



APPENDICITIS WITH MIDGUT MALROTATION- A RARE CLINICAL ENTITY

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ABSTRACT Acute appendicitis is a common clinical entity where patient will present mostly with pain abdomen and typical right iliac fossa tenderness. But Acute appendicitis associated with midgut malrotation is a rare entity and patients present with pain in the left side of abdomen which often lead to missing the diagnosis of a surgical emergency unless patient is subjected to further radiological evaluation. Herein we report one such case of a 27yr old male who presented to us with complaints of pain in left upper abdomen and vomiting.

KEYWORDS : Appendicitis, Midgut malrotation, Surgical emergency

INTRODUCTION-

Acute appendicitis associated with midgut malrotation is a rare clinical entity. Altered anatomy in midgut malrotation affects the typical clinical findings in Acute appendicitis. Patient presents with pain abdomen where the site of pain depends on the location of caecum and appendix. On examination systemic signs of inflammation such as tachycardia might be present but tenderness in right iliac fossa typical of an acutely inflamed appendix in its normal anatomical site will be absent.

We present a case of 27yr old male who presented as a case of pain abdomen under evaluation.

CASE REPORT-

A 27yr old male presented with complaints of pain in left upper abdomen from 3days and multiple episodes of vomiting from 2days. Patient had pulse rate of 92beats/min and was haemodynamically stable. On abdominal examination, tenderness was felt in the left hypochondrium with no signs of guarding or rigidity. Bowel sounds were audible. Blood investigations were suggestive of leukocytosis. USG of abdomen and pelvis was suggestive of focal inflammation of a appendix like structure in left hypochondrium measuring 78mm x 12.6mm with altered SMA-SMV relationship distally. CECT of abdomen showed inflamed appendix in the left hypochondrium due to midgut malrotation with signs of mesenteric inflammation and phlegmon formation. Chest Xray showed no evidence of any situs inversus. Patient underwent exploratory laparotomy with an upper midline incision and intraoperatively inflamed appendix was found in left hypochondrium and appendectomy was done and specimen was sent for biopsy. Histopathological examination was suggestive of acute appendicitis.



Figure 1-upper midline incision



Figure 2-caecum with appendix in left hyochondrium



Figure 3-appendix dissected from mesoappendix



Figure 4-biopsy specimen

DISCUSSION-

Appendicitis is one of the most common condition which a surgeon encounters in an emergency room setting. In its typical presentation, acute appendicitis begins with a vague abdominal discomfort around periumbilical region. Appendicitis associated with gut malrotation is very rare and incidence of same is not clearly known. Patient presents with left sided pain abdomen where the exact site of pain depends on position of caecum and appendix. Left sided pain abdomen in an adult usually raises the suspicion of a diverticulitis hence creating a clinical diagnostic dilemma. Patients with intestinal malrotation usually present in the first month of life classically with bilious vomiting secondary to duodenal obstruction distal to ampulla of vater. Patients presenting for the first time in adulthood with acute abdomen is quite rare. Hence the atypical presentation of acute appendicitis in patients with intestinal malrotation presents a diagnostic challenge.

CONCLUSION-

Appendicitis associated with midgut malrotation in adulthood is a very rare clinical entity and mimic other conditions such as diverticulitis and hence clinically misdiagnosed leading to increased morbidity from the actual underlying surgical emergency. Proper radiological workup such as CT scan is crucial in diagnosis and appropriate management of the condition.

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