A Case of "Status Epilepticus" and Death due to Cerebral Cysts of Cysticercus Cellulosæ (Larvæ of Tænia solium).

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AS this is a fairly rare condition, the following case is considered worth publishing:

R. P—, æt. 39, married, a private in the R.F.A., was admitted to the Isle of Wight County Asylum on January 2nd, 1915, from a Red Cross Hospital in a condition of status epilepticus. The history obtained from his wife was interesting. He joined the Army when about 18, and spent six years in India. He took part in the South African War for fifteen months. He returned to England in 1903, married, and had several healthy children, and had lived at Dorchester for the last ten years. At the outbreak of war he was called up on the Reserve, and sent to France with the B.E.F., and was in the battle of the Aisne. Early in October he developed "epilepsy," and was invalided to England. He had always been strong and healthy till then, and never had a fit previously. Under treatment he improved, and was on sick furlough, when in November he had a severe epileptic attack, and was readmitted to a military hospital. He then became sullen, drowsy, and irritable, with occasional slight fits till December 20th, when he had three severe attacks, but came round from them, and was able to write a clear letter to his wife on December 26th. On January 1st, 1915, he started having severe fits, and these continued up to his admission twenty-four hours later.

Condition on admission.—Well developed and strongly built. Marked brown pigmentation of almost the whole of the trunk. Temperature 102° F.; pulse weak and rapid. The fit was rather of Jacksonian type, commencing in tonic spasms, followed by clonic convulsions of the left facial muscle group; it then spread to the left arm and leg. The right side of the body was affected later, but only in slight degree. There was right conjugate deviation. It was hard to estimate whether there was any sensory change, but in the brief intervals between the fits he was able to articulate in a low voice, and in a fairly coherent manner. The eyes were examined with difficulty, but there was no apparent optic neuritis or ocular cysts. The fits became more frequent, and for the last six hours before death were continuous. He died thirty-six hours after admission.

Post-mortem.—The skull cap and dura mater were normal. The vessels of the pia-arachnoid were congested, and springing from the membrane were numerous, small, oval, and rounded encapsulated cysts, mostly the size of a pea, which were scattered over both hemispheres, and to a lesser extent over the cerebellum. They were about seventy in number, and for the most part were attached to the pia, and dipped down into the cortex, but in some cases the cysts were actually in the

grey matter; there were no surrounding inflammatory changes in the brain-tissue. They were most numerous in the right Rolandic area, this probably accounting for the convulsive fits starting and being mostly confined to the left side. There were no cysts in the ventricles or basal ganglia. The brain, which weighed 45 oz., appeared otherwise normal. All the other organs of the body appeared healthy, and there were no signs of cysts in the muscles or elsewhere, only in the brain. The stomach and intestines were normal. There was no sign of a tapeworm. The spinal cord was not examined.

Pathological examination.—To the naked eye, and examined with a lens, the cyst wall was composed of an outer hard chitinous layer, and an inner thin lining membrane, with villous processes in several instances; some of the contents were cheesy and the others of a harder calcified nature. I submitted specimens to my friend, Dr. B. H. Spilsbury, Pathologist to St. Mary's Hospital, to whom I am much indebted for kindly examining. He reports: "I have no doubt they are examples of Cysticercus cellulosæ. They all have a thick fibrous capsule with a little round-celled infiltration outside it. One cyst appeared completely occupied with granulation tissue, but others were filled with an amorphous *débris* containing cholesterin crystals, and showing early calcification. In some there is necrotic structure which I believe to be a scolex, and in teased fragments of the cyst contents I have found portions of hooklets." I have only once previously met with such a case.

Through the kindness of Dr. Tattersall, Assistant Medical Officer of L.C. Asylum, Hanwell, and of Dr. Elgee, Acting Medical Superintendent of the Epileptic Colony, Epsom, I am able to record another case of epilepsy due to the same cause:

E. J. B—, at present a patient in the Epileptic Colony, Epsom, started having epileptic attacks when fighting in the South African War, and was admitted to Hanwell soon after the war. He had various cystic nodules on the arms, legs, and tongue, and one removed and sectioned showed it to be Cysticercus cellulosæ. Blood examination showed a marked excess of eosinophiles (7·25 per cent.). He was admitted on three occasions to Hanwell, and under treatment his fits greatly diminished, so that he only had one on rare occasions. On his discharge he usually took to drink, and his fits increased again. The fits were accompanied by complete unconsciousness, but on one occasion the convulsive attack was of the Jacksonian type—*i.e.* he stated that he was quite conscious, and that he felt pins and needles on left side of tongue, followed by contractions of left angle of mouth and side of face. He was transferred to the Epileptic Colony on April 12th, 1912. Dr. Elgee reports in August, 1915: "He is a weak-minded man, rather grandiose, lacking in self-control, and often quarrelsome. During the last six months he has had twenty-two fits, and they were all of the major type. He is in quite good health, and the only evidence of cysticercus he has presented since being here is a small cyst on the right under surface of his tongue which is still present."

I have heard of another case which was trephined at a London hospital for cerebral tumour producing localising symptoms, when several cysts of this nature were met with. The case I have recorded suggested the diagnosis of a localised cerebral tumour.

Occasional Notes.

A Statistical Intermission.

AMONG the many duties of life which have had to be thrown overboard in consequence of war strain is that of recording and tabulating facts connected with asylum experiences. It certainly would be undesirable that a process, which at the best of times is but a burden to many, should be continued when the asylum, more than any other class of institution, is heavily stressed by an increase in function accompanied by a notable decrease in the means of performing function. Nevertheless it cannot be denied that a breach in a long continued series of medical observations is in itself somewhat of a misfortune.

The Board of Control, in a recently published circular, has informed those hitherto responsible for certain returns that, while the civil register of admissions must be rigorously kept going, the medical register of admissions may be completely jettisoned. The same treatment has been extended to the death and discharge registers, that is to say, the civil facts must be preserved, while those parts of the record which have to do with the medical aspects of insanity may be dispensed with. If there is no need to note the latter, we fear that there will be a general disposition to let them lapse altogether. We, however, suggest that a valuable portion of the medical facts can be preserved at the cost of exceedingly little trouble.

There are two phases of statistical work, the one of ascertaining and recording experiences as they arise, the other of summation and elaboration at stated intervals. The latter can safely be entirely abandoned. A great point about a register, which was made when our statistical system was proposed, was that, given the entry of facts, those facts could be worked