## Hydronephrosis:An unusual complication of diverticular abscess Aalam Sohal,Hunza Chaudhry,Lin Li

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#### Introduction

- Acute diverticulitis is inflammation due to microperforation of diverticulum in the colon.
- Ureteral complications from inflammatory bowel disease and colon cancer have been extensively documented, however, hydronephrosis as a complication of diverticulitis is rarely reported.
- We present a case of a patient with a diverticular abscess who developed left-sided hydronephrosis.

## **Case Description**

- A 40-year-old man with a past medical history of laparoscopic cholecystectomy presented with left lower quadrant cramping abdominal pain for 2 weeks.
- He endorsed constipation for three months but denied other symptoms.
- His physical examination was significant for a palpable phlegmon in the left lower quadrant with mild tenderness to palpation.
- Laboratory values revealed hemoglobin of 11.4 g/dl, platelet count of 499 k/ul and unremarkable basic metabolic panel.



Figure 1- Computed tomography (CT) scan of the abdomen with contrast revealed severe sigmoid diverticulitis and perisigmoid abscess measuring 6 x 2.6 cm (Figure 1a). It further revealed moderate left hydronephrosis with narrowing of the ureter, concerning for external ureteral compression by the diverticular abscess (Figure 1b)

#### **Further description**

- After multidisciplinary discussion with interventional radiology, urology, and surgery, recommendation was made to undergo surgical intervention after the resolution of acute diverticulitis.
- The patient was treated with intravenous antibiotics with symptomatic relief and discharged with plan for outpatient surgery.
- The patient was unfortunately lost to follow-up.
- He presented 3 months later with perforated diverticulitis, persistent hydronephrosis, colovesical and colocutaneous fistula requiring exploratory laparotomy and repair.
- His surgical pathology was negative for malignancy and revealed severe diverticulitis.
  Patient was discharged home in stable condition.

### Conclusion

- Ureteral complications in diverticulitis can occur due to the close anatomical location of the left ureter to the descending and sigmoid colon.
- Common urologic complications include the development of enterovesical fistulas and urinary calculi and obstruction.
- Physicians should be aware of this association to ensure a repeat CT scan is performed 4-6 weeks after acute diverticulitis to document resolution.