

4. The circulatory and respiratory systems are not affected by judicious doses of the drug.

5. Patients are not liable to the drug habit.

6. Patients' mental conditions have improved remarkably in the majority of cases, while patients treated with bromides are adversely affected mentally. They become dull and stupid.

REFERENCES.

1. Hauptmann.—“Luminal bei Epilepsie,” *Münch. med. Woch.*, 1912.
2. *Idem.*—“Erfahrung aus der Behandlung der Epilepsie mit Luminal,” *ibid.*, 1919.
3. Golla.—“Luminal contrasted with Bromide in Epilepsy,” *Brit. Med. Journ.*, August, 1921.
4. H. Vollmer.—“Zur Pathogenese der genuinen Epilepsie,” *Zentralbl. für die ges. Neurol. und Psychiat.*, Berlin, 1923.
5. Goodall.—“Hypoglycæmia and Epilepsy,” *Brit. Med. Journ.*, December, 1923.
6. Bigwood.—*Annales de Médecine*, xv, 1924.
7. *Clinical Society's Transactions*, 1889.

A Case of Actinomycosis. By S. GROSSMAN, M.R.C.S.Eng., L.R.C.P.Lond., Assistant Medical Officer, Cardiff City Mental Hospital.

ACTINOMYCOSIS is a rare local specific infectious disease, due to the actinomyces, or ray fungus. The actinomyces is a streptothrix, and grows in colonies which are just visible to the naked eye, and these colonies, on microscopical examination, are found to consist of three elements—filaments, cocci, and clubs. In young cultures they stain uniformly, and are Gram-positive. The streptothrix gives rise to a hard, slow-growing tumour, going on to ulceration, with a thin sero-purulent discharge, containing yellow granules in which the ray fungus can be found. The organism is found growing on cereals, especially barley, and commonly infects cattle. Man is infected in the same way, and the disease is generally met with in farmers, corn-eaters, graziers, etc., especially if the patient has the habit of chewing straw, the infection most commonly occurring in the tongue, jaw, and spreading thence to the skin of the face and neck.

The case, which occurred in the Cardiff City Mental Hospital is especially rare, as the primary focus of infection was the face.

H. C—, a half-caste Arab, was admitted to the hospital in November, 1920. Patient was very depressed and emotional on admission. He was completely

disorientated, and, when spoken to, repeated the one word "Allah." His physical state was fair, except for a regurgitant murmur in the mitral area. The heart was well compensated. His mental and physical conditions remained stationary until May 20, 1923, when the right side of his face was noticed to be somewhat swollen. The teeth, tonsils and naso-pharynx were examined, with negative results. On May 23, 1923, a small sinus appeared in the swollen area, which discharged some pus. The sinus closed the following day, but another sinus opened, close to the first one, and a closer examination of sinuses and pus was necessary. Several discharging sinuses were found, with puckering of the tissues around them. On pressing the swelling, the pus which was discharged from the sinuses appeared like *sulphur-coloured granules*.

Infection with the ray fungus was suspected, and three slides were made from the pus, which stained with Gram's stain, and showed typical *Streptothrix actinomyces*. The slides were shown to the Hospital Consulting Pathologist, Dr. H. A. Scholberg, and to the City-County Bacteriologist, Dr. W. Parry Morgan, who, independently, agreed to the presence of the ray fungus in the pus. It must be mentioned here that the patient's face showed no scarring or healed sinuses which could suggest a latent focus of infection. The swelling grew to the size of a small hen's egg, and I decided that it would be better to excise the growth before commencing an iodide treatment. Equal parts of *codrenine* and sterile water was the local anæsthetic. The growth was completely excised by me, and the base thoroughly curetted with a small Volkmann's spoon, and then cauterized with pure carbolic acid. A few loose stitches were inserted and a dry dressing applied. Slides were made from the excised tissue, which showed on microscopical examination the *Streptothrix actinomyces*.

Patient was put on a mixture of pot. iodide in 20-gr. doses three times a day. The dose was altered in three days to 30-gr. sod. iodide three times a day. The wound was healing quite satisfactorily, but a week later patient developed a temperature of 101° F., rapid and irregular pulse, and seemed to have difficulty in breathing. Nothing abnormal could be found in the lungs; the heart showed commencing failure, and patient had complete suppression of urine. For three days patient passed about 4 oz. of urine, per catheter, per day. In addition to cardiac stimulants, I gave him an intravenous injection of 5 c.cm. of 40 *per cent.* sterile solution of urotropin, repeating the injection the following day, increasing the dose to 10 c.cm. Two days after the dyspnoea disappeared, patient commenced to pass urine freely, and in four weeks he was up. The wound completely healed.

Since his illness patient has become much brighter, and is able to do a little work in the ward. The tonsils, tongue and teeth have been examined again. Some teeth have been extracted and the granulation around the roots examined microscopically, but no streptothrix could be found. It is ten months since the operation was performed, and the wound has not opened.

I consider it a very rare case of primary infection of the face with actinomycosis.

It is impossible for me to offer any theories of how the infection occurred, as there have been no cases of actinomycosis in the Hospital prior to, or since, the case described.

A Case of Pseudo-hypertrophic Muscular Paralysis. By ISABEL G. H. WILSON, M.B., Ch.B.Edin., D.P.M., Assistant Medical Officer, Severalls Mental Hospital, Colchester.

Patient, a woman, æt. 57, was admitted to Severalls Mental Hospital, Colchester, Essex, in April, 1923.

Family history.—Eight brothers and sisters alive and well. No history of "any form of paralysis" in family.