

ABSTRACT

The aim of the present study was to investigate the toxic effects of Fluoride, if any, on the Immunological memory and Histology of liver, kidney and spleen of *Labeo rohita*.

Fish were exposed to Fluoride, (150mg/l) for four days, before the antigen (B-RBCs) was given. One group was challenged with the second injection of antigen on day 17th, for determination of effect of Fluoride on immunological memory. The direct haemagglutination test was done and it was determined that fluoride had some toxic effects on antibody titres. Major histopathological changes in fish exposed to antigen, involved leucocytes infiltration, pyknosis, necrosis, tissue degeneration, luman dilation in tubules, glomerular degeneration, expansion in melanomacrophage centers (MMCs). Proliferative changes included reduction in number of pyroninophilic cells in the groups of fishes, exposed to fluoride.