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CHRONIC PYELONEPHRITIS MIMICKING PSOAS ABSCESS-A RARE CASE REPORT.

Surgery

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ABSTRACT

Chronic pyelonephritis is a pyogenic infection of the kidney which occurs in patients with major anatomic abnormalities. Its peculiarity is that there is the destruction of the parenchyma leading to a non-functioning kidney in near future [1]. Its presentation as a psoas abscess is infrequent, but in our case, the patient presented with complaints of flank pain, fever and aggravating pain on raising the leg of the affected side with a sinus tract which had a continuous purulent discharge for 2 months. On examination and ultrasonography, we had a differential diagnosis of psoas abscess or pyelonephritis. Once the CT scan was done, a final diagnosis was established. The patient was planned for nephrectomy with excision of the sinus tract.

KEYWORDS

Chronic Pyelonephritis, Psoas Abscess, Sinus Tract, Nephrectomy.

INTRODUCTION:

Pyelonephritis is a disease of an infectious or inflammatory process which involves the collecting system or parenchyma of the kidney. Pyelonephritis can be treated with oral antibiotics and routine follow-up. However, if the patient presents chronically, hospitalisation with intravenous antibiotic therapy, and cross-sectional imaging must be done. Its presentation as a psoas abscess is a rare occurrence. Hence, this case is discussed to understand the clinical presentation, diagnosis and surgical management.

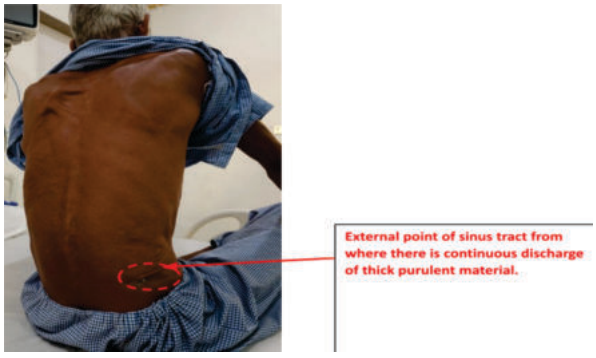
Case Presentation:

A 71-year-old/Male presented to the Emergency Department with complaints of purulent discharge coming from the right flank for two months, with an on and off low-grade fever, which aggravated over the past few days, and was now high-grade in nature. The patient also complained of a dragging pain in the right lumbar region, difficulty while walking and raising his right leg.

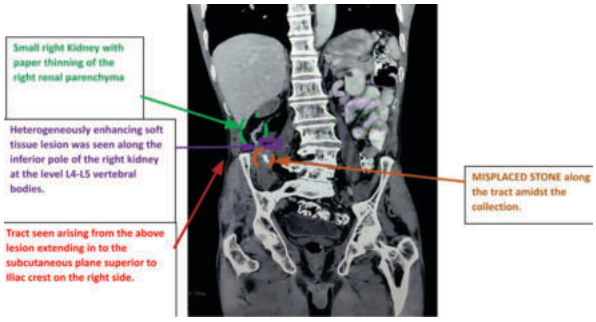
The patient was admitted and started on analgesics and intravenous antibiotics.The patient had no previous investigations except for a USG done from outside which was suggestive of ?Psoas abscess /?Collection in the perinephric space extending up to the right iliac region and a misplaced stone along the collection in the right perinephric space.

Past history of abscess in the right posterior flank, at the same site 7 years ago with crystal deposits for which patient had undergone incision and drainage. However, the patient did not have any documentation for the same. The patient was investigated after a thorough history and examination.

Clinical Picture:



CT SCAN



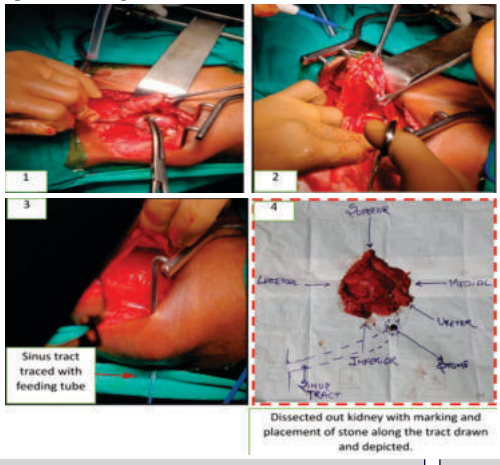
Thinned out renal parenchyma on the right side with purulent collection in the perinephric space extending from the lumbar region up to the iliac region and forming a sinus tract which opens posteriorly in the lumbar region, with a stone (20 x 15 mm) outside the renal system along the sinus tract.

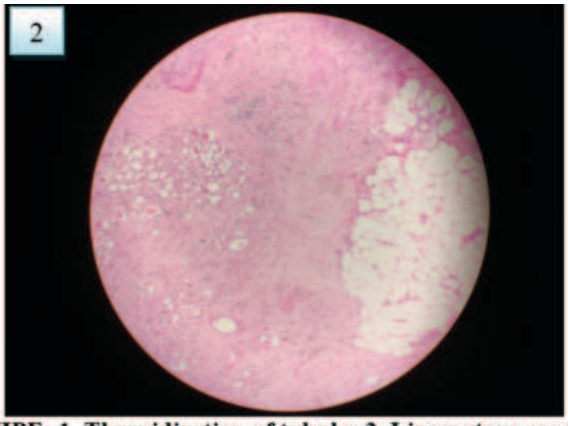
DTPA scan: Non-functioning right kidney.

Treatment Plan:

Surgery:

A right nephrectomy with sinus tract excision was done. The right kidney along with the tract and stone excised, was sent for HPR.
Intra-operative images:





HPE: 1. Thyroidization of tubules 2. Lipomatous area
Courtesy: Department of Pathology, D.Y Patil Hospital

Post-operative period was uneventful and the patient was discharged on pod-7 and asked to follow up after 1 week for suture removal.

HPE Report: Chronic pyelonephritis with replacement of renal parenchyma with lipomatosis suggestive of a non-functioning kidney, with a stone along the path of the sinus tract.

DISCUSSION:

Renal stone disease is a major risk factor for Urinary tract infection (UTI) and recurrent UTI leading to chronic pyelonephritis which leads to progressive renal function deterioration and end-stage kidney failure[2]. Chronic pyelonephritis is a renal injury induced by persistent renal infection. Mostly seen in patients who have a renal abnormality including urinary tract obstruction, renal dysplasia or vesicoureteric reflux in children[3]. The findings of which on CT include a small kidney with abnormal contour, scarring, and sometimes calyceal dilatation or perinephric collection secondary to an obstructive stone. We report an unusual case of chronic pyelonephritis mimicking psoas abscess, the patient on initial examination depicted a clear case of psoas abscess which on investigation turned out to be a case of chronic pyelonephritis with a sinus tract obstructed by a renal stone which migrated from the renal system into the sinus tract and led to an obstruction along the tract. Further leading to collection in the perinephric space extending into the right iliac region mimicking a psoas abscess. Due to the wide spectrum of complications which arise due to pyelonephritis, it is necessary to diagnose these cases early and treat them.

Proper clinical history along with investigation modality i.e. CT scan, USG, DTPA plays an important role in achieving correct pre-op diagnosis and setting up proper management for such rare cases.

CONCLUSIONS:

The study has helped us to understand how diseases mimic each other and how rare cases can present to us, in such scenarios a detailed history, physical examination and appropriate radiological investigations are important to understand the course of the disease. It also depicts how an infective aetiology if left untreated for a longer duration surfaces again till it is completely treated for its underlying root cause.

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