

Rivista di Patologia Nervosa e Mentale.

(Vol. vii, fasc. 5, May, 1902.)

1. A Case of Partial Epilepsy. G. CATOLA.

1. *Partial Epilepsy*.—A description of a case in which operation confirmed the clinical diagnosis of brain tumor. The author's conclusions drawn from the literature of the subject are as follows: (1) the aura is the expression of a cortical irritation and represents the initial phase of the convulsive seizure; (2) the sensory-motor aura is the symptomatic expression of a stimulus which acts in the territory of the psycho-motor zone; (3) the sensory aura is the expression of a stimulus which acts outside of the psycho-motor zone and constitutes an important aid to the diagnosis of the site of a lesion located in the corresponding sensory centers or in neighboring parts; (4) as the aura is, for the most part, the result of a superficial and not very intense stimulus, it probably furnishes a more definite indication of the diseased site than the convulsion itself which is the result of a more intense stimulus and which carries with it phenomena of diffusion more or less extended and accentuated; (5) in rare instances a lesion capable of provoking convulsive phenomena is located exclusively in the white matter; in these cases it is impossible, during life, to make a differential diagnosis from the strictly cortical forms; (6) of great import is the site in which the convulsion begins, as well as its mode of diffusion; (7) Jacksonian epilepsy is not always the expression of a circumscribed cerebral lesion, but may accompany very diffuse lesions; (8) there are forms of Jacksonian epilepsy, which are due to extra-cerebral stimulus; (reflex forms) as well as those which are purely neurotic (hysterical forms); (9) other forms are due to auto- and hetero-intoxication, in which a lesion of the central nervous system is sought in vain; (9) nothing is known of the site of the cerebral lesion in masked partial epilepsy. (Equivalents.)

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Brain.

(Vol. 25, 1902, No. 97, Spring.)

1. On Concussion of the Brain in Some of Its Surgical Aspects. HERBERT W. PAGE.
2. Analysis of 155 Cases of Tabes. BYRON BRAMWELL.
3. A Case of Congenital Muscular Atrophy (Family Type) and a Case of Hemorrhage into the Spinal Cord at Birth giving Similar Symptoms. C. E. BEEVOR.
4. A Brief Report of the Clinical, Physiological and Chemical Study of Three Cases of Periodic Paralysis. JOHN K. MITCHELL, SIMON FLEXNER and D. L. EDSALL.
5. Observations of a Case of Convulsions (Trunk Fit or Lowest Level Fit?). J. HUGHLINGS JACKSON and H. DOUGLAS SINGER.
6. On the Supposed Reversal of the Law of Contraction in Degenerated Muscle. W. PAGE MAY.
7. Internal Hydrocephalus in the Adult, with Remarks on the Etiology of Hydrocephalus and its Occasional Association with other Abnormal Conditions of the Central Nervous System. F. PARKES WEBER.

1. *Concussion of Brain*.—In an exhaustive and highly practical presidential address the author considers the surgical aspects of cerebral concussion. At the present time the surgeon is more active in his operations in and about the brain cavity than formerly, and he holds that surgery may be even bolder than it has hitherto been in endeavor-

ing to minimize and remove some of the causes which seem to be at the root of many of the later consequences of severe head injury, especially in cases where accurate diagnosis may be impossible and the surgeon has to rest content with speaking of them as concussion of the brain, uncertain as to the precise injury which has been inflicted. Obvious grounds for surgical interference are the elevation of depressed bone and removal of fragments which have been driven into the brain substance, it being constantly borne in mind that injury to bone and the deeper table of the vault of the skull may be more extensive than outside appearances suggest. Wounds of this nature in which the scalp and the bones are extensively injured do not provide he thinks the worst varieties of head injury. The traumatic opening itself seems to relieve intracranial tension, a supposedly unfavorable feature. Compression of the brain from meningeal hemorrhage is another obvious reason for surgical procedures. In the same category are to be grouped laceration of the sinuses, lateral or longitudinal. Still other cases offer some attractions. He then discusses some of the more important symptoms. Convulsions of the Jacksonian type. These are rare and are usually the result of a circumscribed local lesion. General clonic convulsions, however, are not infrequent. Severe persistent pain of a peculiar differential type, elevation of temperature, being noticeable in a large proportion of the author's cases which terminated fatally, 103° - 106° F. without suspicion of sepsis, being recorded.

The author believes it justifiable in cases in which the symptoms seem to point to meningeal hemorrhage to trephine the skull and make a diagnosis, believing it to be a better procedure than Tuffiers' lumbar puncture. In the matter of brain disorder following cerebral concussion, the author is inclined to lay considerable stress upon cerebral concussion as a cause for epilepsy and insanity. Operative procedure may offer some hope in the former condition, but it is of very undecided value in the latter.

2. *Tabes*.—The author here analyzes 155 cases of tabes dorsalis. Of these 77.4 per cent. were in the ataxic and 22.5 per cent. in the preataxic stage. One hundred and forty were males, 15 females. The age at onset between 20 and 30 years, 79; 30-40 years, 77; 40-50 years, 35; 50-60 years, 18; over 60 years, 2. Thus 74.1 per cent. began between the ages of 30 and 50. One case began at 21 and there was no syphilitic history; another at 73. The age at onset of 565 cases of Bonar, Thomas, Riley and Bramwell 12.9 per cent. between 20-30; 43.9 per cent. between 30-40; 31.4 per cent. between 40-50; 11.6 per cent. above 50. In 90 the patients were married; occupations were various. Under etiology 56.7 per cent. give a definite history of venereal sore; 27.7 per cent. seemed free from syphilis; 167 per cent. of these had had gonorrhea. In 40.5 per cent. the disease developed within ten years of syphilitic infection; 59.3 per cent. more than 10 years; in 10 cases the time was more than 20 years. Sexual excesses were not numerous. Marriage in these with histories of sexual excess seemed to aggravate the condition. Alcoholic excesses were present in but a small proportion, 10; injury was marked in 6 cases; exposure to cold and wet, 6; mental worry, excessive standing, scarlet fever, diphtheria, each seemed related to one or two cases. The author concurs with the general opinion that syphilis is the most important cause of tabes. It is distinctly not the only cause, he holds. Three main factors always need considering: (a) the original constitution of the nervous system; (b) syphilis; and (c) cord strain or irritation. As to the mode of onset in 152 this was gradual. The early symptoms were pains, 82 cases; diplopia, 73; ataxia, 13; loss of vision, 9; pains and ataxia, 6; bladder, 6; gastric crises, 5; numbness of feet, 3, etc. The

author then analyzes the different symptoms. Lightning pains were present in 148 patients; pains in the back, 45; girdle sensation, 67; paresthesia, 103; anesthesia of legs, 68; of arms, 20; of trunk, 40; in face, 2; analgesia in legs, 55; in arms, 40; ulnar analgesia, 29 in 60; Biernacki's sign, 14 of 60; analgesia of trunk, thorax and abdomen, 59; thoracic analgesia, 45 in 60; analgesia in face and head, 2; heat and cold, few; ataxia in gait, 120; Romberg's sign, 120; incoördination of legs, 117; incoördination of arms, 39; muscular sense in legs, 67; in arms, 24; muscular analgesia in legs, 38; muscular hypotonia, 38; knee-jerks lost in 127; in 20 the knee-jerks were present; 5 exaggerated; ultimately 132 lost knee-jerks; Achilles jerk, 44; absent in 52 cases; deep reflexes 23; upper extremities, jaw-jerk, 7; plantar reflex, 19; Babinski sign, 4; 3 showed no movement; 39 flexion, and 5 extension; cremasteric reflex, 30; abdominal reflex, 55; bladder reflex, 115 affected in some way; rectal reflex, 98; sexual reflex, 73 affected, 72 lost, 1 exaggerated; paralysis, 16; pupils, unequal in size in 54; 39 equal; contracted in 69, medium in 27, dilated 8; pupil reflex to light, lost in 121, 24 brisk, 116 sluggish in both sides, 5 on one, ultimately lost in 145; accommodation reflex, 13 absent, 132 present; Argyll-Robertson, 90, ultimately in 112. Bramwell gives no support to the theory that the Argyll-Robertson is present only in those cases with syphilis; optic atrophy, 33; crises present in some form in 24, trophic lesions in 9; mental symptoms more or less typical of paresis 16. The results show that 31 have died, 75 still live, 49 lost to observation. Of the 75 still alive, 16 are distinctly better, the remaining 59 are either worse or in *statu quo*. Causes of death various. Duration of fatal cases average 8.3 years; longest, 22 years; shortest 1½. This is a most interesting and valuable summary.

3. *Congenital Spinal Muscular Atrophy and Spinal Cord Hemorrhages*.—Dr. Beevor describes two patients admitted about the same time to the hospital, both of which presented almost identical clinical pictures with very dissimilar causative agents. There was complete paralysis of all the muscles of the lower limbs and trunk, excepting the diaphragm; in the first case there was also complete paralysis in both arms, and in the second partial paralysis of one arm. In both cases all the affected muscles were flaccid and did not react to faradism, and there was loss of sensation in the legs and trunk as high as the 2d dorsal segment. The symptoms in the first case were due to a progressive atrophy of the cells of the anterior horns and a degeneration of the posterior columns which had commenced *in utero*, and in the other to hemorrhage into the spinal cord caused by dislocation of the spinal column at birth, and to stretching of the right bronchial plexus.

4. *Family Periodic Paralysis*.—A clinical, physiological and chemical study of three cases of family periodic paralysis is contributed by J. K. Mitchell, S. Fexner and D. L. Edsall. The paper shows in a fragmentary manner that the paralytic attacks are probably the result of some metabolic disturbance, perhaps situated in the muscles themselves affected.

5. *Trunk Fits*.—Dr. Hughlings Jackson and Douglas Singer report the history of a case of convulsive muscular movements analogous to an epileptic convulsion, but originating at levels lower than the cerebrum. Bulbo-pontal fits is a name suggested. The first symptoms were involvement of muscles of both sides of the neck, back and front, soon followed by fixation of both sides of the chest. The authors refer to the possibility of the involvement of Horsley's and Schäfer's trunk centers and to Sherrington's and Grünbaum's recently described Rolandic center. The fits are described very minutely.

6. *Reversal of Reaction of Degeneration.*—The author concludes from his study that Pflüger's law of contraction, according to which excitation occurs only at the point where the current is leaving all of the excitable tissue, is as true for degenerated muscle as for all other excitable tissues, and that the reversal of the law described by clinicians is only apparent, and is determined by the special imperfect modes of testing which have been in use.

7. *Internal Hydrocephalus of the Adult.*—Dr. Weber in a lengthy communication on this subject concludes: that (1) the various kinds of hydrocephalus and effusion into the ventricles of the brain may be fitly compared to the various kinds of effusions into the pleura and the peritoneum (2) the cases of so-called idiopathic or simple internal hydrocephalus are probably nearly all due to more or less localized serous meningeal or ependymal inflammation and are strictly analogous to cases of serous effusion into the pleura or peritoneum, resulting from localized non-suppurative pleuritis or peritonitis. It is of course probable that there are several different microbic or toxic agents; (3) the reason why chronic inflammatory thickening of the membrane stretching from the cerebellum to the medulla and forming part of the roof of the fourth ventricle has so often been found present in fatal cases of chronic hydrocephalus, is not necessarily merely that the foramen of Magendie and the neighboring foramina have been closed by inflammation (as they very often must be in similar cases) but that this portion of the roof of the fourth ventricle is one of the sites of election for the localized inflammation which leads to hydrocephalus; (4) the theory of purely angioneurotic effusion to account for some cases of acute internal hydrocephalus has as yet not sufficient evidence to support it, though doubtless the amount of irritation required to produce the same pressure of effusion varies much in different individuals; it varies doubtless according to conditions (temporary or persistent, congenital or acquired) of the blood vessels and lymphatics which influence the local circulation; doubtless also temporary circumstances, such as exposure to cold or heat, the ingestion of alcohol or other stimulants, and reflex effects on the local circulation from other parts of the body, may influence the tendency to effusion in the ventricle; (5) many cases of apparently acute hydrocephalus in adults and children are really exacerbations of a chronic condition, sometimes, doubtless, dating from early childhood or birth, as evidenced by the history of previous cerebral symptoms by the relatively large size of the head, or by the post-mortem evidence of association with a condition of hydromyelia or syringomyelia, or, as in the present case, by excessive weight of the brain.

JELLIFFE.

Archives d. 'Electricité Médicale.

(No. 113. May, 1902.)

1. The Laws of the Transparency of Matter to X-rays and their Applications to Medical Radiology. L. BENOIST.
2. Lethargy, probably Hysterical in Character, and Its Treatment by Electricity. A. RIC and H. BORDIER.
3. A Phototherapy Apparatus in which the Iron Arc without Cooling Apparatus is Employed. A. BROCA and A. CHATIN.
4. The Medico-Electrical Installation in the Colonial Hospitals. DR. JOURDAN.
5. The Employment of Villard's Rectifying Interrupter for Producing X-rays and High Frequency Currents. DR. H. GUILLEMINOT.
6. A New and Simplified Light Bath with Incandescent Lamps. J. B.
7. The Utilization of 220 Volt Circuits to Actuate Röntgen Ray Coils. J. B.