POSTER NO. 230

A COLIC IS NOT ALWAYS A *COLIC*

Dr. Muhamad Faiz Mohd Fauzi, Dr.Shamsuriani Md. Jamal
Department of Emergency Medicine
Hospital Canselor Tuanku Muhriz, Universiti Kebangsaan Malaysia
mfaizfauzi87@gmail.com

INTRODUCTION

Renal and splenic and infarction are rare in the emergency department. This rarity maybe due to underdiagnosis or their clinical presentations are non-specific. This often misdiagnosed as other conditions such as renal colic where the principal management of these two conditions are different. If not recognized and treated in timely manner, renal and splenic artery thrombosis may lead to permanent organ damage and dysfunction.

CASE BACKGROUND

A previously healthy 47-year-old gentleman to our Emergency Department complaining of sudden severe left loin to groin pain. The pain was colicky with pain score 9/10. There were also two episodes of vomiting prior arrival to the ED. Otherwise there were no urinary tract infection symptoms, hematuria, fever, or diarrhea.

Clinically he appeared to be in pain. Vital signs were as follows; Blood pressure 172/84, Pulse rate 86, SpO2 99% under room air and Temperature 37.2-degree Celsius. There was tenderness over left lumbar area but no guarding. Left Renal punch was positive. Bed side ultrasonography was unremarkable.

Blood investigations were normal except for lactate which was 3.3 on the venous blood gas. His urine analysis was negative except for Blood 1+. Chest and Abdominal radiograph showed no remarkable findings.

He was initially treated for left renal colic. After multi-modal analgesia given including repeated doses of opiods, pain over the flank area remained persistent. Hence, he was reffered to surgical team and abdominal CT was obtained to rule out mesenteric ischemia. Abdominal CT and CT angiography revealed left kidney and splenic infarction secondary to left renal and splenic artery thrombosis. He was then started on IVI Heparin. A week later he was discharged without major complications.

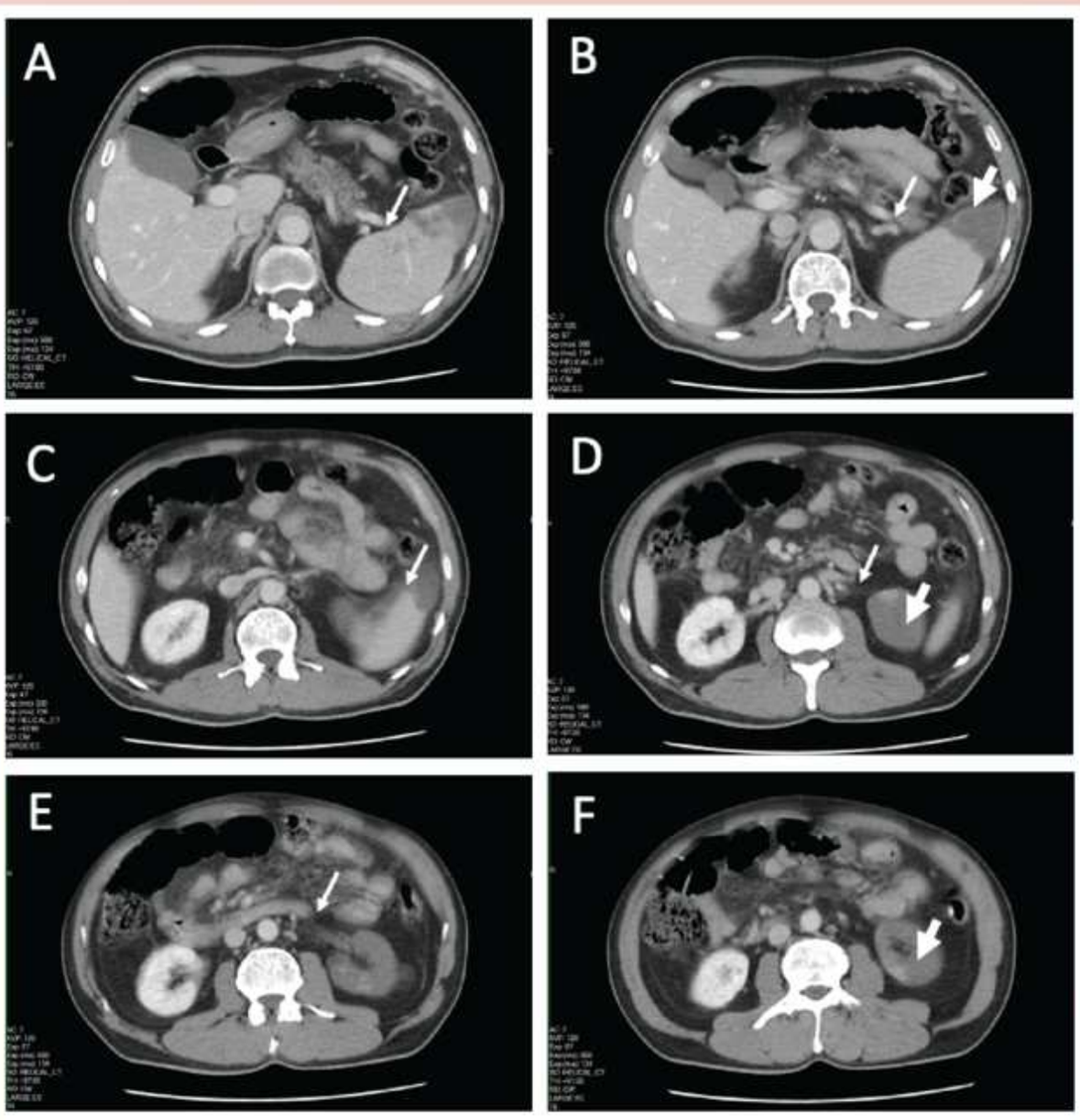

Figure 1 CTA abdomen: (A) Arrow showing no contrast flow in splenic artery. **(B)** Thick arrow showing no perfusion to the spleen. **(C)** Arrow showing infarcted area of the spleen. **(D)** Thin arrow showing no contrast flow in left renal artery; thick arrow showing left kidney with no perfusion. **(E)** Arrow showing complete no flow in the left renal artery. **(F)** Arrow showing infarcted area of left kidney.

DISCUSSION

Renal and splenic artery thrombosis is uncommon which impose high risk of renal dysfunction. The presentation of renal or splenic artery thrombosis leading to renal and splenic ischemia and infarction can mimic renal colic. We recognised this case interesting as it was challenging for us to recognise splenic and renal infarction on the initial presentation. A learning point that we would like to highlight from this case is that acute abdominal pain is not always straight forward and require proper assessment by the emergency doctors.

Even though most of emergency doctors may frequently encounter a patient with renal colic, making this diagnosis is still challenging. Renal colic is usually clinically diagnosed, however many other intrabdominal pathology that might same similar presentations such as renal abscess, pyelonephritis, renal tumour, twisted ovarian cyst, ectopic pregnancy, tubo-ovarian abscess, appendicitis, diverticulitis, biliary colic, or renal/splenic infarction.

There is a wide heterogeneity in selecting the most appropriate diagnostic approach for patients with acute abdominal pain. This depends on individual preference and expertise, rather than following a strict set of guidelines . In this case we proceeded with abdominal CT and CT angiography due to our initial suspicion of mesenteric ischemia. CT can be considered as primary imaging of choice for patients with acute abdominal pain, with the exception of patients suspected of having acute cholecystitis, where ultrasonography is preferred

CONCLUSION

- Renal and splenic artery thrombosis and infraction are rare and challenging to recognise due to their non-specific clinical presentations.
- A proper and careful assessment of patient with acute abdominal pain in the emergency department is crucial.
- In patients with acute and severe abdominal pain with uncertain aetiology, CT is a helpful modalities of imaging.

ACKNOWLEDGEMENT :
Special thanks to my Supervisor, Dr. Shamsuriani Md Jamal & the Department of Emergency Medicine, HCTM for their continuous support and encouragement for this poster presentation.

CONFLICT OF INTEREST :
The author(s) declare(s) that there is no conflict of interest.

REFERRENCES :
(1) Chapman, J., Helm, T.A. & Kahwaji, C.I. 2020. Splenic Infarcts.: 20894. **(2)** Conradie, M.C. 2012. Management of Renal Colic and Triage in the Emergency Room. Smith's Textbook of Endourology: 3rd Edition 1: 675-687. **(3)** Kim, S.T., Hwang, Y., Park, S.C. & Lee, J.W. 2018. Epidemiology and Outcomes of Acute Flank Pain in University-Affiliated Regional Emergency Medical Centers. Urogenital Tract Infection 13(1): 14. **(4)** Korzets, Z., Plotkin, E., Bernheim, J. & Zissin, R. 2002. The clinical spectrum of acute renal infarction. Israel Medical Association Journal 4(10): 781-784. **(5)** Nouri, A.I. & Hassali, M.A. 2018. Assessment of kidney stone disease prevalence in a teaching hospital. African Journal of Urology 24(3): 180-185. **(6)** Patti, L. & Leslie, S. 2021. Treatment / Management Differential Diagnosis: 2021. **(7)** Rucker, C.M., Menias, C.O. & Bhalla, S. 2004. Mimics of renal colic: Alternative diagnoses at unenhanced helical CT. Radiographics 24(SPEC. ISS.): 11-28.**(8)** Silverberg, D., Menes, T., Rimon, U., Salomon, O. & Halak, M. 2016. Acute renal artery occlusion: Presentation, treatment, and outcome. Journal of Vascular Surgery 64(4): 1026-1032. **(9)** Stoker, J., Van Randen, A., Laméris, W. & Boermeester, M.A. 2009. Imaging patients with acute abdominal pain. Radiology 253(1): 31-46.