

Case Report

Epiploic appendagitis with acute pyelonephritis: a case report

Aditya Dhanawat¹, Ashim Kumar Mahali², Lalatendu Mohanty^{1*}, Ambika Prasad Mohanty¹

¹Department of Internal Medicine, Kalinga Institute of Medical Sciences, Bhubaneswar, Odisha, India

²Department of Nephrology, Apollo Gleneagles Hospital, Kolkata, West Bengal, India

Received: 06 April 2019

Accepted: 02 May 2019

*Correspondence:

Dr. Lalatendu Mohanty,

E-mail: lalatendumohanty3@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Coexistence of acute epiploic appendagitis with acute pyelonephritis is a rare occurrence. Present study report here a case of a 36-year-old male with a past history of appendectomy presenting with complaints of pain abdomen, nausea, increased frequency of micturition and dysuria. On examination, there was tenderness and guarding in the left iliac fossa. CECT abdomen revealed resolving acute epiploic appendagitis with acute pyelonephritis. He was managed conservatively with antibiotics and anti-inflammatory agents to which he responded. Thus, epiploic appendagitis is a benign self-limiting condition which when diagnosed early prevents unnecessary surgical interventions.

Keywords: Acute pyelonephritis, Appendices epiploicae, Appendage, Epiploic appendagitis, Left iliac fossa, Pain abdomen

INTRODUCTION

Appendices epiploicae are small, serosa-covered fat pads measuring from 0.5 cm to 5 cm long and 1-2 cm wide attached to the outer surface of the colonic wall. There are approximately 100 appendages distributed along the large bowel with variable frequency: recto-sigmoid junction 57%, ileocecal region 26%, ascending colon 9%, transverse colon 6% and descending colon 2%.¹⁻³

Epiploic appendagitis is a benign, self-limiting condition caused by torsion of a colonic fat-containing appendage or thrombosis of the central draining vein. The vague symptoms and non-specific clinical findings usually result in delayed diagnosis. Here, present study reports a case of acute epiploic appendagitis with coexisting acute pyelonephritis manifesting as pain abdomen, dysuria and increased frequency of urination.

CASE REPORT

A 36 years old, Mr. AB, hindu male from Bhubaneswar, India presented with the chief complaints of abdominal

pain, increased frequency of micturition and nausea for 3 days. On further enquiry, the abdominal pain was located in the left lower abdomen anteriorly which was non-progressive, radiating to the back, not relieved with change of posture and associated with nausea, increased frequency of micturition and dysuria. There was no history of fever, loose motion or constipation. He was not a known diabetic or hypertensive. There was no history of any chronic illness and family history was insignificant. He belonged to a low socio-economic status, working as a manual labour, consuming a mixed Indian diet, normal bowel and bladder habits and no addictions. He was previously operated for appendicitis in 2001, the surgery was uneventful, and he recovered without any complications.

The patient was of average built middle aged male, conscious, well oriented to time, place and person with BMI of 24 kg/m². His vitals were stable and there was no evidence of pallor, icterus, clubbing, cyanosis, lymphadenopathy or edema. Inspection of GI system revealed healthy oral mucosa, good dental hygiene, umbilicus was central and inverted, presence of

appendectomy scar in the right iliac fossa (Figure 1), tenderness in the left iliac fossa. Liver was not enlarged, and spleen was not palpable, abdomen was tympanic and bowel sounds were normal. There was no bruit. Rest of the systemic examination was within normal limits.



Figure 1: Old appendectomy scar in the right iliac fossa.

Investigations revealed TLC to be 10500/mm³, urine routine and microscopy was normal, urine culture was sterile, liver function test was normal, serum urea was 32mg/dL and serum creatinine was 1.87mg/dL. Ultrasonography of the abdomen revealed epiploic appendagitis in the left iliac fossa. CECT Abdomen revealed resolving epiploic appendagitis (Figure 2) and left acute pyelonephritis (Figure 3). The patient was treated with antibiotics, anti-inflammatory agents, proton pump inhibitor, anti-emetic and urine alkalinizer. He responded to treatment, his serum creatinine reduced to 1.51 mg/dL on day-3 and he became symptom free in 5 days. Subsequently, he was discharged. He was followed-up after 2 weeks. He was asymptomatic and repeat CECT abdomen was normal.



Figure 2: Epiploic appendagitis on the CECT Abdomen.

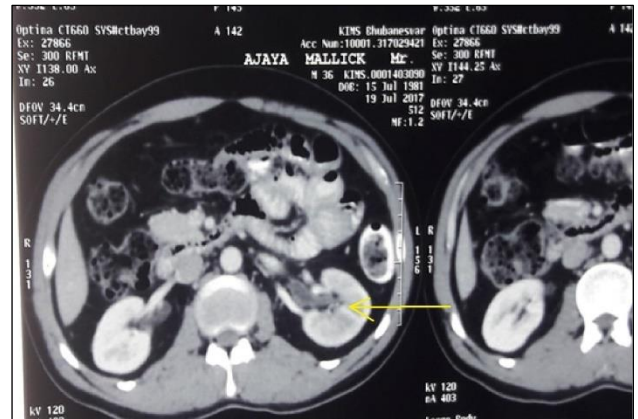


Figure 3: Left Acute Pyelonephritis on the CECT Abdomen.

DISCUSSION

Epiploic appendagitis is a rare condition with an incidence of 8.8 per 1 million people.⁴ This condition may clinically mimic diverticulitis or appendicitis. Primary epiploic appendagitis occurs due to ischemic infarction as a result of appendage torsion or spontaneous thrombosis. Usually, it affects patients in early adulthood and middle-aged. There is a slight propensity for males over females.⁵ The most common site of presentation is the sigmoid colon. Secondary epiploic appendagitis is due to diverticulitis, appendicitis, or pancreatitis.⁶ Clinical presentation is abdominal pain and localized tenderness.

Historically, the diagnosis of epiploic appendagitis was primarily surgical but the first report of epiploic appendagitis on CT scan in 1986 led to pre-operative diagnosis in the subsequent years thus preventing unnecessary surgeries.⁷ Epiploic appendage is seen as an ovoid hypodense pericolic lesion due to the fat composition with a hyperdense halo representing the inflamed visceral peritoneal covering of the appendage.⁶

Standard treatment is with anti-inflammatory drugs; antibiotics are generally not indicated, except in rare cases in which colonic bacteria infiltrate and cause localized abscess formation or generalized peritonitis.⁸ Laparoscopy is done for complications such as adhesions, intestinal obstruction, doubtful cases or recurrence of symptoms after conservative management.⁹

CONCLUSION

Our aim was to bring about a rare presentation of acute epiploic appendagitis with acute pyelonephritis to create awareness about this rare clinical entity, which is essentially a CT diagnosis but can be often mistaken clinically as appendicitis and diverticulitis leading to unnecessary surgical interventions. A high index of clinical suspicion and CT imaging are clues to diagnosis. Epiploic appendagitis is essentially a self-limiting condition and can be managed conservatively.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Boardman J, Kaplan KJ, Hollcraft C, Bui-Mansfield LT. Radiologic-pathologic conference of Keller Army Community Hospital at West Point, the United States Military Academy: Torsion of the epiploic appendage. *AJR Am J Roentgenol*. 2003 Mar;180(3):748.
2. Thomas JH, Rosato FE, Patterson LT. Epiploic appendagitis. *Surg Gynecol Obstet*. 1974 Jan;138(1):23-5.
3. Rioux M, Langis P. Primary epiploic appendagitis: Clinical, US and CT finding in 14 cases. *Radiol*. 1994 May;191(2):523-6.
4. Brito DP, Gomez MA, Bessson M, Scotto B, Hutten N, Alison D. Frequency and epidemiology of primary epiploic appendagitis on CT in adults with abdominal pain. *J Radiol*. 2008 Feb;89(2):235-43.
5. Sand M, Gelos M, Bechara FG, Sand D, Wiese TH, Steinstraesser L, et al. Epiploic appendagitis-clinical characteristics of an uncommon surgical diagnosis. *BMC Surg*. 2007 Jul;1;7:11.
6. Matos H, Costa I. Primary Epiploic appendagitis. *Indian J Surg*. 2015 Dec;77(3):1395-96.
7. Danielson K, Chernin MM, Amberg JR, Goff S, Durham JR. Epiploic appendicitis: CT characteristics. *J Comput Assist Tomogr*. 1986 Jan-Feb;10(1):142-3.
8. Stephen KE, and Gladys M. Epiploic appendagitis: A Benign Process at Risk of Unnecessary Hospitalization and Interventions. *J Gen Intern Med*. 2017 Jun;32(6):711.
9. Afnan AF, Alghamdi ZM, Alshammari E. Acute epiploic appendagitis: A rare cause of acute abdomen and a diagnostic dilemma. *J Family Community Med*. 2016 Jan-Apr;23(1):48-50.

Cite this article as: Dhanawat A, Mahali AK, Mohanty L, Mohanty AP. Epiploic appendagitis with acute pyelonephritis: a case report. *Int J Adv Med* 2019;6:970-2.