

## INFARCTION OF A MESOCOLIC LIPOMA ASSOCIATED WITH CATARRHAL APPENDICITIS IN A 12 YEARS OLD GIRL A CASE REPORT

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**Abstract:**

Lipoma is called the universal tumour. It can occur anywhere in the body. Mesenteric lipomas are considered rare probably because they are often asymptomatic or only mildly symptomatic, however they can cause significant pain, melena or diarrhoea or more serious conditions like intussusception and intestinal obstruction. Solid lipomas, in the paediatric abdomen are very rare. We present such a

**Introduction:**

Lipoma is a benign soft-tissue tumor and one of the most common types of mesenchymal neoplasms in adults. It can be single or multiple (lipomatosis) and superficially or deeply localized. In children, lipomas occasionally develop superficially or in the trunk.(1,2). Deep lipomas can be localized in the thorax, mediastinum, thoracic wall, pleura, pelvis, retroperitoneum, and paratesticular area, but they rarely originate in the intestinal mesentery in children.(1,3–5) There have been sporadic reports of mesenteric lipomas causing intermittent abdominal pain, distension, and intestinal volvulus.(3–5). Herein, we report a case of a small infarctised mesocolic lipoma associated with catarrhal appendicitis in a 12-year-old girl.

**Case report:**

A 12 years old girl was admitted with a two-day history of generalised abdominal pain, settling on the right side. She was anorexic and nauseated. Examination revealed a low grade pyrexia of 38.1 °C. Full blood count showed mild leucocytosis with white blood cell count of 12500 with high neutrophil percentage (81,5%). Blood urea, creatinine and electrolytes were within normal limits. An US was done revealing a distended appendix measuring about 11mm in the proximal portion associated with mild thickened wall, with no significant fat stranding in the peri-appendicular region.

After treating the patient conservatively for suspected appendicular reaction, the next day we found tenderness with rigidity and rebound in the right iliac fossa while examining the patient. No significant modifications were found repeating the US and blood tests. Given the worsening symptoms we decided to perform surgery for acute appendicitis. Intraoperatively the appendix was found slightly hyperaemic and a 1,5/1 cm encapsulated and yellowish mass with a black contour surrounding it, originating from ascending mesocolon was found near the caecum.

case, that of an 12-year-old girl who was admitted with abdominal pain ,nausea and mild pyrexia . The pre-operative diagnosis of acute appendicitis was suggested by ultrasound (US). The diagnosis of infarctised lipoma arising in the ascending mesocolon , without immature cells, was made microscopically after the operation.

**Key words:** lipoma ,appendicitis, mesenteric tumors

Appendectomy and excision of the tumor were performed. Histological examination revealed a lipoma with edema and peripheric haemorrhagic infarction (Infarctised lipoma) and the appendix with coprolith obstruction and follicular reaction.

**Discussion:**

Lipomas are benign tumors with a low potential for malignant degeneration. They are most often found in adults between 40 and 60 years of age and rarely occur in the first decade of life. Lipomas are the most common soft-tissue tumors and their incidence is far higher than reported. Most lipomas are ignored if they do not cause esthetic problems or any symptoms of their anatomical localization.(1,2) The etiology is not well known, although obesity, diabetes mellitus, trauma, radiation, and certain chromosomal translocations and rearrangements have been reported as etiological factors, none of which were applicable to this case.(1)

Lipomas are composed of mature fat and are common mesenchymal tumors, however very little is known about their pathogenesis (6). They may occur in any part of the body but lipoma of the mesentery is a rare finding, mostly described in case reports while the precise incidence is unknown (6). Most of the described intraperitoneal lipomas had an asymptomatic course and were discovered by accident (1,7) and only a few cases presented with acute abdomen (2).

Macroscopically, lipomas are soft, well-capsulated, oval, and yellow. Deep lipomas are usually only diagnosed when the tumor grows very big or becomes symptomatic of its anatomical localization. Microscopically, they are uniform and have a centrally located single lipid vacuole with peripheral cytoplasm and nucleus(1,2) .The tumor from our patient was oval, soft, yellow with a black contour (probably caused by the thrombosis of blood supplying vessels) well encapsulated (Fig. 1).

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Fig.1. Oval, soft, yellow with a black contour well encapsulated tumor.

The intestinal mesentery is an extremely rare site for a deep lipoma. Lipomas generally form a slow-growing, nonlobulated, soft, and mobile mass, which does not penetrate into the surrounding organs (1,2,4). Occasionally they may cause acute or intermittent abdominal pain, distension, small bowel volvulus, and constipation (3–5).

Primary mesenteric tumors, often hard to detect, are usually diagnosed upon laparotomy or necroscopy because of their slow growth and infrequent complications such as bowel obstruction, torsion with necrosis, invasion of adjoining organs or bowel perforation with peritonitis (3).

Benign cystic tumors occur more frequently than solid tumors. A benign mesenteric cyst was first reported in 1507 by Benivieni upon necroscopy (7,8). Histologically, lipomas arise from mature adipose tissue and may be malignant

(7,8). They have been reported in children of all ages with no specific predilection (1, 3). Preoperative diagnosis can be difficult if there are no symptoms or if the tumor is small sized as in our case, but computed tomography and ultrasound (US) may be helpful in patients with larger tumors.(3,4).The US findings prevented us to further investigate the cause of the abdominal pain, leading us to an incomplete diagnosis. In our opinion, only both the appendix obstruction and the infarction of the lipoma could cause such a severe abdominal pain.

Despite the benign nature of the tumor and the non life threatening complication, emergency surgical resection of the tumor is necessary. In addition, mesenteric lipomas may undergo malignant degeneration and may grow in very large sizes, therefore resection is the treatment of choice (8).

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