author indeed thinks that many of the great ones of the earth have belonged to this class, for normal persons do things in an average way only, and without those of abnormal or one-sided development few great things would be accomplished. As to the respective types of mental disease, due to congenital and to acquired predisposition, the former he thinks especially produces the psychoses, having little tendency to dementia, such as periodic insanity and paranoia, while in acquired predisposition he has only found the manias, melancholias and confusion. ALLEN (Trenton.)

ARCHIVES DE NEUROLOGIE

(Vol. XVII., 1904, No. 98, February.)

1. Epilepsy: Pathogeny and Therapeutic Indications. ALEXANDRE PARIS.
2. A New Case of General Conjugal Paralysis. A. CULLERRE.
3. Latest Conceptions in Hypnotism and Hysteria. A. CHARPENTIER.

1. *Epilepsy*.—The studies of this author have led him to the conclusion that certain infectious diseases, such as typhoid fever, have a suspensive effect upon epilepsy, and he attributes this to a neutralization or destruction of toxins by other toxins of different origin, which should be associated with the product of secretion. He illustrates this point by citing the case of an epileptic mute who was able to talk during the course of an attack of typhoid fever, but relapsed into his former state after convalescence was established. He has also observed the infrequency of goitre among epileptics, even in those regions where goitre is very prevalent. There would seem to be a marked antithesis between cretinism and epilepsy, as the former is always established before puberty, and the physical and intellectual development of the individual afflicted ceases at that period, while epilepsy, on the contrary, most often makes its first appearance at that age, when the bodily and mental powers receive a new impulse, the glands of internal secretion and the genital organs acquiring a relatively intense functional activity. What we know of the development of certain glands in the cretin—such as the thyroid body, ovaries or testicles—and the connection which exists between them and intellectual development, the genesic stimulation, and the insufficiency of those glands, gives us ground for attributing that special stimulation which appears at puberty to an increase of functional activity of the thyroid corpus, of the ovaries and the testicles. It is an absolutely logical deduction and of the greatest importance, for it will aid us to assign their proper importance to the thyroid body and genital glands in the pathogeny and evolution of epilepsy. The marked antithesis between cretinism and epilepsy may be observed in the behavior of the subjects, the cretin being harmless, apathic and inert, while the epileptic is only too often a most dangerous member of society. From this we might be led to conclude that the causes of the two conditions are diametrically opposed. A summary of the third subdivision is in part: Epilepsy is less grave in goitrous subjects; aggravation of epilepsy by the ingestion of fresh thyroid corpus or of thyroïdine; connection of epilepsy with the principal phases of genital life in woman, puberty, menstruation and the menopause; secondary influence of the genital glands in the pathogeny of epilepsy. It has been repeatedly observed that epilepsy develops less and less from middle age to the critical age, and it seems then very certain that a rôle ought to be attributed to the evolution of the glands of the genital organs in the pathogeny of epilepsy. (To be continued.)

2. *General Conjugal Paralysis*.—The report of the case of a widow, fifty years old, whose husband had died two and one-half years before of cerebral attacks. Her symptoms were maniacal agitation, marked loquacity, erotism, satisfaction, etc. Her husband had been a lighthouse keeper, of regular habits, no alcoholism nor syphilis as far as could be learned. The patient had been three times pregnant, but had always miscarried. The

final illness of the husband lasted five years, and he had gradually fallen into complete intellectual and physical *déchéance*. This double case, says the author, constitutes a new fact of conjugal general paralysis; an attentive study of the two cases must lead almost conclusively to syphilis as in the antecedent history of both patients. The inability of the wife to bring pregnancy to a successful termination, and the presence of the Argyll-Robertson pupil in the husband are both facts of the highest significance. The infection of the husband probably preceded the marriage by some years, that of the wife was most likely coincident with the first sexual connections.

3. *Latest Conceptions in Hypnotism and Hysteria*.—This is a long critical review of the latest developments in the conceptions of hypnotism and hysteria. The conclusions are as follows: (1) In the hypnotic state, as in hysteria, it is the mental state of the subject which is abnormal, it is upon the *ego* that suggestions or persuasions act. (2) In the hypnotic state, as well as in hysteria, the subject can realize only those phenomena which the will and the imagination are able to realize in the normal state. Thus, hypnotic or hysterical paralyzes, contractions or disturbances of sensibility have certain characteristics which sharply differentiate them from the same manifestations arising from organic lesions, which the normal *ego* is unable to reproduce. (3) Certain morbid phenomena which coincidentally have been observed in hysterical subjects; have been wrongly designated as hysterical. The term hysteria has been made much too inclusive. A careful revision of the meaning of the term would weed out many manifestations which are now classed under this head, and would establish the fact that hypnotic suggestion is able to cure hysterical manifestations only.

(Vol. XVII., 1904, No. 99, March.)

1. Condition of the Fundus of the Eye in General Paralytics. KERAVAL and DANJEAN.
2. Epilepsy: Pathogeny and Therapeutic Indications (continued). ALEXANDRE PARIS.

1. *Fundus of the Eye in Paralytics*.—The authors report forty-one observations made at the asylum of Armentières. Their conclusions are as follows: (1) In forty-one female paralytics thirteen were found to have normal, or probably normal, papillas. (2) Twenty-one paralytics had certain papillary lesions of the same order as those cases upon which the same authors have previously reported. (3) Leaving out those seven observations where there were lesions of the fundus of the eye, independent of general paralysis, we obtain in round numbers a percentage of thirty-eight in the normal state, and 61 per cent. having lesions of the eye of paralytic origin.

2. *Epilepsy*.—The author discusses his theory of the relation of the development of the thyroid body to epilepsy, and concludes that epilepsy is the expression of a disproportion between the original constitution of the sensibility and impressibility of the encephalic nervous centers and their habitual stimulants emanating from the glandular organs, which assume the continuity and the fixity of species, that is, reproduction and regular individual development; ovaries and testicles which not only assure reproduction by the association of their secretions, but which, by a certain exciting action upon the nervous centers, in some sort complementary to the function of the thyroid body, excite to reproduction. It is evidently the especial function of the thyroid body to preserve that stimulation of the nervous centers, which presides at our regular development, for the maintenance and coördination of the functional activity of our organs. If the functional activity of these glands be too great, or elimination is insufficient, so that the accumulation of their products is abnormal, with consequent excitation of the nervous system, the result will be epileptic

manifestations, if these nerve centers have the especial impressibility of what may be called an "epileptic constitution." If the origin of epilepsy can be thus explained, the cure of this condition will soon be among therapeutic possibilities. The aim will then be: (1) To diminish the meningo-encephalic excitability. (2) To moderate the functional activity of the thyroid and genital glands. (3) To assure the regular elimination of the secretions of these glands by preventing accumulation in the organism. (4) To prevent all the complementary causes of meningo-encephalic excitation, the development of accidental accumulations of toxins, etc. The clinical observations of the author have already shown very happy results from efforts made in the directions outlined.

(Vol. XVII., No. 100, 1904, April.)

1. Localization of Cancer Upon the Nervous System. F. RAYMOND.

2. Lead Paralysis of the Partial Type of Aran-Duchenne. MERKLEN and GUIARD.

1. *Localization of Cancer.*—The author passes in review the principal clinical forms of attack upon the peripheral nervous system by cancer. "These divers points," he says, "have been the object of interesting researches on the part of two of my pupils, Oberthür and Monsseaux. It is in part upon the results of their labors that I have based this article." The complication of the peripheral nervous system to which cancerous affections may give rise are of two orders. As Kippel has very judiciously remarked, "Cancer is at once a tumor and a cachexy. It may injure the nervous organs as a tumor, that is directly, or it may act upon them indirectly, by drawing them into a state of dyscrasy and complete intoxication. The two modes of action usually combine in the same subject, but not to such extent that one may say in all cases, and we ought to distinguish carefully the accidents due to compression and invasion of the nervous trunks, veritable mechanical accidents, processes of toxic order, disclosing cancerous auto-intoxication." As to symptomatology, the author says, "It is chiefly by the sensitive elements that you will be influenced. Each time you meet with those atrocious, constructive throbbing pains radiating in the limbs; each time the medullary symptoms are not those to direct you; when you have fully eliminated tabes you will think of radicle carcinosis. You will also often be put upon the right path by the general condition of the patient, by the knowledge of heredity and personal antecedents. You will be aided if you discover an easily accessible tumor, or an operative cicatrice, but often also it will be only after a thorough examination of all the organs, liver, lungs, suprarenal capsules, uterus, prostate, etc., that you will be brought to the diagnosis and the discovery of a latent cancer will be an enlightening revelation. Frankly, although the diagnosis is sometimes easy, it is much more apt to be extremely difficult. Hysteria, lumbago (neuralgia, sciatica, hydatid cysts, aneurisms of the aorta, and especially pachymeningitis, syphilis, tuberculosis of the spine, tumors of the nerves, may furnish a sensory and motor complex that may cause error in a superficial examination. * * * To speak of treatment is to admit curative impotency. * * * Morphine and its preparations produce some temporary relief."

2. *Lead Poisoning.*—The authors report a case, which they say, while not unique of its kind, still presents a certain interest. It is a case of lead poisoning, extremely limited, of localization, of differential diagnosis and obscure etiology, as well as capable of almost complete cure. Cases of saturnine paralysis affecting but a small number of muscles are not very frequent, and in the presence of such a rare form the clinician may often feel some hesitation. In the case under consideration only the thenar eminence and the interosseous were affected, but that in so predominant a manner as to justify the condition being considered a modification of the Aran-Duchenne classic type. The Aran-Duchenne type is very rare, and

the authors state that they know no rules applicable to a modification of that condition. The case was that of a man thirty-five years old, whose occupation compelled him to handle fabrics which were dyed with colors containing salts and lead. He experienced numbness and a sensation of cold in the two last fingers of the right hand, and there was evident atrophy of the thenar eminence. It is the opinion of these writers that direct absorption of the skin plays the principal part in causation. Canuet has poisoned dogs by plunging them in a bath of acetate of lead, and lead poisoning has also been caused by wound dressings, which have lead as a basis. The symptoms are by Moebius attributed in great part to habitual compression of the muscles and their enlargement by the manual labor of a particular trade, as saturnine paralysis of the type Aran-Duchenne is met with only in those employed in certain trades.

(Vol. XVII., 1904, No. 101, May.)

1. Ocular Symptoms in General Paralysis of the Insane. JOFFROY.

1. *Ocular Symptoms in General Paralysis of the Insane.*—This is an excellent clinical lecture on this subject, and reviews these symptoms, emphasizing especially their diagnostic aid in the early stages of paresis. On the psychic symptoms alone we can not rely. They are often insufficiently characteristic at a period when early diagnosis is important. The same may be said of the somatic symptoms, the peculiar disturbances of speech and the reflexes. Joffroy shows an appreciation of cyto-diagnosis of the cerebro-spinal fluid, but recognizes that it is not unattended with inconvenience and difficulty, and is not invariably satisfactory. He has studied the ocular changes in 227 cases of paresis. His examinations were made with great care at the time of first admission, and in the majority of the cases, therefore, in the primary stage of the disease. Out of 227 cases, 212 presented ocular disturbances, and the remaining fifteen would probably have shown them at a later period, but, as a rule, only one examination was made in each case, and that upon admission. The iris is the part of the eye chiefly affected; in its dimensions, form, or mobility (either to light or accommodation) though, of course, in lesser frequency other ocular abnormalities may be present. *Inequality of the pupils* (Baillarger) was found 144 times out of 227 cases; to this must be added complete double mydriasis twenty-six times, and extreme double myosis twenty-nine times, *i. e.*, there was pathologic modification in dimensions of the pupils in 87 per cent. of his cases. *Irregularity in form of the iris.* Departure from the normal circular form of the iris is very frequent. Care must be taken to exclude synechiae, traces of previous specific iritis. Both pupils were changed in shape, irregular shape (not circular) ninety-three times out of 125 examinations, monocular deformity was found eight times. In two cases of pupillar deformity there was no abolition of the light reflex, but in both of these cases this reflex disappeared later. Deformity of the pupils like the Argyll-Robertson phenomenon is not a symptom found exclusively in paresis, but like the latter occurs in syphilis and in tabes. Joffroy, however, thinks it often occurs before the disappearance of the pupillar light reaction, and is in a way the precursor, or the equivalent, of the latter. The iris may be involved in its function. The iris changes its size—dilates or contracts according as the eye is placed in shadows or in a bright light. This constitutes the light reflex. The power which the eye possesses of seeing an object clearly and instantaneously in all points of space between the near and far points varies for each individual, and constitutes for him the act of accommodation, the pupillar aperture growing smaller the more the near point is approached. This variation in the size of the pupillar opening with the distance of the object observed is due to the influence of the accommodation reflex. In paresis (also tabes) both of these reflexes may be diminished or completely abolished, but in a very unequal manner. The light reflex is frequently almost constantly changed,

the accommodation reflex rarely. The loss of the former with the coincident persistence of the latter is the Argyll-Robertson phenomenon.

The author emphasizes the difficulty of distinguishing between the two, and points to the fact that unless our examination be carefully made an accommodation reflex will be obtained which will be erroneously considered a light reflex, and thus when the latter may be really absent, the very valuable diagnostic aid afforded by the abolition of the light reflex is lost. He gives his method of procedure, the object of which is to exclude the accommodation reflex. If the examiner stands in front of the patient and alternately shades and illuminates the eye, or if the patient be made to look at a bright light in front of him the patient will accommodate to the point or object in front of him. His method of procedure consists in brief in the illumination of the eyes from a source of light behind the patient. The patient is made to read the letters on a test chart (if his mental condition permits) at a distance of four to six meters, which relaxes the accommodation. The examiner stands at one side, but not in front of the patient, and the light is reflected into the eye by a mirror. Thus the light reflex may be obtained surely isolated from the accommodation reflex. Another method is to place the patient with his back to a window, and have him fix on an object at a distance of about five meters. The size of the pupils is thus observed, whereupon the patient's face is turned to the window, and he is told to look at a distance. If the light reflex is present the size of the pupils should be less than when the back was turned to the window. Joffroy found the light reflex affected in 75 per cent. of his cases as follows: Abolished both sides 103 times out of 227; abolished one side and weak on the other fourteen times; weak on both sides thirty-five times; abolished one side and normal on the other nine times; weak on one side and normal on the other ten times. He also calls attention to the *progressive weakness* of the light reflex as a diagnostic sign. He has watched this phenomenon repeatedly, until the weakness finally gives place to complete abolition, and he considers this progressive weakness of equal value in the diagnosis with the Argyll sign. During complete remissions of the malady he has also seen the light reflex improve in quality, only to become weakened or abolished when a relapse intervenes. The *accommodation reflex*, according to Joffroy, is affected but very rarely, and generally not early in the disease. Accommodation itself is very uncommonly affected. Among other ocular disturbances alleged to occur frequently in paresis is ophthalmoplegia interna with which the paralysis of accommodation is supposed naturally to be associated, but Joffroy never found paralysis of the third nerve except in rare instances, and at that late in the course of the disease. Paralysis of other ocular muscles is equally rare. Where there is external ophthalmoplegia, or a paralysis of the third with paralysis of accommodation, tabes should be suspected. Keraval and Raviart report very frequent changes in the fundus in paresis forty-two times out of fifty-one cases. Joffroy agrees with Gowers and Ballet that alterations of the fundus are very infrequent. Joffroy found changes in 12 per cent. of his 227 cases. Changes in the visual field were reported as commonly occurring by Reznikow. Joffroy cannot confirm this; even when the mental state permits such an examination he found reduction of the range of vision quite infrequently. In conclusion Joffroy states that while much may be hoped in the future from examinations of the cerebro-spinal fluid he still thinks that alterations in the light reflex, due care being taken in examination, is one of the most valuable early signs in the diagnosis of progressive paralysis. This alteration in the pupillar response to light may consist merely in a weakness or sluggishness which is always progressive toward complete disappearance, or in complete abolition. With this alteration in the light response there is most frequently a persistence of the normal accommodation reflex. Of great value also is the determination of irregularity in the contour of the pupil.

ALLEN (Trenton.)