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RESEARCH ARTICLE

PERFORATION PERITONITIS: A CASE STUDY.

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Abstract

Peritonitis is an emergency health condition that is life-threatening and requires urgent surgery. here we presented a case of perforation peritonitis for a 21 years old male. The patient suffered severe abdominal pain constant vomiting of what he eat, not bloody diarrhoea and he had moderate fever. Abdomen examination showed peritonitis. And the CT.abdomen examination showed a presence of peritonitis and few air pocket in rectosigmoid region and posterior to pancrease which mean that patient had peritonitis with pneumoperitoneum. The patient underwent surgery and stayed in the hospital for 7 days during which the patient's health improved and became healthy.

Introduction:-

Peritonitis is an inflammation of the serosal membrane which lines the abdominal cavity and the organs that inside it (1). Generalized peritonitis could result from gastrointestinal perforation and considered a surgical emergency (2).

Gastrointestinal perforations can occur due to different causes, and the majority of these perforations represent emergency conditions, which demand early recognition and surgical treatment at suitable time (3).

Acute peritonitis still a serious reason for morbidity and mortality in emergency surgery. The instrumental reasons are delay in seeking the surgical advice, toxemia, infection, associated illnesses, old age and post-operative complications (4). The estimation of perforation peritonitis mortality is ranges between 6 and 27% (5).

The present study designed to discuss a peritonitis case, for a 21 years old male.

Case presentation:-

21 years S/M, not known to have any chronic diseases. Patient did not complain till 3 weeks before admission when early morning he develop severe abdomen pain at left side radiate to left testicle, went to Alansar hospital, diagnosed as UTI (U/S not done), receive analgesia and medications and discharged.

Patient didn't improved, came to OHUD H., he received same medications and discharged, again he didn't improved and after 5 days he went to Albakry H. where U/S done and he was diagnosed as stone in left ureteric with mild to moderate hydronephrosis, receive medication and discharged, but patient still continue to suffer and he was received 75 mg I.M BID for pain daily for 10 days.

Then he develop sudden increase in pain severity, mainly at bilateral loins and suprapubic areas, constant vomiting of what he eat, not bloody diarrhoea and he had moderate fever.

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Regarding PMH there was no significant past medical history, but he was ex-smoker. Patient looked ill, conscious and oriented.

Abdomen examination showed that there was board rigidity of abdomen, tenderness and rebound tenderness all over the abdomen but mainly at lower part. Diagnosis was Peritonitis (due to perforated ruptured viscus) .
CT.abdomen examination showed :

- Large abdominal and pelvic collection with thick enhanced peritoneum represent peritonitis.
- Few air pocket seen in rectosigmoid region and posterior to pancrease
- Appendix is normal and other abdomen is unremarkable.
- Diagnosed as peritonitis with pneumoperitoneum

The patient did ASCA test and it was positive.
Operative findings showed

- 1000 ml of pus, pyogenic membranes covering all small bowel.
- Jelly like inflammatory mass at sigmoid- descending junction and reddish tumor like wall of sigmoid as showed in figure 1.
- Full exploration from stomach to rectum which did not show perforated area, no bile.
- Dense adhesions between sigmoid and Lt. side of urinary bladder.

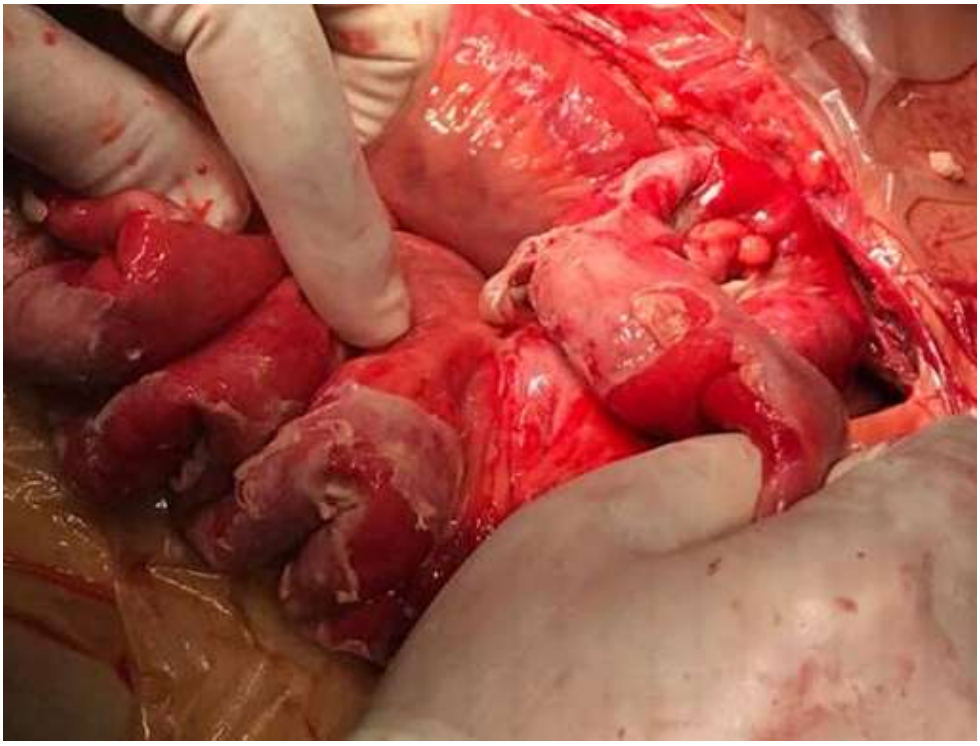

Figure1:- showed the inflammatory mass at sigmoid-descending and reddish tumor like wall of sigmoid.

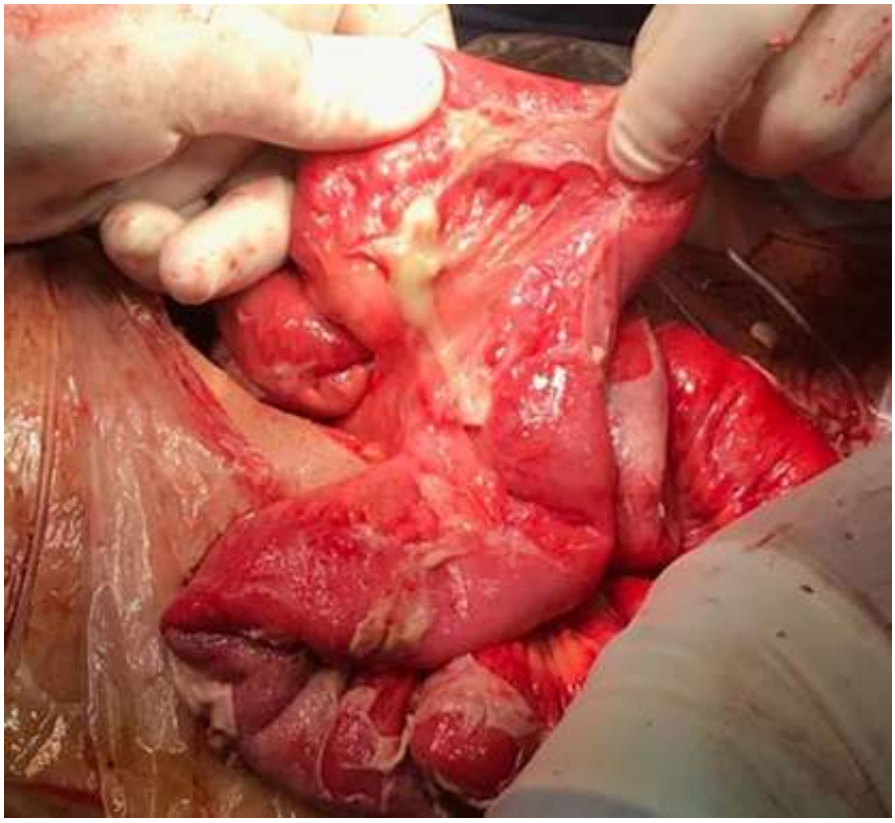

Figure2:- showed the inflammatory mass at sigmoid-descending and reddish tumor like wall of sigmoid.

The patient underwent surgical treatment where it was
- Full aspiration of puss.
- Full exploration from stomach to rectum which did not show perforated area.
- Biopsy taken from pericolic tissue.
- Peritoneal wash.
- Drain and wound closure.

After the surgery was performed for the patient and necessary work was done for him, the patient stayed 7 days in the hospital, the patient showed improvement and the results of his investigations were normal. And he can eat and can defecate normally, the sound of his intestines was normal.

Discussion:-

Perforation peritonitis is considered as one of the most common surgical emergencies. In the tropical countries, the perforation peritonitis is usually seen in a younger age group as compared to the studies in the West (5). At the current study we presented a case for a 21 years old male with Peritonitis.

Our patient here had severe pain mainly at bilateral loins and suprapubic areas, constant vomiting of what he eat, not bloody diarrhoea and he had moderate fever. Local findings of our patient were board rigidity of abdomen, tenderness and rebound tenderness all over the abdomen but mainly at lower part. Commonly, peritonitis presents as an acute abdomen. Regarding the Local findings of peritonitis its include; abdominal tenderness, rigidity or guarding, diminished bowel sounds and distension. while, systemic findings include; fever, rigor or chills, sweating, dehydration, tachycardia, tachypnea, disorientation, restlessness, oliguria and shock in the end (6).

Based on a CT scan of the patient's abdomen, it showed a presence of peritonitis and few air pocket in rectosigmoid region and posterior to pancrease which mean that patient had peritonitis with pneumoperitoneum. Generalized peritonitis could result from gastrointestinal perforation, and it is among the most common reasons of intraperitoneal free air, the detection of these perforation is serious for diagnosis of life-threatening conditions among patients with

acute abdomen (7). Many reasons could cause gastrointestinal tract perforations such as; peptic ulcer, blunt or penetrating trauma, inflammatory disease, a neoplasm or foreign body, and iatrogenic factors. Most of gastrointestinal perforations are emergency conditions which need an early recognition and urgent surgical treatment (7).

At the present study ASCA test revealed that our patient had a Crohn's disease. Crohn's disease is a chronic transmural inflammatory disease of the gastrointestinal tract. this disease is an idiopathic and very insidious, affecting any part gastrointestinal tract from mouth to anus, but mostly it's affecting small bowel and colon. Crohn's disease occurring mostly in the second to third decade of life, but in smaller rate during the sixth decade. Free intestinal perforation with diffuse peritonitis and free air on imaging is a very rare condition but likely life-threatening complication of Crohn's disease that require urgent surgical management (8). in adults ranges between 1 and 2% (8). In 1932 was the first description of Crohn's disease since then almost100 cases of free intestinal perforation have been reported in adults (8).

In the present study, the patient underwent surgical treatment. Generally, the surgical practice for peritonitis due to perforation in the hollow viscera aims to eliminating the cause of the contamination, decreasing the bacterial inoculum, and preventing recurrent or persistent sepsis (10).

Conclusion:-

Peritonitis is an emergency health condition that is life-threatening and requires urgent surgery. Generalized peritonitis could result from gastrointestinal perforation, and it is among the most common reasons of intraperitoneal free air, the detection of these perforation is serious for diagnosis of life-threatening conditions among patients with acute abdomen. Free intestinal perforation with diffuse peritonitis and free air is likely life-threatening complication of Crohn's disease.

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