Peri-renal and Renal Involvement in Acute Pancreatitis

Yusuf Alalwan  
*Henry Ford Health System*

Taha Ashraf  
*Henry Ford Health System*

Rachel Karmally  
*Henry Ford Health System*

Follow this and additional works at: [https://scholarlycommons.henryford.com/merf2019caserpt](https://scholarlycommons.henryford.com/merf2019caserpt)

Recommended Citation

Alalwan, Yusuf; Ashraf, Taha; and Karmally, Rachel, "Peri-renal and Renal Involvement in Acute Pancreatitis" (2019). *Case Reports*. 34.  

This Poster is brought to you for free and open access by the Medical Education Research Forum 2019 at Henry Ford Health System Scholarly Commons. It has been accepted for inclusion in Case Reports by an authorized administrator of Henry Ford Health System Scholarly Commons. For more information, please contact acabrer4@hfhs.org.
INTRODUCTION

- Acute pancreatitis is a common disease characterized by release and activation of proteolytic enzymes which lead to nonspecific inflammation of the pancreas and surrounding tissue
- Inflammation can spread to nearby retroperitoneal organs like the kidneys and spleen
- Renal involvement can range from acute kidney injury, perirenal fat stranding with perirenal fluid collection to renal vein thrombosis and parenchymal abnormalities

CASE

- 68-year-old male with past medical history significant for type 2 diabetes mellitus and bladder cancer post cystectomy with ileal conduit presented with acute onset peri-umbilical abdominal pain and vomiting
- Fund to be in diabetic ketoacidosis (DKA) and had an elevated lipase
- Abdominal CT without contrast showed a complex cystic mass associated with the pancreatic tail that draped over the upper pole and anterior margin of the mid left kidney with surrounding fat stranding. CA 19-9 was elevated
- Working diagnosis was acute pancreatitis and patient was treated with aggressive fluid resuscitation.
- Magnetic Resonance Cholangiopancreatography (MRCP) showed parenchymal changes within the left kidney with multiple perinephric loculations and complex collections, partially encasing the left kidney and extending superiorly to the tail of the pancreas
- MRCP findings were concerning for pyelonephritis and peri-nephric abscess therefore urology were consulted.
- Findings were attributed to acute pancreatitis with spread of inflammation to the left kidney
- Patient’s symptoms improved and he was discharged home
- Repeat imaging showed resolving inflammation and no underlying masses

DISCUSSION

- This case necessitated involvement of different specialties to determine whether the findings were due to a pancreatic process as opposed to a renal process
- Patient had complex urological anatomy due to cystectomy with ileal conduit which predisposed him to pyelonephritis.
- However patient’s symptoms improved after conservative management. He was afebrile and did not develop any leukocytosis.
- Attempts to drain the fluid collection around the kidneys would predispose the patient to fistula formation
- It is very important to appreciate that renal and perirenal involvement is a common finding in acute pancreatitis
- In one study peri-renal fat stranding was found in 62% of patients with acute pancreatitis and 40% had perirenal fluid collection.

CONCLUSION

- Understanding that renal and perirenal involvement is a common finding in acute pancreatitis can prevent unnecessary investigations and interventions

REFERENCES