Mycobacteriosis in Sharptooth Catfish, Clarias gariepinus

Elkamel, A., Mohamed, A., Hassanein, R. and Shaaban M.

Abstract:

The aim of this study was to investigate piscine mycobacteriosis in wild sharptooth catfish, Clarias gariepinus. Out of 120 fish collected, Mycobacterium SPP. Were isolated from fish 5 (4.16%), M. fortuitum was isolated from 3 (2.5%), while M. marinum was isolated from 2 (1.67%) fish. Conventional and molecular methods were applied to identify suspected mycoacterial isolates. Experimental induction of mycobacteriosis in sharptooth catfish by intraperitoneal inoculation of 1.2X10^8 and 1.6X10^8 cfu of M. fortuitum (MF4) and M. marinum (MM31), respectively, resulted in acute infections with severe peritonitis and adhesions. Less severe to chronic cases resulted from intraperitoneal inoculation of 1.2X10^7 and 1.6X10^7 cfu of M. fortuitum and M. marinum, respectively. Sharptooth catfish with induced chronic M. fortuitum infections showed severe enlargement of the spleen and dark coloration of the liver and kidneys, while induced chronic M. marinum showed sanguineous granular ascites. Antibiograms of the isolates were also conducted. The fisherman dealing with sharptooth catfish had developed nodules on the dorsum of hand that could be a case of fish handler granuloma

Published In:

Vet. Med, Cairo Univ, Giza , Vol. 55, No. 2 , PP. 537-553