OCCURRENCE OF FIBROMA IN A MAJOR CARP, LABEO ROHITA

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ABSTRACT

A case of fibroma in a juvenile specimen of the Indian major carp, *Labeo rohita* is discussed. Aquaculture becomes a viable practice only when the problems of disease and associated mass mortalities are brought down. Of all the fish diseases, the problems of those connected with neoplastic diseases are yet to be explored. Fishes form useful animal models to study the effect of carcinogens in body systems. So a survey and analysis of fish neoplasms are often helpful in indicating human carcinogens when especially many neoplastic diseases of humans remain unresolved.

During the course of random sampling, one live specimen of the Indian major carp, *Labeo rohita* of 5.6 cm total length, 4.4 cm of standard length and 1.970 g wet weight with one tumour on the head (Fig. 1) was obtained on 20-9-88 from a nursery pond of the College of Fisheries, Panangad.

The tumour was noticed in the near posterior aspect of the right eye so as to make it difficult to open the operculum. Imbalance in swimming was the only sign of the disease.

The tumour was of 0.6 mm diameter with a height of 0.5 mm, the colour being silver to pinkish and the texture was rubbery.

The tumour tissue was dissected out, immediately preserved in phosphate buffered formalin, sectioned at 5 μ, stained in haematoxylin and eosin and studied.

It could be seen that there was pedunculated growth on the surface of the skin which was lined by stratified squamous cells. The tumour growth had a corrugated appearance with lots of curvatures (Fig. 2a). The cells consisted of irregularly arranged fibrocytes scattered throughout the area (Fig. 2b). Clumping of dark coloured cells could be seen at places and there was no sign of mitotic figures. Besides this, numerous round cells simulating mononuclear cells were noticed especially at the periphery of the outgrowth.

The muscle tissue beneath the outgrowth was also infiltrated by mononuclear cells.

![Fig. 1. Labeo rohita showing the tumour in the head region.](image-url)
The changes noticed are suggestive of a fibroma. Fibroma has been reported in *Cyprinus carpio* (Crisp, 1854; Ronca, 1914) in brown trout (Kreyberg, 1937), in *Lebistes reticulatus* (Stolk, 1957), in sardines (Biavati and Mancini, 1967) and in trouts (Broughton and Choquette, 1971). The characteristics of fibroma noticed in the present study is almost similar to that described by Roberts (1978).

Fibroma has not been reported among the Indian major carps so far. Moreover, it is of such interest, as this has been observed in a fingerling which is only about 2-3 months old.

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**REFERENCES**


