Post operative treatment was achieved by administering as Ceftriaxone @ 3gm I/V, Meloxicam @ 0.5 mg/kg I/V, Chlorpheniramime maleate @ 0.5mg I/M and Bol. Seratiopeptidase two SID PO daily was given for 5 days along with topical dressing (Drew® ointment) of wound. The healing of wound lesions enhanced by oral administration of wound healing preparation such as bolus CHB one SID PO till complete wound healing. The wound healed completely after 10 days of intense treatment. After ten days the wound healing was complete and milk was collected by hand milking. The management is aimed at restoring milk flow and allowing adequate time for healing.

References

Pathology of Biliary Amphistomiosis in Murrah Buffaloes

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(Received : 28-02-2014; Accepted : 12-05-2014)

Abstract

*Explanatum explanatum* (Gigantocotyle explanatum) is a trematode parasite found in the liver of buffalo. Three black, graded Murrah, she buffaloes were presented for necropsy showed the presence of numerous amphistomes in the gall bladder, major bile duct and intrahepatic ductules and granulomatous nodules in the mucosal surface. Major microscopic findings were portal cirrosis, bile duct hypertrophy and hyperplasia. The worms were identified as *G. explanatum*.

Key words: Amphistome, liver, bile duct, *Gigantocotyle explanatum*

*Explanatum explanatum* (Gigantocotyle explanatum) is a trematode parasite found in the liver of buffalo and has a wide geographical distribution in India and neighboring countries. It is localised in the main bile ducts and intrahepatic ductules. The parasite may cause mortality, reduction in growth rate as well as reduction in the production of milk and meat (Haque et al., 2011). *G. explanatum* is a common amphistome infecting liver and bile ducts of buffaloes and other domestic ruminants in India (Verma and Swamy, 2006). In this present report, we describe the macroscopic and microscopic findings of the natural infection of *G. explanatum* in the liver of buffaloes.

Materials and Methods

Necropsy was conducted on three black, graded Murrah, she buffaloes aged 2.5, 3 and 12 years respectively. Gross changes were noticed mainly in the liver and duodenum. The common
bile duct and intrahepatic ductules were cut open and detailed investigations was carried out. Representative portions of liver, gall bladder and duodenum showing gross changes were collected in 10% formalin for histopathological studies. The tissue samples were processed under standard protocols, 3 µm sections were made and stained with haematoxyline and eosin. The parasites were collected in normal saline for identification.

Results and Discussion

Grossly, the liver was pale grey brown, enlarged and hard with thick capsule. The cut sections of the liver revealed the presence of numerous *G. explanatum* parasites in the lumen of the common bile duct and intrahepatic ductules (Fig.1). A longitudinal cut across the main bile duct showed numerous flukes measuring approximately 5x4 mm being attached to the mucosa of the bile duct. On removal of parasites from the site of attachment, granulomatous nodules, 1-3 mm size, on the mucosal surface of the major bile duct and intrahepatic ductules were observed (Fig.1.Insert). The bile ducts were dilated and thickened. The gall bladder of two buffaloes also contained numerous flukes. The flukes recovered from the bile duct and gallbladder were morphologically identified as *Gigantocotyle explanatum*. The proximal duodenum showed mucosal congestion and haemorrhagic granulomatous nodules.

Microscopic examination of the liver revealed major changes in the portal areas, ranging from periportal necrosis, infiltration of mononuclear cells to portal fibrosis (Fig.2). Lymphocytes were predominant among the inflammatory cells that might be a manifestation of strong immune response of the host as reported by Haque *et al.* (*loc. cit*). There was fibroplastic proliferation in and around the bile duct. Portal triads were distented and surrounded by atrophied hepatic cords.

Cirrhotic lesions particularly enlarged prominent portal tracts with variable amount of cellular infiltration, fibrosis and their extension into the parenchyma observed were similar to earlier reports (Verma *et al.*, 2011).

References

