

proportion of persons who are admitted into asylums labouring under the depressing forms of mental disease, and I may add, from my own experience here, that of the recent and acute cases which come under treatment, by far the greater proportion are acutely melancholic, many having actively suicidal tendencies.

Concerning rest in bed, Dr. Alexander says :—

The average number daily in bed—about six per cent.—is larger than what obtains in most asylums. This is accounted for by the large number of far-advanced general paralytics we have, and by the great store we place on confinement in bed as a therapeutic agent in the treatment of cases of melancholia with refusal of food, and of certain cases of epilepsy ; attaching as we do so much value to bed treatment in these cases, we do not strive to “break the record” of the smallest number of patients confined to bed in any asylum. In connection with this question it is a matter of fair speculation as to the share that our bed treatment has in the production of the low death-rate that usually obtains in this asylum.

*Newcastle.*—A patient sustained a fracture of the fibula in an unusually easy way. When playing at cricket he was struck on the outer ankle by the ball. He continued his innings, and it was not until he attempted to walk from the field that he experienced any great pain.

*Mavisbank.*—Dr. Keay mentions two cases which are of interest. It might be useful if he published them in the *Journal*, giving special prominence to the “active medical treatment” employed.

One case will appear in a future number of this *Journal*.

(*To be continued.*)

## 2. *Therapeutic Retrospect.*

By HARRINGTON SAINSBURY, M.D., M.R.C.P., Physician to the Royal Free Hospital.

The use of cocaine is so widespread that a few words of caution against its indiscriminate employment may not be superfluous. From time to time cases in which alarming symptoms have followed the use of cocaine are noted, but they do not attract much attention. Dr. Edmund Falk, of Berlin, is the more to be thanked for having collected and tabulated 176 cases of poisoning by therapeutic doses of cocaine. The dose employed, with its method of employment, and the results following the use, are carefully set down. Dr. Falk excludes from his table not a few cases of syncope which have been set down to cocaine, but which he considers may be referred to the operation itself. He is also of opinion that a majority of cases have not been published, and further that a large number of cases of insanity are to be found in the asylums, which have arisen from the prolonged use of cocaine. The 176 cases which he has tabulated will, therefore, fall very short of representing the real toxic dangers of cocaine. Ten fatal cases are to be found in the list. Two of these fatal cases followed the use of a

four per cent. solution of cocaine applied to larynx or pharynx. One case followed the injection of 0.06 gramme ( $\frac{2}{100}$  grain) beneath the mucous membrane of the gums; another, the subcutaneous injection of a little over three grains. The smallest dose causing death was 0.6 grain (0.04 gramme) injected subconjunctivally. Short of death, very alarming symptoms are frequently noted, such as pallor, cyanosis, vertigo, fainting, collapse, unconsciousness, more or less prolonged, delirium, hallucinations, diminished general and special sensibility, impairment of vision, deafness, etc., etc.

A further critical survey of the dangers of cocaine is postponed to the next number of the "Therapeutische Monatshefte," but meanwhile we would direct attention to this most valuable synopsis in the October number of the above journal.

In the "Lancet" for Sept. 6th, 1890, Mr. Mayo Robson advises the use of Esmarch's bandage applied within half a minute of the injection and proximally to the site of the puncture. In this way he maintains that local anæsthesia is secured without the danger of general poisoning. This method is obviously only adapted to certain parts of the body ("Practitioner," Nov., 1890).

The addition of carbolic acid to cocaine solutions has been recommended by Dr. Gluck in the "New York Medical Record." The advantages claimed for this admixture are that the solution is more permanent and the local anæsthetic action increased, the carbolic acid acting also as a local anæsthetic; further, that toxic effects do not result from the use of this solution. The formula given is:—Carbolic acid (purs.), two drops; distilled water one drachm; shake till dissolved, then add cocaine 10 grains ("Practitioner," Oct., 1890).

Of late Mr. Rushton Parker has recommended resorcin as having similar properties to carbolic acid when combined with cocaine.

*Chloralamide in Mental Diseases. Record of Experiments in the Asylum of the Rhine Province at Andernach by Dr. UMPFENBACH.*

The drug was administered in solution in absolute alcohol (one part chloralamide to two parts alcohol). This solution was diluted by the addition of water and syrup—it was taken without difficulty by the patients. The dose began with 30 grains at night and rose to 90 grains per dose.

Fifty-five cases were treated, viz., 14 of mania; 13 of paranoia; three of melancholia; three of general paralysis; nine of excitement in idiocy; and eight of excitement in epilepsy. The result was satisfactory in 30 cases, unsatisfactory in 12 cases, transitory in 13 cases.

The conclusions arrived at are that, as Rabow and Strahan affirm, the drug is useless in mania, but in opposition to Strahan some good results were obtained in the excitement of epilepsy. By-effects were comparatively rare. The drug was well borne even after prolonged

use. No case of collapse occurred since those recorded in the Feb. number of the "Monatshefte." One case of scaly skin affection was caused by the drug; it affected the flexor aspects of the elbow and knee joints and spread upwards and downwards on the limbs. This with Pye Smith's case makes the second record of a similar skin trouble. For the rest chloralamide may produce eruptions like those of chloral. Dr. Umpfenbach considers chloralamide to be serviceable but not very certain, and to possess no advantage over chloral hydrate ("Therap. Monatsh.," Oct., 1890).

Amylene hydrate was tried at the above-mentioned asylum in seven cases of long-standing epilepsy. The dose was 5-8 grammes (75 grains to 120 grains). Good results were obtained in two cases. In a third case the attacks were in the first instance diminished, but subsequently the drug was without effect. In four cases no special effect was witnessed. No bad effects were witnessed with the exception of a troublesome sleepiness and insomnia for some time after discontinuance of the medicine. So far as these results go the value of amylene hydrate is not very apparent ("Therap. Monatsh.," Oct., 1890).

*Experiments with Orexine in the Treatment of Anorexia.*

The doses were 0.25-0.5 grammes (4-7.75 grains); they were given in the form of pills or of powders, the latter in milk or bouillon. The dose was given once or twice daily, and care was taken to administer a sufficient quantity of the broth or milk. The results obtained were good in 19 out of 30 cases (of these 30 cases 25 were mentally affected), *i.e.*, in 63.3 per cent. They stand numerically between Penzoldt's and Glückziegel's, who recorded some 70 per cent. of successes, and Iwrédy's, of Budapesth, 58 per cent.

Orexine certainly merits a trial as a stomachic. In its critical employment care must be taken to avoid suggestion ("Therap. Monatsh.," Oct., 1890).

Penzoldt's original paper is to be found in the "Monatshefte" (Therapeutische) for Feb., 1890. In the "Lancet" for Nov. 15th it is stated that Dr. Penzoldt recommends the administration of orexine in starch paper wafers instead of in gelatine-coated pills.

In the October number of the "Practitioner," a claim is advanced for the further trial of bromide of gold in epilepsy. The salt appears to have been beneficial after the failure of many other drugs in a case of hysteria gravis recorded in the proceedings of the St. Petersburg Society of Psychiatrists. The salt is also said to have proved very efficacious in suppressing epileptic seizures. The dose advocated is  $\frac{1}{2}$  grain. The "Practitioner" advises the admission of this compound to the list of bromides, to be tried if others fail. (*Vide* "New York Medical Record," Vol. xxxviii., No. 7., 1890.)

Biernacki records some very interesting experiments with strychnine. His proposal was to test the influence of the drug upon the cerebral cortex. The animals experimented upon were rabbits, and the method

was to expose the psycho-motor centres of the brain by trephining; to determine the minimal faradic stimulus which would give a definite contraction; then to administer strychnine, either subcutaneously or by painting the surface of the brain with very weak solutions, and then to proceed with the electrical testing of the cortex. The results he obtained were in all cases diminution in the cortical irritability. With the smallest doses 0·00004 and 0·00006 gramme (0·0006 and 0·0009 grain) of the nitrate of strychnine a result was not always obtained, but with 0·0015 grain it was always found.

An interesting point was the delay in the appearance of the result; the effect was not at its maximum for 27-30 min., and moreover slight signs of cord-action (strychnine-like) frequently appeared at this time.

The author concluded that the effect of strychnine is probably not direct upon the nerve cells in the same way that morphine and cocaine act, because of this delay; also that the depression of the functions of the cortex cerebri may in some way depend on the state of the irritation of the spinal cord, since the two effects, the maximum of the former and the minimum of the latter, come out together.

However explained, the diminished irritability of the brain is exceedingly interesting, and it explains the use of strychnine in epilepsy and in dipsomania—also its possible value as a sleep producer as, according to Brunton, it may act. The author suggests, further, its possible use in the treatment of unmixed cases of mania, and that moreover its use is likely to be witnessed for small doses, *e.g.*,  $\frac{1}{30}$  of a grain (0·002 gramme).

In the comparative absence of any definite experiments upon the influence of strychnine upon the brain, and in the presence of the assumption that its effects were almost limited to the grey matter of the spinal cord, medulla and pons, these experiments are very welcome ("Therap. Monatsh.," Aug., 1890).

#### *Exalgin.*

("Therap. Monatsh.," Aug., 1890.) Falk largely enumerates the toxic action of this drug in the above periodical. The symptoms include: *free sweating*, though this is not likely to arise with careful dosing (3-6 grains); *vertigo*, a common symptom appearing in from quarter to half an hour, and sometimes amounting to a sense of intoxication with dazzlings and noises in the ears; *confusion of thought*, this has followed a larger dose, and there has been recorded *impairment of vision*, followed by *delirium* and loss of *consciousness*. *Convulsions* have occurred. *Cyanosis* is not likely to occur with careful dosing. *Methæmoglobinæmia* has not been observed, though a reduction of the oxyhæmoglobin has been noted.

*Disorders of digestion* are uncommon. *Fugitive erythematous exanthems* have been described. The danger of this aniline derivative appears to lie in its effect on the blood. Its close alliance to antifebrin, of which it is a methyl derivative, is drawn attention to.