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OCCURRENCE OF MYXOSPORIDIAN CYST IN THE PITUITARY OF THE TELEOST *CHANNA PUNCTATUS* (BLOCH)

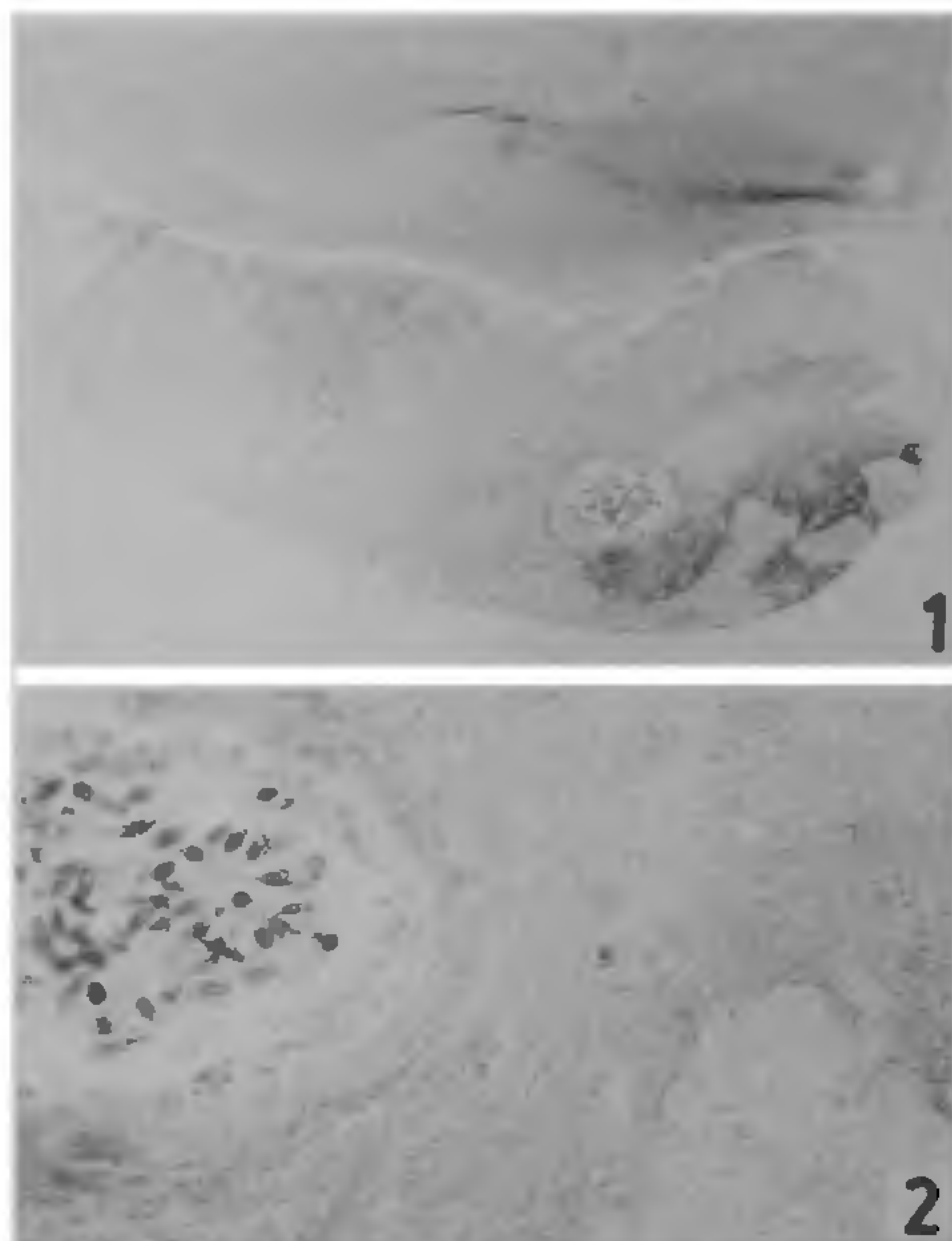
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OCCURRENCE of parasitisation in the pituitary is very rare^{1,2}. Over 500 brains with intact pituitary used in this study were fixed in bouin's fluid. Paraffin sections were cut at 5 μ m thick and stained in Alcian blue (AB)-Periodic acid-Schiff (PAS)-Orange G (OG) and Lead haematoxylin (PbH)-PAS-OG.

While examining the serial sections of the brains of *C. punctatus* with intact pituitary in relation to various experiments, a large myxosporidian parasitic cyst was seen in one of them occupying a part of the posterior neurohypophysis, pars intermedia (PI) and proximal pars distalis (PPD) (figure 1). The cyst wall is fibrillar and multilayered (figure 2). Despite this large cyst the surrounding pituitary cells appear to be normal. The fish also did not show any external signs of the presence of the infection.

Kerr³ reported that the presence of plerocercoid stage of the tapeworm (*Ligula intestinalis*) in the body cavity of the Roach (*Leuciscus rutilus*) caused reduction in size and granulation of the basophils in the PPD of the pituitary. Trematode parasite was reported in the third ventricle, and close to the nucleus preopticus and pituitary of *Ophiocephalus punctatus*^{1,2}; and myxosporidian parasites were noticed in the neurohypophysis of *Barbus stigma*¹. However, no marked change was noticed^{1,2} in the pituitary cell types in response to



Figures 1, 2. 1. A part of the brain with intact pituitary showing myxosporidian cyst in the neurohypophysis between PI and PPD. $\times 75$. 2. Higher magnification of the part of the cyst. AB-PAS-OG. $\times 400$.

parasitisation. In the present study also, despite the presence of the large myxosporidian cyst, the pituitary cytology was not affected.

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