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JEJUNAL DIVERTICULOSIS- A RARE PRESENTATION

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Abstract : Jejunal diverticulosis is a rare condition with incidence rate less than 0.5 percent. The prevalence of castleman's disease is also equally rare with the figures stating 1 per 100,000.Both the above conditions are equally rare entities among themselves and thus when they present together is truly a diagnostic challenge. This is a case who presented with symptoms of subacute intestinal obstruction and abdominal pain. Emergency ultrasound was done for the same which came back as suspicious of mesenteric ischaemia. Hence laparotomy was done suspecting bowel gangrene. On opening up multiple jejuna diverticula were seen which were mildly inflammed but no signs of rupture were seen. Along with this multiple tiny 1x1 cm sized mesenteric lymph nodes were seen, which were biopsied. Histopathology of the nodes were reported as castleman's disease. Since the diverticula were not ruptured a thorough wash was given with saline and the abdomen was closed after putting flank drains. Jejunal diverticula are the least common and in fact represent the rarest localization of diverticular disease.

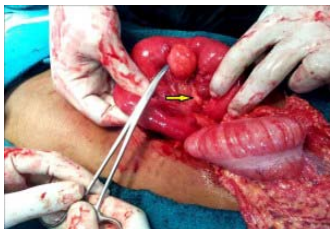
Castleman's disease is is a very rare disorder characterized by non cancerous tumors that develops in asingle lymph node or throughout the body.Both the above conditions when combined together represents a very rare finding. In a country like India where tuberculosis is very common one should also keep in mind other differential diagnosis such as castleman’s disease in a setting of mesenteric lymph node enlargement.

Keyword : Jejunum, diverticulitis, castleman's, laparotomy, mesenteric ischamia, rare, lymphnodes

A 52 year old male presented with history of abdominal pain and not passing motion since 3 days. He had no significant past medical history. The patient was of average built and undernourished. Vitals were stable and he was afebrile. Examination of abdomen revealed diffuse tenderness around the umbilicus. Bowel sounds were sluggishly heard .Per rectal examination was normal. Basic blood investigations were also within normal limits. Abdominal xray revealed mildly dilated small bowel loops and was inconclusive. On further evaluation an ultrasound scan report came as adynamic ileus with suspicion of mesenteric ischaemia.

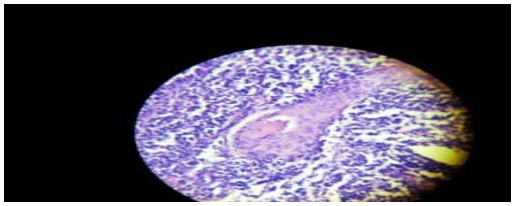
pre op photo

Hence the patient underwent a laparotomy and multiple jejunal diverticula were seen on the mesenteric border with some flakes .No signs of perforation was present. Along with this multiple tiny mesenteric nodes were also noted. Since the diverticula were not ruptured, a thorough wash of the abdomen was given , a few of the involved mesenteric nodes were taken for biopsy and the abdomen was closed in layers.



jejunal diverticula with lymph node

The above image shows the jejunal diverticula marked with the artery forceps and the lymph node marked with a yellow arrow. Patient was started on oral feeds on the fifth post op day following which he made a full recovery.



lollipop sign on histopathology

Histopathology of the involved nodes was reported as castleman's disease ,hyaline vascular variant exhibiting a characteristically expanded mantle zone and a radially penetrating sclerotic blood vessel (lollipop sign) on H&E stain. Our patient has been under regular follow up for the last one year and has had no recurrence of symptoms and is doing well.

Discussion:

Among small bowel diverticula, jejunal diverticula are the least common and in fact represent the rarest localization of diverticular disease [3] .Although the true etiological factors are unknown the proposed etiologies include abnormal peristalsis, intestinal dyskinesis and elevated segmental intra luminal pressures. The diverticula arise on the mesenteric border as described in the above case as these are the points where the mesenteric blood vessels penetrate the jejunum. Patients when they are symptomatic often describe a vague abdominal pain which can be often localized to the periumbilical region or epigastrium. The only definitive way to confirm jejunal diverticulosis as the source of abdominal pain is cessation of symptoms after resection of the affected bowel. There are truly no reliable diagnostic tests in jejunal diverticulosis and hence truly challenges the clinicians diagnostic ability. CT can only identify bowel thickening or abscess formation. Double balloon enteroscopy and capsule endoscopy are useful investigations but cannot be done in an emergency setting [6] In our case it was decided to go for closure of the abdominal wound after a thorough wash as the diverticula were intact [5].

Our patient was also reported to have castleman's disease from the mesenteric lymph nodes which were tested. It is also called as "angiofollicular lymph node hyperplasia", "giant lymph node hyperplasia", "lymphoid hamartoma" and "follicular reticuloma". It is a very rare disorder characterized by non cancerous tumours that develops in a single lymph node or throughout the body. Hyperproliferation of B cells occurs thereby producing cytokines [2]. The exact mechanisms causing this condition are poorly understood. Immune dysregulation through immunosuppression, autoimmune processes or continuous low grade inflammation is a key factor.

Conclusion:

Jejunal diverticulosis is a very rare disorder which can present a challenging picture to the clinician. There are many incidences in which diverticulosis has been successfully managed conservatively but in conditions such as diverticular rupture it is always better to go in for a laparotomy and closure [1]. This when combined with an even rarer diagnosis such as mesentric Castleman's disease represents a very rare finding [4]. One should also keep in mind about rarer diagnoses such as Castleman's disease when mesenteric lymph nodes are found to be involved instead of thinking it to be tuberculosis.

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