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Case Report

Human abdomen still a pandora's box

MS Raju[1], Raju Karthikeyan[1], M.S Senthil[1], S.M. Anandh[1]*, L. Lakshmi[1]

[1] *Kongunad Hospital, Coimbatore, Tamil Nadu, India*

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ABSTRACT

The abdomen is called Pandora's Box by surgeons, because one is not sure what will come out of it when one opens it. Even well experienced surgeons are constantly amazed at the variety of pathology they have encountered on opening up patients' abdomen. In spite of so many new investigations at our disposal like ultrasound, CT scan and MRI, the human belly defies them all and reveals its secret only when confronted by a surgeon's scalpel. We have to deal with the mystery inside the tummy on the operating table! Pandora's box is an artefact in Greek mythology, Pandoras box was a gift from the Gods to Pandora the first woman on earth. It contained all evils of the world unknowingly Pandora opened, though she hastened to close the container, only thing that was left behind the box was Hope – spreading the pessimistic meaning of " deceptive expectation ". Based on this story this idiom has grown "to open a Pandora's box" means we may expect something and go and may get something entirely different.

1. Case Report

60 yrs old man attended emergency department with complaints of diffuse abdominal pain of insidious onset, continuous, constant, pricking and non radiating nature and obstipation for last 2 days. He is a known diabetic smoker and alcohol user for last 20years. History of one episode of fever spike. No history of nausea and vomiting. No history of trauma. No history of similar episodes in past. On examination febrile, tachycardia, per abdomen distended, guarding present over left iliac fossa and bowel sounds were hyperkinetic. Per rectal examination revealed collapsed rectum with fecal staining.

On evaluation total leukocyte counts were 9800, and renal function tests including electrolytes were within normal limits, dyselectrolemia noted with hypokalemia ,hyponatremia and hypochloremia, serum amylase was 68 IU/L and serum lipase 246 IU/L, coagulation profile normal limits, an Xray abdomen erect view was taken which revealed multiple air fluid levels along with dilated small bowel loops, patient was kept nil per oral, ryles tube inserted and kept on gravity dependent continuous drain and treatment initiated with IV fluids and empirical antibiotics and parenteral potassium correction. Contrast enhanced ct abdomen was taken.

CT revealed irregular rim of enhancing abscess collection seen in left side of lower abdomen extending to pelvis measuring about 12 x 10 x 9.8cm with air fluid level in between. There is moderate dilatation of jejunal and ileal loops noted which shows edematous thickened wall with associated minimal omental thickening seen anteriorly with suggestion of closed bowel loop obstruction secondary to adhesion. To rule out infective cause -? Tuberculosis

Therefore decision for Diagnostic laparotomy was made and on opening of abdomen, in contrast to CT findings we were welcomed by dilated small bowel loops which were found adherent to each other over the surface coated with flakes of sloughed tissue. Hence needed to release the inter

* *Corresponding author*.
E-mail address: dranandhsmms@gmail.com (S. M. Anandh).

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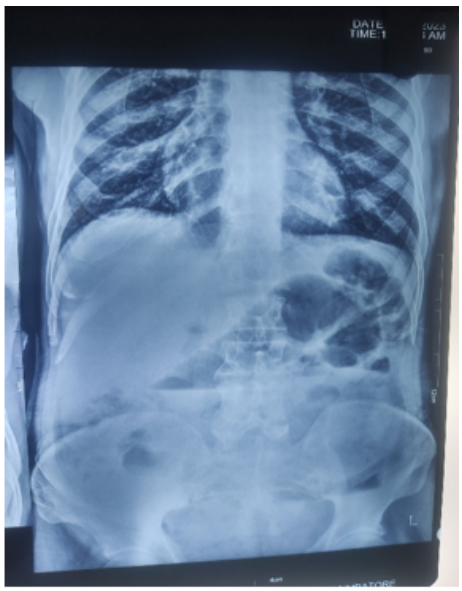

Figure 1: X-ray abdomen erect revealing air fluid levels and dilated small bowel loops

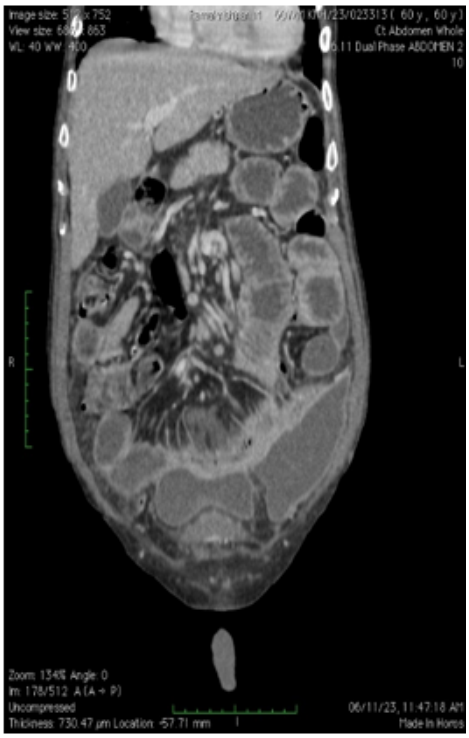

Figure 2: Coronal image of CECT abdomen showing thickened small bowels

bowel adhesion and on bowel walking pouting perforation of approximate size 2x 1 cm noted in jejunum at 15-20 cm from duodenojejunal flexure identified. Perforation margins freshened and closure done in 2 layers and peritonel lavage done and intra abdominal drain kept. Postoperative period uneventful and patient was discharged on sixth Postoperative day.

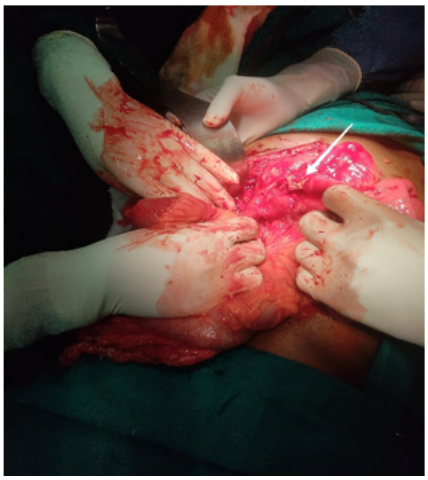

Figure 3: showing flakes of sloughed tissue while releasing the interbowel adhesions

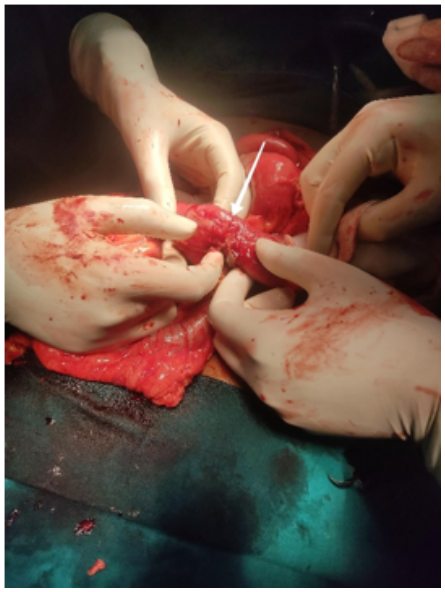

Figure 4: arrow mark pointing to the pouting perforation

2. Discussion

An ‘acute abdomen ‘represents a rapid onset of severe symptoms that may indicate life threatening intra abdominal pathology. Pain is usually a feature but is not always the case because a pain free acute abdomen is more common

among elderly, in children and third trimester of pregnancy. The differential diagnosis is extremely wide and definitive diagnosis is often difficult particularly in primary care. This is due to the many different organs within the peritoneal cavity and the potential for referred pain. Hence, abdominal pain has and will always been a tricky symptom to assess. This is why it is Aptly called a Pandora box by Surgeons.[1]

Abdomen becomes a Pandora's box in the relative aspect that we won't be sure what will come out of it until we opens it. In spite of so many new investigations available abdomen always remains a mystery until we opens it because the human belly can defy them all and reveal its secret only when confronted by a Surgeon's scalpel. We have to deal the mystery on the operation table ! So Diagnostic laparotomy is often the last court of appeal in investigating abdominal cases.[2]

Many a times patients comes to us after a large number of hospital visits ,and so clinical signs and symptoms are masked by treatment given at different stages of disease progression. Early decision-making and intervention are needed in many cases of acute abdomen to prevent endangering life and prevent stage of peritonitis and sepsis and loss of fertility.

Spontaneous free perforation of small bowels is rare especially if no history of trauma present. However initial or recurrent perforation can define the disease diagnosis and its severity in diseases like Crohn's disease. initial spontaneous perforation may be a presentation of an occult intestinal disorder like lymphoma complicating celiac disease even though in the present scenario diagnosis is guided by CT imaging ,urgent surgical intervention is usually required for precise diagnosis and treatment.[3]

Perforation of jejunum is an uncommon disorder and can be rarely diagnosed preoperatively. Causes of jejunal perforation includes many like advanced age atherosclerosis, prolonged oral administration of thiazide and potassium therapy. It can also be found secondary to trauma, foreign body, jejunal diverticulitis, steroid therapy and collagen disease which can be associated with necrotising arteriolitis or collagen sprue or can be secondary to chronic alcohol and smoking habits, malignancy like lymphoma complicating celiac disease, and superior mesenteric artery occlusion.

Sometimes a viscous perforation is contained because of its retroperitoneal location of perforation and may be diagnosed in imaging as walled off intra abdominal abscess or inflammatory mass. In contrast to this free perforation usually presents clinically in more dramatic fashion with generalised peritonitis.[4,5]

In imaging CT has been established as the most valuable imaging techniques for identifying the presence, site and cause of GI perforation. The amount and location of extraluminal free air usually differ among various perforation sites. other findings like discontinuity of bowel wall and concentrated free air bubbles in close proximity to the bowel wall can help predict perforation site. CT is being considered the standard investigation of choice in detecting perforation because of its high sensitiveness for detecting free extraluminal air. Present era have modern multi detector CT for easy and accurate diagnosis of site of perforation. But always detection depends on amount of air and site of perforation. Retroperitoneal perforations may be sealed or walled off and hence may be missed even with CT and hence close clinical evaluation and clinical suspicion takes a major role in diagnosis of perforation and Diagnostic laparotomy or laparoscopy is completely diagnostic.[6,7]

3. Conclusion

Acute abdomen is a common emergency in a Surgeon's life . Over the years lot of advancements had developed in abdominal imaging. Inspite of all, we tend to see surprises on table even in modern day advancement in abdominal imaging. So one should be ready to expect the unexpected in any case of acute abdomen.

4. Source of Funding

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5. Conflict of Interest

None.

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Author biography

MS Raju, Managing Director

Raju Karthikeyan, Medical Director

M.S Senthil, Head https://orcid.org/0009-0007-0434-3835

S.M. Anandh, Onco Surgeon https://orcid.org/0009-0003-9402-626X

L. Lakshmi, Junior Resident https://orcid.org/0009-0009-8863-0237

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