

HISTOPATHOLOGICAL CHANGES IN THE SKIN AND GILLS OF CHANNA PUNCTATUS DUE TO BACTERIAL INFESTATION CAUSES EPIZOOTIC ULCERATIVE SYNDROME (EUS)

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ABSTRACT

The present study was carried out to study the skin and gills histopathology in the freshwater fish, Channa punctatus which is exposed to bacterial infestation. Different histopathological changes were observed in fish organs. Histopathological changes in skin and gills observed microscopically showed increased degrees of damage in the tissues in correlation with the concentration of polluted toxic substances while skin and gills of control groups exhibited a normal architecture. The seasonal variation of skin and gill pathology of Channa punctatus was carried out from two lakes of Hasanparthy and Bhandam in Warangal, Telangana, India during the months of December to February 2019. For the histopathological studies of skin and gill were collected processed and stained with Azan. Histologically the Channa punctatus of two lakes of fishes were more affected in winter months. The investigated organs of Murrels were exhibited some abnormalities during winter however mild hyperplasia, haemorrhage, partial loss of secondary gill lamellae, marked and hypertrophy was observed. Several pathological changes like necrosis, fungal granuloma, protozoan and cyst, vacuolation, melanomacrophage, haemorrhage, hypertrophy, hyperplasia and clubbing were recorded in all the investigated organs. Large bacterial colony and protozoan cyst were observed in the secondary gill lamellae of Channa punctatus.

KEYWORDS: *Channa Punctatus, Hasanparthy, Haemorrhage*