

A CASE OF BOVINE CEREBRAL ABSIDIOMYCOSIS

By Eduardo Campos-Nieto*

Absidiomycosis has been reported as a cause of abortion and phycomycosis in animals (Vanbreuseghem 1966; Rippon 1974), but there is scarce information about it. Ainworth and Austwick (1955) isolated *Absidia ramosa* from the brain of a calf which died shortly after birth. Knudtson et al. (1975) report only one case of foetal cerebral mycosis in 4015 aborted bovine fetuses examined. They found *Absidia corymbifera* associated to vasculitis, trombosis, abscessation and cavitation of the brain. In this paper a case of bovine cerebral absidiomycosis in Mexico is described.

CASE HISTORY

A bovine holstein, female, approximately 24 months old was submitted to the Laboratorio Regional of Gómez Palacio in the State of Durango (Mexico) in October of 1974. The animal showed a problem of chronic course resistant to antibiotic therapy and characterized clinically by blindness and nervous alterations. Initially it was suspected to be rabies or a chronic bacterial sickness. The finding of the necropsy revealed little calcified abscesses of 7 mm in diameter located in the frontal lobes and at the base of the brain, with some little diffuse hemorrhaging zones. At the laboratory, the staff made some routine bacteriological studies the results of which were negative. In the mycological study it was isolated a wooly and dense coloured colony that later on changed to gray-brown in color (the growth was a similar at 37°C and at room temperature). The reverse of the culture did not present pigmentation. In the microscopic examination, these were observed broad and nonseptate hyphae with stolons, pyriform sporangia, conic columella, and oval, smooth and hyaline spores. The fungus was identified as *Absidia ramosa*.

* Domicilio actual: Instituto Nacional de Investigaciones Pecuarias, S.A.R.H., Apartado Postal M-7628, México 1, D. F.

COMMENTS

Some Zygomycetes are often found in mastitis, abscesses, abortions, diarrhoea, etc., but usually, they have not received the importance they should, as causal agents of illness. In spite of the lack of an integrated diagnosis, for the absence of a sample of brain for histological studies and sample of serum for immunological test, this case is reported on the basis of the clinical history, necropsy findings and the isolation of *Absidia ramosa*. This diagnosis coincides with those mentioned by some other authors (Knutson et al., 1975; Rippon, 1974).

LITERATURE CITED

- Ainsworth, G. C. and P. K. Austwick, 1955. A Survey of animal mycosis in Britain. General aspects. *Vet. Rec.* 67:88-97.
- Knutson, W. V.; M. E. Bergelard, and C. A. Kirkbride, 1975. Bovine fetal. Absidiomycosis. *Sabouradia*. 13:299-302.
- Rippon, J. W., 1974. *Medical Micology*. Saunders. Philadelphia, pp. 438-445.
- Vanbreuseghem, R., 1966. *Guide practice of Mycologie Medicale et Veterinaire*. Masson. Paris. pp. 152-153.

SUMMARY

A case of bovine cerebral absidiomycosis in Durango State (Mexico) is reported. The animal showed a problem of chronic course, resistente to antibiotic therapy, with blindness and nervous alterations. The findings of the necropsy revealed little calcified abscesses located in the frontal lobes and at the face the brain. In the mycological study *Absidia ramosa* was isolated.

RESUMEN

Se menciona un caso de absidiomicosis cerebral en un bovino del Estado de Durango (México). El animal presentaba un problema crónico, terapioresistente, caracterizado clínicamente por ceguera y alteraciones nerviosas. Los hallazgos a la necropsia mostraron abscesos ligeramente calcificados con zonas hemorrágicas difusas en el lóbulo frontal y la base del encéfalo. En el estudio micológico se aisló *Absidia ramosa*.