

DIAGNOSIS OF DEATH BY DROWNING. Revenstorff (Münchener medicinische Wochenschrift, March 21, 1905).

Revenstorff bases his conclusions on the fact that hemolysis of the blood is one of the earliest macroscopical signs of putrefaction, being due not to physical influences or to autolytic action, but to bacterial action. It appears in the blood of the various vessels in the following order: Portal vein, right heart and afferent vessels, left heart and arterial system. What the author terms the "drowning hemolysis" occurs by a foreign fluid getting into the capillaries or lung tissue, thus coming in contact with the blood and, if the difference of concentration between the foreign fluid and that of the body is sufficiently great, dissolving the blood corpuscles involved. This hemolysis, contrary to the cadaver hemolysis, appears in higher degree in the serum of the left heart. Lung tissue juice, pleural transudate and pericardial fluid are free from admixture with the drowning fluid if they do not show any free hemoglobin. Edema caused by the presence of water always has a serum containing hemoglobin, the true lung edema having a serum without color. Consequently, if no pigment shows in the contents of the portal vein, but drowning hemolysis is evident in the blood of the heart, the proof is positive that the blood has ceased to move in the heart before the drowning medium was diffused. The medico-legal applications of this conclusion are obvious.

JELLIFFE.

PNEUMONIC PARALYSIS. Fedeli (Rif. Med., Feb. 25, 1905).

The author reports a case of right hemiplegia occurring in the course of pneumonia in the case of a man aged 65, and due (as proved by necropsy) to hemorrhage in the left internal capsule. He then discusses the subject of pneumonic paralysis generally. A short review of various cases teaches that there are several varieties of paralysis occurring in pneumonia. Those occurring at the beginning or in the course of the disease have a different symptom-complex and a different prognosis from those which happen during convalescence. The latter are diffused in type, with a tendency to become fixed in the lower extremities, and almost always recover. The former are more often monoplegic or hemiplegic in type and may end in death. Probably the paralyzes of convalescence are of the nature of a neuritis or polyneuritis, which may or may not be of the ascending type, and occasionally leading to poliomyelitis. The muscular atrophy which sometimes accompanies these forms of paralysis tells in the same direction. As to the more serious group of paralyzes—those occurring in the beginning or during the course of pneumonia—many of them are due to cerebral hemorrhage, others to thrombosis, embolism and softening. Of those which recover some may be explained by localized anemia of reflex origin (for example, in children), or due to vascular changes (in old people). Even the toxic paralyzes probably act chiefly in virtue of some previous vascular weakness forming a *locus minoris resistentiæ*. Hysteria is not a very probable cause, and may be largely discounted in these cases and it seems fairly certain that whatever be the real pathogenesis of pneumonia, it must in their case be something different from that of old people.

JELLIFFE.

NEW DISCOVERIES AND ADVANCES IN THE FIELD OF THE PATHOLOGY OF RABIES. E. Bertarelli (Wiener klinische Rundschau, Volume XIX, No. 4).

This article is a survey of the researches in the pathology of rabies made for the past two or three years in Italy. It would seem that they are unanimous in declaring that the Negri bodies are never found in animals free from rabies, and that if they are not found in those affected it is always in cases where the search has not been an exhaustive one. The hippocampus major is their chosen site, and examination of it would be fairly conclusive, entirely so if the finding proved affirmative, but if

negative a supplementary test by inoculation of a rabbit would be advisable, as well as an examination of the cerebellum and ganglia. Fragments of the hippocampus may be hardened in saturated sublimate solution or in absolute alcohol and stained by the Mann eosin-blue method, or by fixing the fragments in osmic acid, leaving them for a few hours in alcohol. Sections can then be made by hand and tested with glycerin. The evidence is that these bodies cannot be produced artificially, and that they never occur except in rabies. Volpino's experiments indicate that each of them contains a central basophile small body, the two parts of which have different staining affinities. The saliva of patients with rabies is sometimes, but not always, virulent. Some months ago Nitsch undertook to discover the truth as to the harmlessness of fixed virus by injecting it subcutaneously into himself. At the time of writing no effects of any sort had appeared. Valenti has been able to neutralize the virus of rabies in a test tube with quinine, and in the living body as well, but no other alkaloid has had the same effect.

JELLIFFE.

PNEUMATOCELE OF THE CRANIUM. L. L. McArthur (Journal A. M. A., May 6).

The author reports an operation for this condition, and discusses the diagnosis and treatment. The etiologic factors are chiefly two—traumatism and sudden increased pressure within the buccal and oral cavities. Fifty per cent. of the reported cases have occurred spontaneously, so far as history of injury or inflammatory conditions are concerned. During the growth of the tumor sneezing or blowing the nose may cause an appreciable increase of the size of the tumor, or external pressure may cause escape of air into the oral cavity. Because of the separation of the periosteum from the bone osteophytes may be produced, and this accounts for the irregularities felt when the tumor is collapsed. With modern antiseptic methods the treatment has become more simple and successful. In nearly every case a perfect cure can be effected if a free opening is made with due care so to dispose the incision as to make the point of final healing immediately opposite the bony perforation through which the air entered the tumor. McArthur quotes the conclusions of Costes, of Bordeaux, as follows: 1. Pneumatocèles are very rare. 2. They always depend on perforations of the bony walls. 3. They are always tympanitic. 4. They are more or less reducible by pressure. 5. They can take their origin only from the mastoid or the frontal sinuses. 6. They are of very slow and indolent formation. 7. They are never dangerous except from complications (infections). A bibliography is appended.

MYASTHENIA GRAVIS WITH SPECIAL REFERENCE TO THE OCULAR SYMPTOMS, AND A REPORT OF A CASE INVOLVING THE EYES ONLY. Mortimer Frank (The American Journal of the Medical Sciences, April, 1905).

After a critical review of the literature the author reports a case presenting this condition in a girl 10 years of age. At present she has double ptosis, most marked on the right side, paresis of all the extrinsic muscles of both eyes, and a marked divergent squint of the right eye. There is complete preservation of the functions of the intrinsic muscles of the eye. The first symptom, the ptosis, began when the patient was 6 years old, and would at first intermit for a day or two at a time. From the beginning there was no evidence of ptosis on arising in the morning, and after resting her eyes the movement of the lids appears to be normal, but they are rapidly exhausted. There was also observed some weakness in the orbicularis palpebræ and occipito-frontalis muscles. Other bodily functions are normal, but a feeble myasthenic reaction has been demonstrated at times.

C. D. CAMP (Philadelphia).