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SEALED OFF DUODENAL PERFORATION- UNUSUAL PRESENTATION OF RETROPERITONEAL ABSCESS

General Surgery

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ABSTRACT

We report a case of 50-year-old male patient presented with abdominal pain and difficulty in walking since 3 months. On examination a large swelling noted in right lower back region which was extending to the inguinal region. CT scan showed retroperitoneal abscess. Endoscopy was suggestive of pyloric and duodenal thickening. Drain was placed in the lumbar region and pus was drained out. Patient was asymptomatic post-surgery and regained full range of movement and recovery was uneventful.

KEYWORDS

Retroperitoneal Abscess, Sealed Off Duodenal Perforation.

INTRODUCTION:

Retroperitoneal abscesses due to duodenal ulcer perforation are uncommon. Altemeier surveyed retroperitoneal abscesses treated between 1912 and 1961 at the Cincinnati General Hospital, Of 189 patients with an abscess, only two (0.95 %) originated in a duodenal perforation[i].Most of patients may not have any previous history of peptic ulcer disease and may present with fever, abdominal pain and signs of inflammation[i]. The retro peritoneum is a potential space with clearly defined boundaries between the peritoneum and transversalis fascia. It contains the kidneys, ureters, duodenum, pancreas and portions of the ascending and descending colon[i].

CASE REPORT:

50-year-old male patient presented to EMD with complaints of right sided abdominal pain and fever on and off since 3 months. He also complained of difficulty of walking since 2 months. Examination findings revealed a swelling 10 x 10 cm in the right lower back and lumbar region extending to the right inguinal region. Range of movement of right hip joint was restricted. No local signs of inflammation were seen. His pulse rate was 84 per minute and blood pressure 118/74 mm of hg on admission. Pallor was present and other systemic examinations were normal. He was started on antibiotics and routine investigations were ordered.

Work Up And Operative Procedure:

His HB was 9.3 g/dl, ESR -88 and total leucocyte counts were 23,500.

Ultrasonography was suggestive of heterogeneous collection of size 20 x 8.7 c.c involving right psoas muscle.

Computerised Tomography (CT) Of Abdomen & Pelvis:(Figure 1)

Large peripherally enhancing collection with multiple air foci in posterior perinephric region extending inferiorly along illiopsoas muscle up to right inguinal region, suggestive of abscess formation. Stomach and duodenum appear over distended due to mild wall thickening in 2nd part of duodenum.

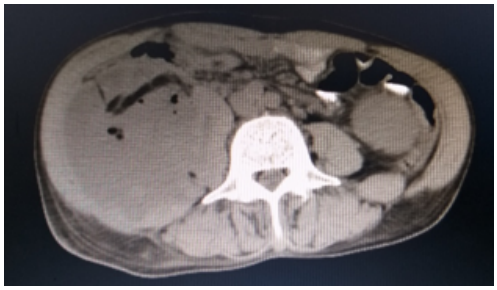

Figure 1 Computerised Tomography (CT)

Upper GI scopy was suggestive of oedema in pylorus and duodenum with possibility of duodenal fistula .He underwent a follow up CT scan with contrast study which revealed Mild hyper intensity along lateral part of duodenum with air foci suggestive of leak. No frank extravasation of positive oral contrast seen. Diagnosis of sealed off duodenal perforation was made. Patient underwent percutaneous insertion of abdominal drain in right lumbar region and pus was drained. Pus culture was suggestive of klebsiella pneumoniae. Patient was asymptomatic post-procedure and regained range of movements in right lower limb.

DISCUSSION:

Duodenal perforation is a rare cause of retroperitoneal abscess [ii]. Most common source is from kidney or renal tract. Other causes of retroperitoneal abscess include perforation secondary to neoplastic disease, diverticulitis, retrocaecal appendicitis, pancreatitis, biliary tract disease, peptic ulcer disease, inflammatory bowel disease. Rare causes include acupuncture, biliary stent migration [i] and ERCP related duodenal perforation [i].

The most common reported cause of a duodenal perforation is a diverticulum. The most common symptom in patients with retroperitoneal perforation of the duodenum is epigastric and right upper quadrant pain[i]. Other symptoms include nausea, vomiting and fever. Complications of retroperitoneal abscess include renal failure, DVT, small bowel obstruction, urinary tract infection, emphysema and osteomyelitis. Rare condition included extension to scrotum causing necrotizing fasciitis [vii].

Management of duodenal ulcers depends upon general condition of patient, operative findings and duration of perforation. Direct closure of the perforation site with omentopexy and drainage may be possible when intra-abdominal inflammation is mild and the perforation is small. When inflammation is severe or the site of perforation is not small, digestive tract diversion such as pyloric exclusion with a Billroth-II reconstruction or tube gastrostomy should be used to minimize the risk of leakage at the site of perforation [vi].Endoscopic fibrin sealant can be used for patients of duodenal perforation post ERCP[i]. In our patient perforation was healed and history was for a long duration, hence minimal surgical intervention was done. Percutaneous drainage of retroperitoneal abscess was done.

CONCLUSION:

Early prediction of perforation, serial endoscopy and use of proton pump inhibitors are important in management of duodenal ulcer and its further complications. Possibility of duodenal perforation should

be considered as a rare cause of retroperitoneal abscess.

REFERENCES

1. Altemeier, W. A., & ALEXANDER, J. W. (1961). Retroperitoneal abscess. *Archives of Surgery*, *83*(4), 512-524.
2. Hashmonal, M., Abrahamson, J., Erlik, D., & Schramek, A. (1971). Retroperitoneal perforation of duodenal ulcers with abscess formation. Report of four cases and survey of the literature. *Annals of surgery*, *173*(3), 409–414.
3. Mallia, A. J., Ashwood, N., Arealis, G., & Galanopoulos, I. (2015). Retroperitoneal abscess: an extra-abdominal manifestation. *Case Reports*, *2015*, bcr2014207437.
4. Humar, A., Barron, P. T., Sekar, A. S., & Lum, A. (1994). Pancreatitis and duodenal perforation as complications of an endoscopically placed biliary stent. *Gastrointestinal endoscopy*, *40*(3), 365-366.
5. Stapfer, M., Selby, R. R., Stain, S. C., Katkhouda, N., Parekh, D., Jabbour, N., & Garry, D. (2000). Management of duodenal perforation after endoscopic retrograde cholangiopancreatography and sphincterotomy. *Annals of surgery*, *232*(2), 191.
6. Sadatomo, A., Koinuma, K., Zuiki, T., Lefor, A. T., & Yasuda, Y. (2013). Retroperitoneal abscess associated with a perforated duodenal ulcer. *Clinical journal of gastroenterology*, *6*(5), 373-377.
7. Aldohuky, W., & Mohammed, A. A. (2019). Scrotal abscess as a manifestation of posterior duodenal perforation; a very rare presentation. *Urology case reports*, *27*, 101010
8. Yang, H. Y., & Chen, J. H. (2015). Endoscopic fibrin sealant closure of duodenal perforation after endoscopic retrograde cholangiopancreatography. *World journal of gastroenterology*, *21*(45), 12976–12980. https://doi.org/10.3748/wjg.v21.i45.12976