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Case Report

Ruptured ileal mesenteric dermoid mimicking acute abdomen: a clinical report

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ABSTRACT

Mature cystic teratoma is the uncommon variety of rare mesenteric cysts. Dermoid cysts of the intestine are mostly asymptomatic. Till date incidence of symptomatic mesenteric cyst (only 21 cases) is rare and most of them are asymptomatic. Here we report a case of ruptured mesenteric dermoid cyst in a 15 year old male child who presented with acute abdomen. This case shows ruptured dermoid cyst may mimic appendicitis and a high degree of clinical suspicion and radiological back up may clinch the diagnosis.

Keywords: Appendicitis, Dermoid, Mesenteric cyst, Teratoma

INTRODUCTION

Mesenteric cysts are rare variety of intra-abdominal lesions with an incidence of1 in 10500-205000 hospitalised patients.[1] Among the six varieties of mesenteric cysts, the dermoid cyst of the mesentery, the only malignant variety is extremely rare and mostly asymptomatic.[2] In this instance we represent a case of mature cystic teratoma of mesentery that presented with acute abdomen due to rupture.

CASE REPORT

A 15 year old male child was referred to the emergency of a rural hospital of West Bengal with pain in the lower abdomen and suspicion of appendicitis. The parents of the child stated that there was no other associated complains of vomiting, constipation or urinary symptoms except for mild degree of non-specific lower abdominal pain. The general examination of the child was satisfactory except for mild degree of pallor. There was no associated generalized lymphadenopathy which excluded any lymph proliferative malignancy. The abdominal examination revealed a tender abdomen without any associated visceromegaly. On admission the haemoglobin was 10.3 gm/dl, total count was 10,900/cmm and the liver enzymes, serum amylase, lipases were normal, excluded pancreatitis. The C-reactive protein was 38 mg/L. The ultrasound of the abdomen revealed a cystic lump of 6cm in size with heterogeneous echo texture clearly demarcated away from liver. However, the mass was having septations and there was suspicion of calcification. There was evidence of peritonitis. A suspicion of mesenteric dermoid was made. The patient party was counselled regarding the constraints of the diagnostic modalities in this rural hospital setup and asked for transfer to higher set up. The parents of the child refused to transfer the kid due to their financial constraints and a decision for laparotomy was made with the consent of the parents. The surgery was done with an antibiotic coverage of piperacillin, tazobactum and amikacin.

Abdominal exploration revealed a cyst in ileal mesentry and adherent to the wall of the ileum. The mesentery was oedematous with no signs of torsion. However, there was dent in lower surface of the cyst with white cheesy fluid coming out from it. The cyst contained thick, white gelatinous fluid (Figure1).

Figure 1: The cheesy fluid coming from the dermoid.

There was a small mass on the other end of the cyst which contained tooth, hair and bony elements (Figure 2 and 3).

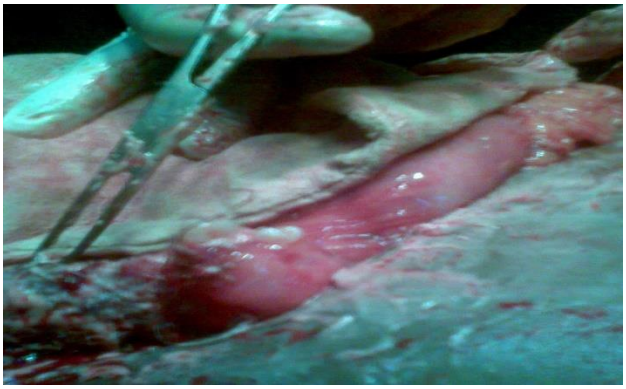

Figure 2: Teeth protruding from the mass.

Figure 3: Bony projections coming from the mass.

The peritoneum was washed and abdomen was closed with a drain. The patient was continued with the broad spectrum antibiotics and the post-operative period was uncomplicated and uneventful. The patient was discharged with a histopathological report showed sections with endodermal, ectodermal and mesodermal components that clinched the diagnosis of dermoid cyst.

DISCUSSION

Among all the various population groups studied type II The cystic mature teratoma rises from dysembryoogenetic masses of ectodermal lines with both cystic and solid components. This tumor though mostly found in ovary yet it may be found in other places too.[3] Dermoid cyst of intestine was first described by Florentinee anatomist, Benevieni, in an eight year old girl while autopsy.[4] Mesenteric cysts are asymptomatic mostly and very few produces symptoms like abdominal lump, torsion of the lesion, leading to abdominal pain or autoimmune immune haemolytic anaemia.[5-7] Here we report a spontaneous rupture of a mesenteric dermoid. These cysts may rupture due to abdominal trauma. The patient came to the hospital with mesogastric pain raising the suspicion of etiology of acute abdomen like appendicitis, pancreatitis. Enucleation is the treatment of choice in mesenteric cyst. But this is mostly difficult in cases of adherent mesothelial cyst and early enucleation if not done may create complications like inflammation, haemorrhage, torsion or rupture.[8] Present clinical report is rare in that present patient presented with acute abdomen with a past history of low grade abdomen.

CONCLUSION

This case highlights that complicated mesenteric dermoid are not as rare as they thought to be. This case highlights that mesenteric dermoid are prevalent in adolescent population and a high degree of clinical suspicion and radiological modality is required to exclude the chances of development of complications.

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