



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2022; SP-11(7): 3469-3470  
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Received: 12-05-2022

Accepted: 16-06-2022

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## Lipoma of the small intestine: A cause for intussusception in buffalo

**Rachna Poonia, Manisha Mehra, Manisha Mathur, Hemant Dhadhich and S Rani**

#### Abstract

The present investigation was carried out from December, 2016 to November 2017. During this period, a total number of 738 specimens of lower gastrointestinal tract of buffaloes, suspected for abnormalities were examined irrespective of age, sex, and breeds in North-West Rajasthan. For abnormalities were further processed for histopathological examination. An overall occurrence of various pathological conditions affecting the lower gastrointestinal tract of buffaloes was observed as 32.24 percent whereas, the incidence of, Lipoma 0.42 percent. Intussusception as a cause of intestinal obstruction in adults is rare. There is invariably an underlying pathology which leads to intussusception in adults. A case of intussusception in an adult due to a small intestinal lipoma is presented in view of this association. Ultrasound and CECT may help in a preoperative diagnosis.

**Keywords:** Gastrointestinal tract, lipoma, intussusception, ultrasound, CECT

#### Introduction

Intussusception is defined as telescoping of one segment of bowel into another one. It is an uncommon cause of intestinal obstruction in adults with a reported incidence of 1 in 1300 abdominal cases presenting as obstruction. Neoplasms of adipocytes are classified as lipomas, infiltrative lipomas, angioliomas, and liposarcomas. Lipomas are benign fatty tumors composed of mature fat cells. Lipomas are common benign tumors that are composed of lobules of well-differentiated adipocytes. Lipomas are usually found in older animal and the incidence of neoplasms increase with age.

#### Case Report

The present investigation was carried out from December, 2016 to November 2017. During this period, a total number of 738 specimens of lower gastrointestinal tract of buffaloes, suspected for abnormalities were examined irrespective of age, sex, and breeds in North-West Rajasthan. For abnormalities were further processed for histopathological examination. An overall occurrence of various pathological conditions affecting the lower gastrointestinal tract of buffaloes was observed as 32.24 percent whereas, the incidence of, Lipoma 0.42 percent. with history of lethargy, diarrhea, progressive weight loss and emaciation was necropsied and postmortem examination was conducted. In accordance to gross findings, it was concluded that significant findings in the buffaloes were and showed evidence of paratuberculosis.

#### Results and Discussion

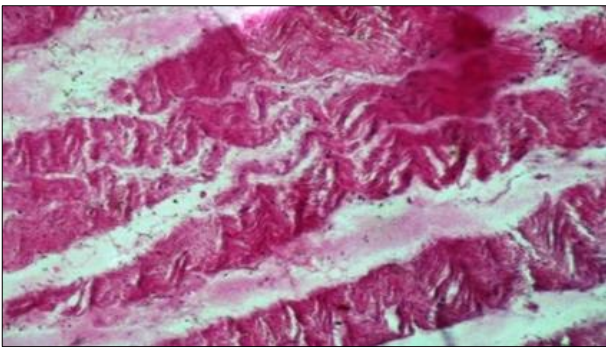
A thorough post-mortem examination was conducted on the carcass. The entire external and internal body was examined. This condition was observed in 01 (0.42%) case. Grossly, They occur mostly singly and vary in size. They also vary in shape, and might be pedunculated or encapsulated, and mostly either lobulated or nodular. They were soft, cut surface being oily, translucent, white or yellow in color (Fig. 1). are in close approximation to the findings recorded by and Kumar *et al.* (1992)<sup>[2]</sup> and Jones *et al.* (1997) found gross appearance as delicately circumscribed mass seen in the wall of intestine.

Microscopically, lipomas had made up of cells containing either one large fat globule, or several small ones. The nucleus was pushed to the periphery or even obliterated. Interspersed between the fat cells had strands of collagen fibers. Most of cases, intestine showed adipose tissue in submucosa (Fig. 2), (Fig. 3). As correspond well with the earlier reports of Sastry and Rao (2005)<sup>[5]</sup> and McGavin and Zachary (2007)<sup>[3]</sup>. Lipoma is a tumor of fat cells and so is

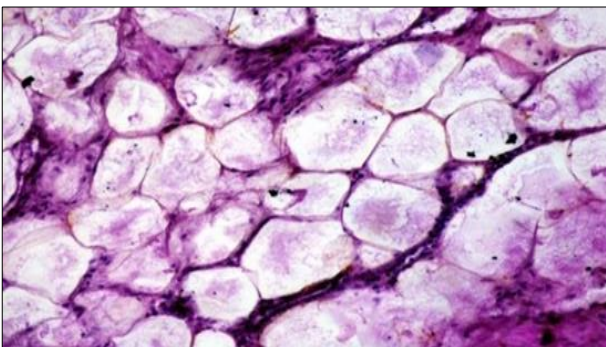
ubiquitous in tissues of subcutis, subserosa, mesentery and submucosa (Sastry and Rao, 2005) [5]. Either fat necrosis or fibrosis may occur but the effect on the animals appears minimal (Jones *et al.*, 1997) or it may be because of unknown etiology (Chauhan, 2003) [1].



**Fig1:** 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.

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