictory findings. Some find the urine hypotoxic before and hypertoxic after convulsive attacks, while others find the toxicity exactly reversed. A survey of the entire subject of the toxicity of the urine, blood, sweat, etc. shows inconstancy and contradiction instead of uniformity. There is similar want of conformity in the results as to the amount of toxiferous urine, blood, etc. necessary to poison animals. The present author has attempted to study this subject anew. He begins with the urine, and first sees to it that its temperature agrees with that of the animal to be experimented upon, and also that it is filtered and sterilized. It must also be perfectly fresh and acid in reaction. The specific gravity must always be the same as when passed. It must neither be concentrated nor diluted, for its density can stand in no relation with its toxicity.

The urine selected for experiment is taken from the amount passed in 24 hours before and after an attack. Fifty parts of urine are injected for 1,000 parts of animal. In regard to the organ in which urine is injected, the intravenous method disturbs the blood-pressure too much and thus masks the toxic effect. The peritoneal cavity is likewise unsatisfactory, as the power of absorption doubtless varies. The intestine is objectionable for several reasons. The author therefore relies upon multiple subcutaneous injections. Thus 25 c.cm. can be divided into five portions, injected in the animal's belly and back. The patients who furnish the urine were 15 male epileptics, and specimens were obtained before and after attacks and in the intervals. The experiments are given in full: Rabbits were the animals used. The subcutaneous procedure was used for the principle method, while for control purposes the endoperitoneal route was chosen. A few cases are reproduced, viz.:

No. 1. Patient aged 47; an epileptic since childhood. After attacks he is agitated and impulsive; he is very excitable in the intervals. He has ideas of persecution, etc. A specimen of his urine five days after and two days before a typical attack was injected into the peritoneal cavity of a rabbit and caused depression and tremor for six hours. Specimens of urine four hours after a typical attack injected into the peritoneal cavity of a rabbit (15 c.cm.) caused temperature to fall from 36.5 to 35.8. The animal was insensible to stimuli for twelve hours. Specimen of the same urine injected by subcutaneous route gave only slight depression.

No. 10. Patient aged 36; an epileptic since childhood. His attacks were followed by periods of maniacal excitement. Urine passed 3½ hours after attack injected into the peritoneal cavity of a rabbit, caused severe depression and inability to respond to stimuli.

As all the cases experimented upon in the author's very careful methods show a certain amount of variability, the lack of conformity shows that autointoxication is only a contributory cause of the epi-

leptic paroxysms. In other words, epilepsy is not solely an auto-intoxication although the increase of the toxic power of the urine shows a possibility that increased formation of toxic matter in the body may be a contributory factor in the production of the attacks.

CLARK.

UEBER CEREBRALE BLASENSTÖRUNGEN (On Cerebral Bladder Disturbances). Ernst V. Czyhlarz and Otto Marburg (*Jahrbücher für Psychiatrie und Neurologie*, 20 Vol. No. 1, p. 134).

The existence of true cerebral bladder symptoms has been a question of much debate, with the weight of opinion inclining towards its non-existence. This paper aims to discuss the question in a more precise way by means of microscopic study and by the critical examination of the cases reported in literature. Under cerebral bladder symptoms is understood all those symptoms referable to the bladder which occur in the course of cerebral affections without psychical disturbances or involvement of consciousness, if the bladder apparatus in its nervous, muscular, and glandular functions is perfectly intact. To be excluded are all those affections of the brain which have no strictly limited localization, as *commotio cerebri*, progressive paralysis, senile dementia, and those in which the shock of the attack, as in apoplexy or in fever, may produce disturbances of themselves. To be included under the latter is encephalitis. In such cases the assumption of Frankl-Hochwart and Zuckerkandl, that we have to do with an irritation of the intra-cerebral inhibitory paths, is the most reasonable explanation. According to the present state of our knowledge, the cortical bladder center is in the motor zone, at the point of conjunction of the arm and leg centers, somewhere in the region where, according to Oberstœiner, the center for movements of the thigh is located. The clinical manifestations of disturbances located here is the impossibility of voluntary urination, that is retention, which, in unilateral focal lesions, is temporary. In regard to the bilateral foci, no opinion can be expressed. The sub-cortical center lies in the corpus striatum and has to do with automatic movements of the bladder, resulting from conscious, sensory stimulation. A third center reacts to effective stimuli and plays an important rôle in cases where the effective states are most frequent, as in children or psychopathic women. This center is situated, probably, in the thalamus. The influence of the cerebellum in central bladder affections is stated in this way: cerebellar affections have a tendency to change retention, caused by pyramidal tract lesion, to an incontinence, and cause the symptoms relating to the bladder to become more pronounced. The cerebro-spinal motor paths connect these centers with the conus, the pyramidal tract plays an important rôle in this connection. The skepticism in regard to the existence of central bladder symptoms is unjustified. Its existence may be regarded as proven, when more cases have been studied. The bladder symptoms due to cerebral lesions may be an aid in localisation where the seat of the lesion is doubtful. In support of the above conclusions, the authors present cases from literature, as well as some of their own.

SCHWAB.

ZUR SYMPTOMATOLOGIE DER PARALYSIS AGITANS (The Symptomatology of Paralysis Agitans). D. Frank. (*Monatsschrift für Psychiatrie und Neurologie*, September, 1900.)

The author reports on several cases of paralysis agitans observ-