

CONGENITAL MEGACOLON IN A LION (*PANTHERA LEO*)

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web supplement

Megacolon refers to the abnormal dilatation of large intestine. It can be a congenital condition caused by the lack of, or incomplete nerve supply to the colon, or as a complication of one of several inflammatory conditions like ulcerative colitis. It can cause recurrent abdominal pain and fever and can be critical. In man and domestic animals, X-ray of the abdomen show a largely dilated colon occupying the abdominal space. Though reported in cats and rats, reports in other animals are scanty. Perusal of available literature did not show any report of the condition in the lion and hence is documented.

Case history: A lion aged 6 years belonging to Trivandrum Zoo was suffering from congenital megacolon. Weakness of posterior trunk and hind quarters and recurrent constipation was evident from birth itself. Anorexia, constipation, abdominal pain, distention and tenderness of the palpable abdominal area and lameness were noticed off and on during the course of its life. A protrusion was noticeable at the anal region of the animal. There was relief on manual clearing of faecal material, done after low sedation using a combination of Ketamine and Xylazine. General weakness, dullness and difficulty in walking were noticed during the last two weeks prior to death.

Treatment/ Management: Manual removal of faeces, enema using soap solution, administration of analgesics, liver extracts, fluids and electrolytes were done whenever the symptoms aggravated. In its last phase of life the lion was suffering from constipation and acute abdominal pain despite several attempts at alleviation. No surgical intervention was attempted.

Post mortem: On necropsy, posterior part of colon about 60cm length was enlarged 3-4 times and was completely impacted with hard, dry, inspissated faecal balls which were some what powdery on breaking. Epithelium was soft and peeled off easily. Mucosa beneath showed varying degree of congestion, ecchymosis, haemorrhage, erosion and necrosis. Towards the proximal part, the contents were thick, porridge-like and bulky. Other visceral organs showed lesions indicative of toxemia.

This 6 year old male Lion "Zimba" born in the zoo was suffering from Congenital Megacolon possibly due to inbreeding. Constant medical treatments and management plans to relieve the animal's suffering could not prolong its life as they failed to provide a lasting relief. However, the treatment provided some relief from pain and the animal lead a normal life for 6 years. Post mortem examination confirmed megacolon.

Megacolon is not uncommon in cats and can be acquired due to ulcerative colitis, Crohn's disease and some infections of the colon, or could be congenital. Congenital megacolon has been reported in cats by Dietzmann & Monatsh (1968). When symptoms of megacolon precipitated in the form of constipation, animal responded poorly to medicines. In domestic cats surgical treatment is attempted but when megacolon becomes unmanageable the only option left is euthanasia. Subtotal colectomy is now established as a satisfactory treatment for idiopathic megacolon in cats. Recently, removal of the colon has been used successfully to treat chronic constipation and megacolon associated with mechanical obstruction of the pelvic canal due to stenosis caused by malunion of pelvic fracture. But in the long run colectomy affects the enteric function in cats (Rosin, 1993).

Cats presented with signs of gastrointestinal disease or obstruction are to be primarily suspected and differentiated among causes that are common in the species, viz., linear foreign bodies, trichobezoars, focal intestinal neoplasia, feline infectious peritonitis and megacolon. Clinical signs of gastrointestinal obstruction consist of vomiting, diarrhoea, constipation, tenesmus, anorexia, or weight loss. The course and onset of disease depends on the rate at which the obstruction develops, the level of obstruction and on whether the obstruction is partial or complete. The diagnosis of suspected cases is on the basis of percussion and palpation of an abdominal mass. Other diagnostics tools used are X-ray and possibly Ultra sound which help in the location of the obstruction. Surgical treatment includes removal of the cause and in congenital or genetic state partial resection of colon though various methods has been described (Mac Phail, 2002). The objective of the paper was to record the incidence, management and post-mortem findings of the case in question.

REFERENCES

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* see Image in the web supplement at www.zooreach.org