

endeavoured to proceed upon that principle, but the pressure that comes from benevolent persons interested in the cases is an influence that constantly tends to weaken our resolve, and so increase the number of cases provided for by the parochial board.

I have brought under review the results of our system in so far as they relate to the number of applications made to the inspector of poor, the disposal of the applications, the amount of certified insanity relative to the population of the parish, and some of the practical difficulties connected with the certification of pauper lunatics. I do not propose, for the present, to bring under your notice the other branches of investigation embraced in our method of dealing with the cases reported to us. The clinical aspects of the cases examined, their physical conditions as well as their mental states, the causation of insanity in the cases certified, the social circumstances of the persons reported, the nature and frequency of recurring attacks of insanity, and several other important lines of investigation are followed, each too large to be dealt with within the limits of this paper.

CLINICAL NOTES AND CASES.

*Trephining for Epilepsy: A Clinical Case.** By T. DUNCAN GREENLEES, M.B.Edin., Medical Superintendent, Grahamstown Asylum, South Africa.

The following case is of interest on account of the successful localization of a cerebral disease, as well as from the fact that this is the first recorded case, so far as I am aware, where, in a South African Asylum, the aid of surgery has been invoked to alleviate a cerebral disease giving rise to mental aberration.

Selina Mary K., unmarried, aged 39, was admitted to the Grahamstown Asylum on August 1st, 1893, suffering from epileptic mania.

Previous History.—The family history can hardly be considered as satisfactory, there being a decided hereditary tendency to the neuroses. Her mother died at the age of 58 from apoplexy, and her father, who is a farmer, while being an intelligent and well-read man, is nevertheless of a nervous and excitable temperament. The patient has always been a delicate woman, suffering from derangement of the menstrual

* Read before the South African Medical Congress, Dec. 27, 1893.

functions, but for the most part she was very active and industrious, keeping her father's house for many years.

History of Present Illness.—In the month of February, 1892, she was one day bending down to open the lower drawer of a cupboard, and, rising up suddenly, forgetting that the door of the cupboard was open, she struck her head violently against its sharp edge. Her father found her some time afterwards lying full length on the floor in an unconscious condition, or what he took to be a faint. He noticed a considerable swelling over the right side of the head, which was also much bruised. She soon recovered, and remained in her usual state of health until the following September, when she suddenly, and without any warning, had a severe epileptic fit, and ever since she has been subject to epilepsy, the fits varying in severity and frequency.

Shortly after the onset of the epileptic seizures she began to exhibit symptoms which at first were considered as simply hysterical; these mental symptoms, however, became gradually worse, and by degrees merged into hallucinations and delusions, accompanied by some excitement. She became forgetful at times, acted strangely, and was soon quite unfit for her household duties. She was observed to be always worse mentally during her menstrual epochs, and her present mental breakdown dates from the time of her last "monthly," when she began to imagine she was a corpse, would let no one touch her, and had to be fed artificially. She believed she had committed "the unpardonable sin," and that she was pregnant; and it would appear that at this time her whole moral character became quite perverted.

From time to time she had an epileptic seizure. In a fit she was strongly convulsed, the convulsive movements beginning, and being more severe, on the left than on the right side, and she complained of a local patch of anæsthesia over the left lower lip. The fit does not seem to have been of long duration, nor during these attacks does she appear to have become totally unconscious. A well-marked aura was a quivering of the tongue which generally preceded each fit.

She was under the care of Dr. Townsend, of Skytherville, to whom I am indebted for much of the preceding information regarding the onset and early symptoms of the case. Her medical attendant considered that she was a fit person for treatment in an asylum, and accordingly she was placed under my care.

Condition on Admission.—She is a slim-built woman, rather above than under the average height; hair dark and close cut; face thin and pale; and she is apparently of the lymphatic-bilious temperament. Mentally, her expression was slightly depressed. She would not look one straight in the face; she was surly and irritable in manner, and discontented at everything. Her friends said that her character had altered completely since her illness. On the right side of the head, immediately above and very slightly anterior to the temporo-frontal arch, there was a localized swelling, sensitive to the touch and sore on pressure, which she said was caused by the blow she gave her

head eighteen months ago. She is in delicate health, but physical examination failed to detect any organic disease.

Progress of Case.—August 10, 1893.—She has taken several epileptic fits since her admission. At first she was restless and stubborn, refusing food, and expressing the delusion that her food was human flesh. She says all her teeth belong to a pig, and at times she also says her food is being poisoned. She seems to have a great dislike to everyone and everything about her. Is not sleeping well.

September 1.—She has been having stout, cod-liver oil, and milk for several weeks past, with considerable benefit to her general health. She continues, however, to take severe fits, but she is not now quite so irritable and discontented as she was, although she continues to express many delusions.

September 28.—Has improved much in appearance and health, and is becoming active and industrious, and more like her old self. She continues to take severe fits, and I had an opportunity of seeing her in one the other evening. For some time previous to the onset of the fit she suffered from general malaise, was pale and depressed, and said herself that she felt a fit impending. There was no initial cry, but, while lying down, the left arm gradually became flexed and the hand clenched; then the left leg was drawn up slowly, and the muscles of the left side of the face were put into strong contraction. This was followed by convulsions, which, attacking the left side primarily and most severely, soon passed to the right side, so that the entire body was for some time in a condition of strong convulsions. Then spasms were followed by general muscular relaxation, the "post epileptic" coma supervened, and the whole attack was over in three or four minutes. After recovery for some time she remained in a dull and dazed condition, and complained of pains in her head situated on the seat of injury.

October 8.—Her father has visited her, and has expressed a desire for operation, should we consider it justifiable, and likely to result in a cure, or at least amelioration. In consultation with Dr. Greathead, of Grahamstown, it was decided that the operation of trephining should be performed immediately over the site of the old injury.

October 22.—*Description of Operation*, by Dr. Greathead.—Having concluded that an irritative lesion would probably be found in the region of the middle and upper portion of the ascending frontal convolution on the right side, and a tender spot, with slight elevation of the scalp, existing just behind the line of the coronal suture, and about one inch above the temporal ridge, this point was chosen for the application of the trephine.

Chloroform having been administered, a semi-circular flap, including the periosteum, was raised from the bone, and immediately in contact with the skull was found a small cold abscess, about the size of a split pea. A large trephine was used, and the dura mater duly

exposed. As the membrane appeared to bulge considerably into the circular opening made by the trephine, a hollow needle was passed into the substance of the brain in several directions, but without revealing pus or other fluid. The dura was then incised, and found to be much thickened and matted together with the arachnoid and pia mater. At the lower margin of the wound, the dura mater was three-sixteenths of an inch in thickness, and easily stripped from the brain surface exposed by the operation, the cortex appearing to be quite healthy.

A small portion of the dura was excised and kept for future microscopic examination, and such of the membrane as could be removed without injuring the cortex, by pressure on the sharp edge of the trephined skull, was incised.

After washing the wound with warm boracic lotion, the flap was sutured in position with horse-hair, but the bone removed by the trephine was not replaced.

The wound healed rapidly without any suppuration, though for several days the skin appeared somewhat swollen and tense.

Microscopic Examination of Dura, by Dr. R. M. Truter, of the Albany General Hospital, Grahamstown.—The portion excised was hardened in absolute alcohol, embedded in paraffin, cut and mounted, stained in picocarmine and unstained.

Under Low Power.—While it is impossible to differentiate the different layers of the brain membranes, owing to their being so closely fused together, still on close examination it is noted that the upper portion is densely fibrous. The middle portion contains a small artery in transverse section, with its lumen almost obliterated, and the lowest portion presents a few small capillary vessels indicated by parallel rows of deeply stained nuclei.

Under High Power.—The upper portion is seen to be composed of densely packed fibrous tissues, staining pink with the picocarmine, with a few small cells scattered in the meshes of the tissue. The small artery, already referred to, is in a state of *endarteritis obliterans*; its lumen is obliterated by a thickening of the sub-endothelial and endothelial coats, and in one section it is seen to be divided into two channels. The elastic lamina stands out well, and the adventitia is infiltrated with cellular elements. The lower portion of the section shows several small blood vessels in a fibro-cellular net work.

Further Progress of the Case.—The results of the operation were at first satisfactory, and for over a week she had no fits. Later on the fits returned, but seemed to be diminished in number and severity. It would appear that the operation hastened her mental recovery, for although, before the operation, she was undoubtedly convalescing, yet afterwards she rapidly became quite well.

The headache, from which she originally suffered previously to the alteration in her mental condition, returned after a time. This headache was very intense and distracting in nature, extending all over the

right side of the head, similar to deep-seated neuralgia, and on several occasions I found it necessary to administer morphine to relieve the paroxysms. These attacks of headache were mostly nocturnal in point of time, and she feared herself that, unless relief was obtained, her mind would again break down.

After the operation, and indeed ever since, she has complained of sensory symptoms affecting the left arm and hip. These consist in a sensation of numbness and "pins and needles" affecting the extensor surface of the left forearm, a total want of sensation in the left forefinger and thumb, so that she is unable to grip anything firmly with her fingers, and a local patch of anaesthesia over the left lower lip. The last symptom has existed through the whole course of her illness, but the former symptoms seem to be consequent upon the operation.

The epileptic seizures became just as frequent and severe as before the operation, and it was noted that when the headache was severe, or when a fit was impending, the skin over the trephine-opening bulged out considerably, and there was some tension and throbbing; but when, for a time, she happened to be feeling better, the scalp lay flat over the opening, and the cerebral pulsations could hardly be felt.

Having come to the conclusion that, although the operation did not seem to have resulted in the hoped-for recovery, yet it revealed the undoubted cause of the fits, viz., a thickened dura mater pressing upon the cortex, and as the thickening of the dura appeared to extend beyond the limited area exposed by the trephine, it was suggested that a further operation be performed with the view of removing more of the disused membrane. But, previous to undertaking further operative treatment, and having in view the microscopic appearance of the excised dura, more particularly the endarteritis, it was decided to try the effects of anti-syphilitic treatment.

Accordingly this treatment was commenced in December, 1893. Her head was shaved, and weak Ung. Hydrarg. Nit. rubbed into the scalp twice daily, and Pot. Iod., together with Liq. Hydrarg., was given thrice daily.

February 28.—Since the above treatment was commenced and up to this date she has had no fits or headache. Her general health is now perfect, her menstrual functions have been restored and are now normal, and mentally she is quite well again.

While the treatment has no doubt succeeded in effecting a cessation of the fits, her recovered physical health is undoubtedly due to the fact that she was sent to the seaside for a fortnight recently.

As she has kept free from fits for upwards of two months I purpose now discharging her as recovered.

Remarks.—It would appear that, as the result of our treatment, we are compelled to admit this case as one of syphilitic

thickening of the dura mater. The moral character of the patient excludes the probability of acquired syphilis during adult life, but I am informed that syphilis is very frequently communicated during childhood by native nurses.

The interesting point in this case is that the injury sustained in adult life seems to have awakened, as it were, the specific latent poison, so that the inflammatory results of the injury, occurring in a syphilitic subject, have been effectually cured by anti-syphilitic treatment; and that, therefore, all the operation has done for us in this case has been to put us on the right scent; the diagnosis having been confirmed by the microscopic examination of the dura, the treatment was simple, and has been followed by the most satisfactory results.

Unruptured Tubal Pregnancy, with Cystic Tumour of the Opposite Ovary. Operation followed by Mania and Phlegmasia Dolens. Recovery. By A. C. BUTLER-SMITH, F.R.C.P.Ed., F.R.C.S.Ed., Surgeon to the Grosvenor Hospital for Women and Children, and Surgeon to Out-Patients, Samaritan Free Hospital for Women and Children.

E. D., aged 31, a short, stout, dark-featured woman, attended at the out-patient department of the Grosvenor Hospital on February 22nd, 1892. She gave the following history:—Healthy girlhood. Menstruation appeared at the age of 11. The periods were regular, but she had much pain during the flow, which usually lasted for four days, and never was excessive. Married at 27. No family. Two years ago she had an attack of "inflammation in the belly," and was admitted into a London General Hospital. When there she was told she had a tumour, but nothing further being done she left that institution and went home. Had been in good health and quite regular up to Christmas, 1891, at which date her last period occurred. Soon afterwards she began to feel ill, and had attacks of sickness throughout the month of January. On the evening of February 10th she was suddenly seized with acute pain in the abdomen, and had attacks of sickness and faintness during the night. Turpentine stupes were applied, and gave some relief, and the pain passed off towards morning. Her doctor was then sent for, and he attended for three days, during which time she was kept in bed. At the patient's request, however, he discontinued his visits, but two days later, in consequence of a second attack of a similar nature, he was again called in, and remained in attendance for four days, the patient being kept in bed and under the influence of morphia. At the end of that time she got