Clinical Records

These cases of hæmatogenous brain abscess are not of every-day occurrence, yet they are perhaps not quite so rare as one might be led to expect. Quite a number have now been reported, and Eagleton gives a very complete bibliography.

RHINOSPORIDIUM SEEBERI

By K. W. MACKENZIE (Ipswich)

W. W. ENGLISH, age 27, a gunner in the Artillery, took part in a boxing tournament in February 1930, and, as the result of a blow on the nose, reported sick with profuse nose-bleeding. Previously he had enjoyed good health and had no history of nasal trouble.

For eleven months, until January 1931, he remained well, but then commenced to have minor attacks of nose-bleeding lasting only a few seconds and occurring at intervals of a week or a fortnight. This was followed in July by some difficulty in breathing through the left side of the nose and by October this obstruction had become complete. The attacks of epistaxis ceased, but streaks of blood were frequently found on the handkerchief. There was some nasal discharge from the left side, but no pain. In January 1932, the patient was referred to one of us (K.W.M.) by Dr. Robinson of Leiston.

The left side of the nose was blocked by a reddish-purple polypus with a papillomatous surface. It bled readily when touched. The area of attachment was one quarter of an inch in diameter and situated on the lower portion of the cartilaginous septum at a point three-quarters of an inch from the columella.

The tumour was removed by encircling the pedicle with an incision through the mucous membrane and stripping it from the underlying cartilage. As malignancy was suspected, four milligrams of radium were inserted for a few days.

In November 1932 there was no sign of recurrence and, apart from a septal perforation due to the radium, everything was satisfactory.

Mode of Infection.—Of 37 recorded cases, including the present one, this patient is the first Englishman in whom Rhinosporidium Seeberi is reported. Logan Turner and Ashworth have described a case which occurred in an Edinburgh student, but he was a native of the State of Cochin on the south-west coast of India. Of these 37 cases all occurred in natives of India or Ceylon with the exception of five, three from the Argentine, one from Tennessee and the one recorded now. Only two cases have been reported in females.

https://doi.org/10.1017/S0022215100038342 Published online by Cambridge University Press

Infection usually takes place at an early age. In only 26 cases is the age of the patient given and of these, 21 occurred in those under thirty years of age.

As the mode of infection is undetermined, some particulars of the present patient's life in India might be of interest. In February 1930 when the boxing tournament took place, the patient was stationed at Kirkee in the North-West Province of India, and had been there for three months. He remained at Kirkee until he departed for England on January 23rd, 1931. During the two and a half years previous to his residence in Kirkee he was stationed at Quetta, also in the North-West Province. It thus seems likely that infection took place either at Kirkee or at Quetta. He has no knowledge of having been in contact with an infected person but the battery of which he was a gunner was composed mostly of Mohammedans.

As an artilleryman he was in constant contact with horses, and the occurrence of Rhinosporidium Equi Zschokke in the nasal tumour of a horse is perhaps noteworthy, while O'Kinealy thought that it was possible that his patient became infected from raw hides at his work.

The position of the growths, together with the large numbers of spores which must escape with the nasal discharge, led R. E. Wright to suggest that transmission of the organism occurred in dust or water. The districts both of Kirkee and Quetta are very dusty, particularly the latter which is practically desert. Infection by water in this case is a distinct possibility, as swimming was an everyday enjoyment to the patient while at Kirkee where he bathed in the River Moola, a favourite bathing resort of the natives of the battery and of the district. He also indulged in regular bathing at Quetta, where the English and the natives used a bath at an electric power plant.

REFERENCES

Ashworth, J. H., *Trans. Roy. Soc.*, Vol. 53, p. 301.
Norrie, F. H. B., *Jour. Lar. and Oto.*, Aug. 1929.
Cherian, P. V., *Jour. Lar. and Oto.*, Aug. 1929.
O'Kinealy, F., *Proc. Laryngol. Soc.*, London, x., 1903.
Wright, R. E., *Ind. Med. Gaz.*, lvii., 1922c.
Zschokke, E., *Schweizer Arch. f. Tierheilkunde*, lv., 1913.

Histological Note by Dr. Biddle

The tumour is roughly oval in shape, measuring 1·3 inches by 1 inch. It has a papillomatous surface but no small whitish spots can be seen.

https://doi.org/10.1017/S0022215100038342 Published online by Cambridge University Press

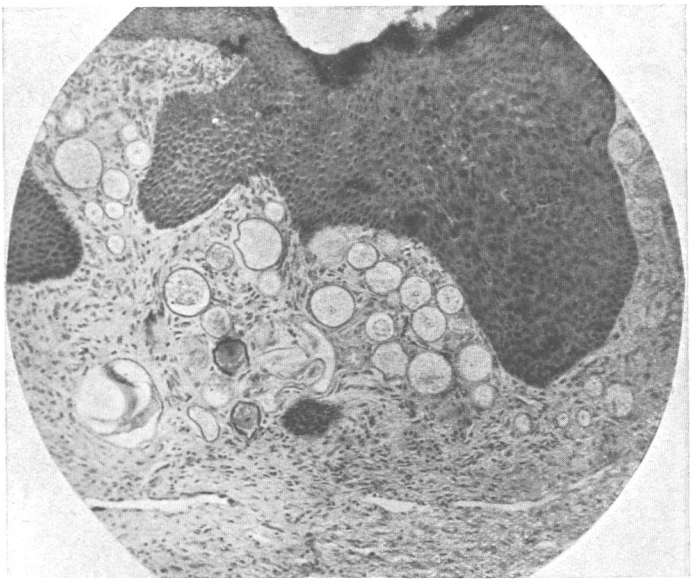


FIG. 1.

Small spores lying beneath the thickened epithelium. Some of them show the central nucleus.

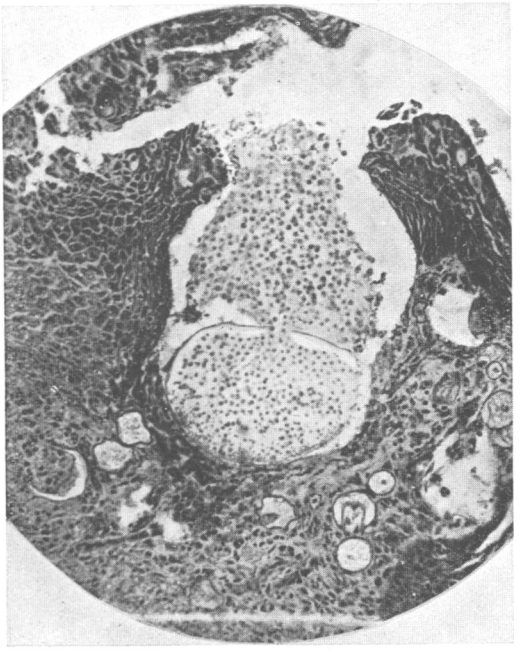


FIG. 2.

Splitting of the epithelium and the discharge of the contents of a spore.

https://doi.org/10.1017/S0022215100038342 Published online by Cambridge University Press

https://doi.org/10.1017/S0022215100038342 Published online by Cambridge University Press

On section a hypertrophied squamous epithelium with many infoldings and downward projections is found covering a cellular and rather vascular connective tissue containing the characteristic " cysts ". These " cysts " or spores are very numerous and vary in size from 12 to 150 microns in diameter and except when distorted artificially are truly spherical in shape. They are found mostly lying just below the epithelium but a few are embedded in it. The smaller ones have a thin chitinous wall and a single small nucleus. The larger are filled with numerous spherical granules and some of these show a thin portion of the wall through which the granules will be discharged. A few can be seen which have just burst and are pouring out a mass of granules in a mucus-like material.

The microscopical characters of this condition closely resemble those described in a very comprehensive report of a case by Professor J. H. Ashworth.* The case he describes differs in that the epithelium was ciliated in character, whereas this and most of the other cases recorded show epithelium of the squamous type. Otherwise all the points Professor Ashworth describes were observed in our sections.

* *Trans. Roy. Soc. Edin.*, Vol. 53, p. 301.

https://doi.org/10.1017/S0022215100038342 Published online by Cambridge University Press