

both motor and sensory systems of the cord, as well as degenerations of the cord not easily reconcilable with the systemic changes.

A. W. WILCOX.

5. Treatment of Insanity.

On the Lumbar Puncture in Mental Affections [La Ponction Lombaire en Médecine Mentale]. (Bull. de la Soc. de Méd. Ment. de Belgique, Feb., 1905.) Deroubaix, A.

At the Froidmont Asylum the method of procedure is to make the patients sit on the edge of a table and by leaning well forward arch the back strongly. An anæsthetic is used only for the very timid or the restless, in order to avoid sudden movements. The puncture is made indifferently in the third, fourth, or fifth lumbar space (the last is preferred) with Tuffier's needle of platinum, iridium tipped, 8 cm. in length (just over 3 in.), of short bevel and armed with a stylet; strict asepsis is observed. The injunction not to remove more than 10 c.c. (about 2½ drachms) at one sitting, upon which some authorities, including Quincki himself, have insisted—this was not found to be imperative. Double this quantity and even more was removed on occasion without any trouble, nothing worse than a little headache resulting. The only precautions adopted were to make the patients lie down for two to three hours after the puncture.

The pressure of the cerebro-spinal fluid varies greatly in health, *viz.*, from 40 to 60 mm. of water up to 150 mm. In disease it may rise to much higher levels, spurting out on puncture, or it may fall so low as to escape only very slowly, drop by drop. All causes which raise temporarily or continuously the pressure within the cranium or the spinal canal raise this pressure of the contained fluid. The highest pressures were found in states of mental excitement and particularly in epileptics and general paralytics, but exceptions to this were noted even in well-defined cases. These high pressures are therefore suggestive but not pathognomonic.

In respect of the chemical constitution of the fluid, the presence of albumen in quantity above the normal, *e.g.*, 1 per cent. and beyond, was only noted in cases of general paralysis, not in the other psychoses. But again the sign is not pathognomonic, for exceptions were observed, cases, *viz.*, of general paralysis with normal or even subnormal albumen percentage. The high percentage is, however, decidedly suggestive. From the presence of formed elements in the cerebro-spinal fluid a clearer leading is obtained; thus lymphocytes were never found in epilepsy or in dementia præcox or in states of confusional insanity, whereas they were constant in cases of general paralysis. The albumen percentage was determined by Esbach's albuminimeter; the formed elements were obtained by centrifugalising for twelve to fifteen minutes, and then examining the sediment.

HARRINGTON SAINSBURY.

On the Action of Hyoscine in Neurological and Psychological Medicine [Zur Wirkung des Hyoscins in der neurologisch-psychiatrischen Praxis]. (Neurol. Cbl., May 16th, 1905.) Higier, H.

Hyoscine has been shown to be identical with scopolamine. The

halogen salts of hyoscine have been most in use, and of these in particular the bromide of hyoscine. The author of the paper has been accustomed during the last ten years to employ hyoscine in the most varied nervous affections. He administers the drug chiefly in watery solution and in pills, less frequently hypodermically, exceptionally by instillation into the conjunctival sac. He finds it an excellent sedative, especially in those neuroses and psychoses which are characterised by an over-excitability of the motor areas and *in primis* in paralysis agitans.

In fifty cases of Parkinson's disease he obtained excellent results—exhibiting the medicine chiefly by the mouth in solution or in pill form (occasionally, in those cases in which it did not seem to agree with the stomach, instillation into the eye gave equally good results without any detriment to the eye.) The dose of 0.2–0.3 mg. (gr. $\frac{1}{30}$ – $\frac{1}{20}$) *pro die* was rarely exceeded, and it was possible to maintain this dosage for long periods. One patient had taken this dose, alternately with duboisine, for seven years. In only one case was idiosyncrasy observed; in this instance a pill of gr. $\frac{1}{30}$ caused a high-tensioned pulse, tachycardia, hurried and oppressed breathing, confusion of thought.

Dependence upon the drug was noted in certain of the cases to an extent warranting the name “hyosciniism.” Intermission of the remedy caused here symptoms of cardiac weakness, depression, and attacks of faintness. A tolerance demanding a rise in the dose was not observed. In three cases of the severe type of chorea very fair results were obtained after bromides, arsenic, salicylates, chloral, and morphia had failed. In the dose of 1 mg. (gr. $\frac{1}{4}$) for a period of one week this was effected. In certain forms of severe itching (excepting the pruritus of diabetes) hyoscine in the *daily* dose of gr. $\frac{1}{10}$ –gr. $\frac{1}{5}$ gave fairly good results. It was given along with a small dose of antipyrine.

In spasmodic asthma, hyoscine injected subcutaneously in association with caffeine answered satisfactorily.

In the treatment of chronic alcoholism (not delirium tremens), hyoscine did not seem to advantage the patient appreciably, but in morphinism more encouraging results were attained.

In periodic mania, hyoscine failed to prevent the attacks, though administered before the onset of the maniacal stage.

As a symptomatic remedy for the maniacal excitement of various forms of delirium the drug was of great value; it was given in the subcutaneous dose of $\frac{1}{30}$ – $\frac{1}{20}$ gr.

Against the heroic administration of large doses of hyoscine the writer gives warning, also against its employment in the treatment of young children and in cases of disease of the heart and vascular system.

HARRINGTON SAINSBURY.

Upon the Specificacy of the Toxine in the Blood-Serum of Epileptics
[*Ueber das wesen unde die Speziffisität der im Blutserum der Epileptiker enthaltenen toxischen. Stoffe*]. (*Cbl. f. Nervenheilkunde u. Psychiat.*, March 15, 1905.) Ceni, Carlo.

Dr. Carlo Ceni, continuing the investigations of which he gave a preliminary sketch in the meeting of the Congress of the Societa Freniatria Italiana at Ancona two years ago,* has given us the

* *Vide* articles in *Rivista Sperimentale di Freniatria*, 1901 and 1903, *Neurol. Cbl.*, No. 8, 1903.—[E.D.]

result of fresh experiments. He had found that by making injections of serum taken from the blood of epileptics into the subcutaneous tissues of epileptic patients an improvement of the symptoms follows, and sometimes the reverse. This induced him to inquire whether there were differences in the serums used by Catola, Wendel, and Tiengo. For this purpose he chose seven epileptics, upon whom he practised injections of the serum and antiserum, which is obtained from any animal supposed to be rendered immune against serum derived from epileptics. Upon these patients he practised injections of 10 cubic centimetres of blood-serum taken from other epileptics. These did not cause any acute symptoms, local or general, when used either in the interval between the epileptic seizures or during the attacks. Ceni found that in this latter time or in the status epilepticus the blood-serum is often hypertoxic. This serum even in small doses is apt to occasion symptoms of local and general disturbances, especially headaches, mental confusion, a febrile condition, and renewed epileptic attacks. Applied to men who are not epileptic, the injection of this serum has a toxic effect, but it is slight and without any symptoms of epilepsy. As far as one can see Ceni does not furnish any proof that these serums have any specific effect whatever in causing or checking epilepsy, and that it is apt to bring on attacks on patients already known to be epileptic, in whom any disturbance of the circulation or nerve-excitement is liable to become the exciting cause of renewed seizure. The hypertoxic epileptic serum injected in large doses into various animals—dogs, cats, rabbits, cavies, white mice, and fowls—failed to bring on epileptic attacks. WILLIAM W. IRELAND.

On Certain Characteristics of the Specific Antitoxines in the Blood-Serum of Epileptics [Ueber einige Charaktere spezifischer Antitoxine im Blutserum der Epileptiker]. (Zbl. f. Nervenheilkunde u. Psychiat., May 15, 1905.) Ceni, Carlo.

Professor Ceni thus sums up his conclusions from recent experimental investigations: (1) The antitoxic powers of the blood-serum of epileptics, as shown by its reaction with specific anti-serum, do not appear to vary to any extent in the various phases of the disease during its regular course—*i.e.* whether the serum be taken before or during the attacks or in the intervals. (2) In the severer cases of epilepsy, or in those exacerbations which may arise in the course of the ordinary disease (status epilepticus), the antitoxines of the serum diminish even to seeming disappearance. (3) An epileptic treated by injections of the specific anti-serum, together with a serum such as that obtained from the severer cases mentioned in (2), is rendered very decidedly worse, and at the same time the antitoxic powers of the serum of this patient fall considerably. HARRINGTON SAINSBURY.

Merck's Annual Reports, vol. xviii, 1905.

Narcyl.—Among the newer additions to pharmaceutical preparations we note ethyl narceine hydrochlorate first employed in France as "Narcyl." It is a definite crystalline compound not very soluble in water, more so in spirituous solutions. It is stated to be a good hypnotic and analgesic

and to be devoid of the undesirable by-effects of morphia; it is suitable for administration to children. It has been given in doses varying from 1 gr. up to 2½ grs. in the day.

Bromipin.—Further experience confirms the value of this drug, especially in epilepsy (Hirschkron, Levi, and de Moor). In chorea Hirschkron has also found it of value, likewise in cases of sexual neurasthenia, and Thumen praises it in the treatment of neurasthenia and hysteria. De Moor, speaking from a wide experience, lays stress upon the nutrient value of the preparation in addition to its sedative powers. The Toulouse-Richet method of administration of the bromides—*vis.*, with a dietary poor in chlorides—in order that the bromide may more intimately substitute itself for the chloride; this method may with advantage be adopted when bromipin is used. Bromipin may be given either in 10 *per cent.* or 33½ *per cent.* strength, or in the form of tablets (*Bromipinum solidum saccharatum*). In the oily state, it may be given either as such or in capsules.

Dionin.—Hydrochloride of ethyl morphine more than maintains its position; indeed, its field of application has widened out considerably. Among other uses, its employment in insomnia, either alone, in doses varying from ¼ to ⅝ gr., or in conjunction with veronal (1½–8 gr. of veronal with ¼–½ gr. of dionin) has been spoken of highly by Meitner and by Dr. D— (*Journ. Méd. de Bruxelles*, 1904, No. 12). It was administered by the mouth in tablet form. Its advantage over morphia consists in the absence of after-effects.

Neuronal, bromo-diethyl acetamide, is a white crystalline powder which dissolves freely in alcohol, somewhat sparingly in water; it has a bitter cool taste somewhat resembling menthol. It is described as a useful hypnotic in doses of gr. 8–15; its effect, like that of trional, is somewhat weaker than veronal. It has, in some few cases, caused stomach disturbance, and in one case of epilepsy Stroux noticed an increasing headache. Inasmuch as the molecule in this compound contains bromine it has been chiefly used as a sedative in epilepsy. Rixen administered it in this disease in doses of 15–30 gr., and he found it a useful sedative. In severe motor unrest the dose was raised to 45–60 gr. It is described as very useful in the headache arising after epileptic fits.

Scopolamine hydrobromate (hyoscine hydrobromide) is much praised by M. Kochmann in mental disease. In the Jena Asylum it has been exclusively used to combat intense motor excitement. In doses of ⅛–¼ gr. it invariably produced sleep, with strengthening and retardation of the pulse and a similiar effect upon the breathing. K. Liepelt finds it useful in various forms of mental excitement, and that it greatly excels chloral hydrate and morphia in delirium tremens and in the delirium of pneumonia and of typhoid. His dosage hypodermically is ⅛–¼ gr. The calmative effects of these doses would persist some three to five hours. In these doses and even in the dose of ¼ gr. no disturbing symptoms arose. A. Rose (*British Medical Journal*, 1903) describes it as a specific in paralysis agitans; his dosage was ⅛ gr. twice daily.

Veronal.—The therapeutic value of veronal has been abundantly proved and further investigations, both experimental and clinical con-

tinue to be favourable. It has been given in animals up to a dosage of 11 gr. per kilo. of body-weight without toxic effects, and in man 135 gr. have been given in a single dose without serious symptoms. The blood does not suffer in its composition, neither is the blood-pressure lowered, the respirations are unaffected, the kidneys not irritated. Because of this relative harmlessness it has been administered without hesitation in serious heart failure and also in phthisis, and renal disease does not appear to contra-indicate it. It does not disturb the alimentary tract, and may be given even when this tract is deranged. According to some observers the albuminous waste of the tissues is lessened by veronal. In simple nervous agrypnia and in all forms of the insomnia of mental disease it is prescribed with benefit. In the sleeplessness of affections of the stomach, heart, lungs, kidneys it is serviceable, and the fact that, in combination with a *small* hypodermic injection of morphia the effect of both drugs is enhanced, encourages the hope that in the morphia habit veronal will be valuable during the withdrawal of the morphia.

In the insomnia of convalescence from acute infections, such as influenza and typhoid, it is a good remedy. It has been given largely to children, and it has even been administered to infants. For adults the dose is 8-12 gr. ; in the case of women and girls smaller doses may be tried, *viz.*, 4-5 gr. For infants the dose is $\frac{3}{4}$ -1 $\frac{1}{4}$ gr. Hot peppermint-water is a good vehicle. In aqueous solution it may be given as an enema, and in this way is said to be equally effective. The infusion of camomile is a good vehicle when thus administered.

HARRINGTON SAINSBURY.

6. Sociology.

Insanity in Prisons [La Folie dans les Prisons]. (Rev. Psychiat., April, 1905.) Pactet.

In this article the author calls attention to the occurrence, in his opinion very frequent, of cases of unrecognised insanity in French prisons. He points out that the records of the insane criminal section at Gaillon show that the greater part of the prisoners sent there come from a very small group of prisons—those, namely, with a special medical staff trained in psychiatry ; while the prisons which are in the medical charge of local doctors furnish only a quite insignificant proportion of cases. He further instances his own experiences at Villejuif, where he has repeatedly received insane patients who had just been discharged from prisons.

The remedy which the author advocates for this state of things is the adoption in France of the system of alienist inspection of prisons established in 1891 in Belgium. As a demonstration of the advantages of that system—which has not been generally regarded as a success—Dr. Pactet has, with the co-operation of Dr. Collin, started on an amateur tour of inspection in the French prisons in quest of insane, or at all events abnormal, criminals. The results so far obtained are not stated in the paper.

W. C. SULLIVAN.

The Increase of Lunacy (Glasgow Med. Journ., March, 1905). Parker, W. A.

In this paper the author discusses the causes of the increase of lunacy