



ORIGINAL RESEARCH PAPER

General Surgery

A RARE CAUSE OF SMALL BOWEL OBSTRUCTION – A CASE REPORT

KEY WORDS: Small Bowel Obstruction, Appendix Epiploicae, Diagnostic Laparoscopy

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ABSTRACT

We report a case of a 62 year old male patient presented with complaints of diffuse abdominal pain, abdominal distension, bilious vomiting for one week and obstipation for 2 days. On examination, patient had distended abdomen with diffuse tenderness and guarding. X ray Abdomen erect and supine showed dilated small bowel loops with multiple air fluid levels. Contrast CT of Abdomen showed Partial small bowel obstruction with transition point 8-10cms from ileocaecal valve. Diagnostic laparoscopy showed Inflamed appendix epiploicae from mid transverse colon extending upto a point 10 cm from DJ flexure attached to a necrotic mesenteric node obstructing the distal ileum. Distal portion of inflamed appendix epiploicae divided with lap harmonic scalpel and clips applied over the stump. Cut end of inflamed appendix epiploicae retracted and could not be traced laparoscopically. Hence mini - laparotomy made and thorough laparotomy done. Inflamed appendix epiploicae over the transverse colon is identified, ligated and excised in toto, sent for HPE. The distal end of the band is identified and found to be attached to necrotic lymphnode. Post operatively patient was stable, started on oral diet on post-operative day 2 and no further complaints.

CASE REPORT:

HISTORY:

A 62 year old male patient presented with complaints of diffuse abdominal pain – sudden onset, intermittent, colicky pain, non radiating with abdominal distension, bilious vomiting for one week and obstipation for 2 days.

ON EXAMINATION:

Diffuse abdominal tenderness with guarding present. Bowel sounds were exaggerated. Per rectal examination – rectum empty, no fecal staining.

XRAY ABDOMEN ERECT & SUPINE:

Showed dilated small bowel loops with multiple air fluid levels. (Fig 1)

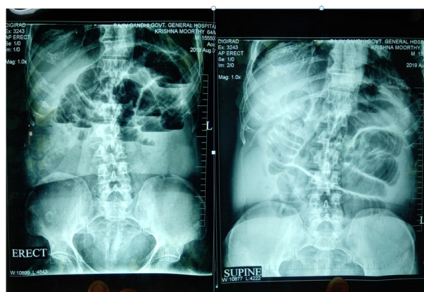


Fig.1. Xray Abdomen Erect and supine –Dilated small bowel with Multiple air fluid levels

USG ABDOMEN:

Dilated small bowel loops (max diameter 4.2 cms), no e/o free fluid. Impression : Acute intestinal obstruction

CECT ABDOMEN(IV/ORAL/RECTAL CONTRAST):

e/o narrowing of ileal loops at about 8-10 cms from ileocaecal junction resulting in dilated bowel loops proximal to it. Large bowel appears normal. No e/o bowel wall thickening.

IMPRESSION:

Partial small bowel obstruction with transition point 8-10cms

from ileocaecal valve. (Fig.2)



Fig.2. CECT ABDOEMN – Partial small bowel obstruction

TREATMENT:

Pt was hydrated well with iv fluids. Abdominal distention was progressively decreasing and pt had loose stools after admission – suggestive of Intermittent obstruction. Hence planned for Diagnostic laparoscopy and proceed.

INTRA-OPERATIVE FINDINGS:

Small bowel mildly distended. Inflamed appendix epiploicae from mid transverse colon extending upto a point 10 cm from DJ flexure attached to a necrotic mesenteric node obstructing the distal ileum (Fig.3). Distal portion of inflamed appendix epiploicae divided with lap harmonic scalpel and clips applied over the stump. Cut end of inflamed appendix epiploicae retracted and could not be traced laparoscopically. Hence mini - laparotomy made and thorough laparotomy done. Inflamed appendix epiploicae over the transverse colon is identified, ligated and excised in toto, sent for HPE. The distal end of the band is identified and found to be attached to necrotic lymphnode 3x2 cms, base is transected with vicryl sutures and samples taken for HPE.



Fig.3. Diagnostic laparoscopy showing Inflamed Epi

ploic appendage adherent to necrotic mesenteric lymph node entrapping distal ileum causing obstruction.

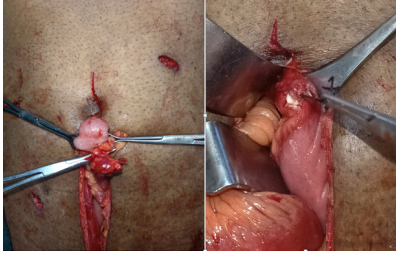


Fig.4. Mini-laparotomy showing cut end of inflamed Epiploic appendage and necrotic mesenteric lymph node

HISTOPATHOLOGY REPORT:

Sample A (inflamed appendix epiploicae) – shows mature adipocytes with extensive areas of necrosis and hemorrhage , focal aggregates, neutrophils and necrotic debris

Sample B(from necrotic node) – areas of fibromuscular tissues with congestion and necrosis

DISCUSSION:

Epiploic appendages - small outpouchings of fat-filled, serosa-covered structures present over the colon , abundant in the transverse and sigmoid colon. Acute epiploic appendagitis is defined as Inflammation/ ischemic infarction of an epiploic appendage. Infarction is caused by torsion or spontaneous thrombosis of the epiploic appendage central draining vein. Most commonly occurs in the 2nd to 5th decades of life. It is Four times higher in men as compared with women. Epiploic appendagitis can arise in any segment of the colon with 57 % in the rectosigmoid and 26 % in the ileocecum. Risk factors include Obesity, an increase in abdominal adipose tissue, strenuous exercise. Clinical presentation includes localized, strong, non-migratory sharp pain after eating located on the left, right, or central regions of the abdomen. Right lower quadrant pain mimic appendicitis. Left quadrant pain mimics diverticulitis. Ultrasound scan may show "an oval, non-compressible hyperechoic mass without internal vascularity with a subtle hypoechoic rim 2-4 cms in diameter. CT abdomen may show A fat-density ovoid structure adjacent to the colon, usually 1.5-3.5 cm in diameter, Thin high-density rim (1-3 mm thick) Surrounding inflammatory fat stranding, and thickening of the adjacent peritoneum with Central hyperdense dot (representing the thrombosed vascular pedicle). The inflamed appendage is classically located on the anterior aspect of the sigmoid or descending colon. Epiploic appendagitis is self-limiting and can be managed conservatively with NSAIDs. Laparoscopic surgical excision can be done.

CONCLUSION:

Acute epiploic appendigitis is a very rare condition occurring in the middle aged men, usually mimicking other conditions like diverticulitis, appendicitis. In our case the inflamed epiploic appendage from transverse colon was found adherent to a necrotic lymphnode over the mesentry near distal ileum entrapping the small bowel loop causing intermittent small bowel obstruction.

REFERENCES

1. "Epiploic appendagitis – clinical characteristics of an uncommon surgical diagnosis". BMC Surgery. 7:11
2. <https://radiopaedia.org/articles/epiploic-appendagitis>
3. Singh, Ajay K.; Cervais, Debra A.; Hahn, Peter F.; Sagar, Pallavi; Mueller, Peter R.; Novelline, Robert A. (2005-11-01). "Acute Epiploic Appendagitis and Its Mimics". RadioGraphics
4. Sussman, Rachael; Murdock, Jonah (2015-04-02) "Peritoneal Loose Body". New England Journal of Medicine