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Intussusception in buffalo caused by intestinal Lipoma

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Abstract

The current inquiry was conducted from December 2016 to November 2017. During this time span, 738 buffalo lower gastrointestinal tract specimens suspicious of anomalies were evaluated in North-West Rajasthan, regardless of age, gender, or breed. Abnormalities were further processed for histological evaluation. The overall prevalence of various medical disorders affecting buffaloes' lower gastrointestinal tracts was found to be 32.24 percent, with Lipoma accounting for 0.42 percent. Intussusception as a cause of intestinal blockage in adults is uncommon. Intussusception in adulthood is almost often caused by an underlying pathological condition. In light of this relationship, we present a case of intussusception in an adult caused by a tiny intestinal lipoma.

Keywords: Gastrointestinal tract, Lipoma, Intussusception, Ultrasound, CECT

Introduction

Intussusception is described as the telescoping of one section of the bowel into another. It is a rare cause of intestinal obstruction in adults, accounting for only one out of every 1300 abdominal illnesses presenting as blockage. Adipocyte neoplasms are categorized into four types: Lipomas, infiltrative Lipomas, Angiolipomas, and Liposarcoma. Lipomas are benign fatty tumors made up of mature fat cells. Lipomas are common benign tumors made up of lobules of well-differentiated adipocytes. Lipomas are typically observed in elderly animals, and the occurrence of neoplasms increases with age.

Materials and Methods

The current inquiry was conducted from December 2016 to November 2017. During this time span, 738 buffalo lower gastrointestinal tract specimens suspicious of anomalies were evaluated in North-West Rajasthan, regardless of age, gender, or breed. Abnormalities were further processed for histological evaluation. The overall occurrence of various pathological conditions affecting the lower gastrointestinal tract of buffaloes was observed to be 32.24 percent, with a Lipoma incidence of 0.42 percent. A buffalo with a history of lethargy, diarrhea, progressive weight loss, and emaciation was necropsied and a postmortem examination was performed. According to the gross findings, important discoveries in buffaloes were and revealed signs of paratuberculosis.

Results and Discussion

A comprehensive post-mortem inspection was performed on the carcass. The entire body, both exterior and internal, was examined. This condition was observed in one (0.42%) case. They appear primarily alone and vary in size. They can also vary in morphology, being pedunculated or encapsulated, and typically lobulated or nodular. They were soft, with an oily, translucent, white or yellow sliced surface (Fig. 1). are quite similar to the findings of Kumar *et al.* (1992) [2] and Jones *et al.* (1997) [5], who reported the gross appearance to be a finely delimited mass observed in the gut wall

Lipomas were formed up of cells that contained either a single giant fat globule or multiple smaller ones. The nucleus was pushed to the periphery, or maybe destroyed. Collagen fibers were interspersed between the fat cells. In the majority of instances, adipose tissue was seen in the intestine's submucosa (Figs. 2 and 3). As is consistent with earlier studies by Sastry and Rao (2005) [4] and McGavin and Zachary (2007) [3].

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Lipoma is a fat cell tumor that can be seen in tissues such as the Subcutis, Subserosa, mesentery, and submucosa. Either fat necrosis or fibrosis may occur, but the effect on the animals appears to be limited (Jones *et al.*, 1997) [5], or it could be due to an unknown reason (Chauhan, 2003) [1].

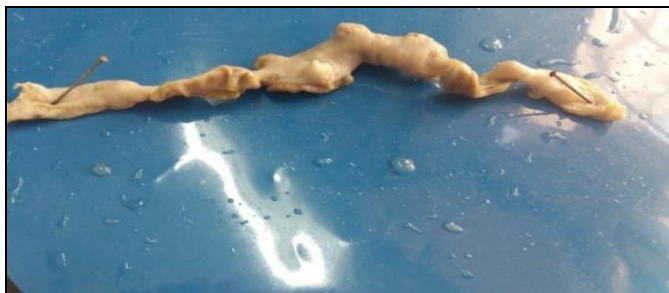


Fig 1: Lipoma: Photograph showing circumscribed mass in the wall of intestine

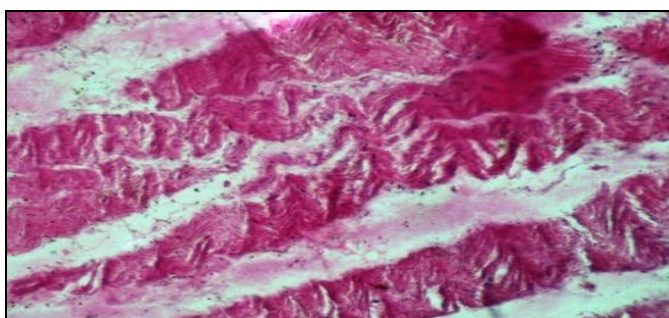


Fig 2: Higher magnification of intestine showing corrugation of mucosa. H&E, 200X

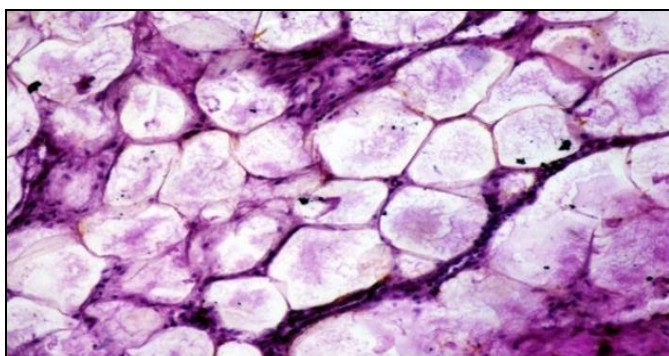


Fig 3: Microphotograph of intestine showing adipose tissue in submucosa. H&E 200X.

Conclusion

Lipoma is a tumor of fat cells and so is ubiquitous in tissues of Subcutis, Subserosa, mesentery and submucosa.

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