



RENAL ABSCESS IN SLE - A RARE PRESENTATION

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ABSTRACT

Systemic lupus erythematosus (SLE) is an autoimmune disorder. Abscesses involving various sites of the body have been reported in SLE. Renal abscess being very rare in SLE should be promptly diagnosed and treated to prevent sepsis and subsequent mortality. A 26 yr old lady with SLE presented with fever for 2 weeks and abdominal pain. She was found to have a large renal abscess due to MRSA (Methicillin resistant Staphylococcus aureus). She recovered completely after antibiotic treatment and percutaneous drainage of the abscess. A definitive diagnosis of renal abscess due to MRSA is by microbiological culture of surgical specimen.

KEY WORDS: Renal abscess, Systemic lupus erythematosus , MRSA- Methicillin resistant Staphylococcus Aureus



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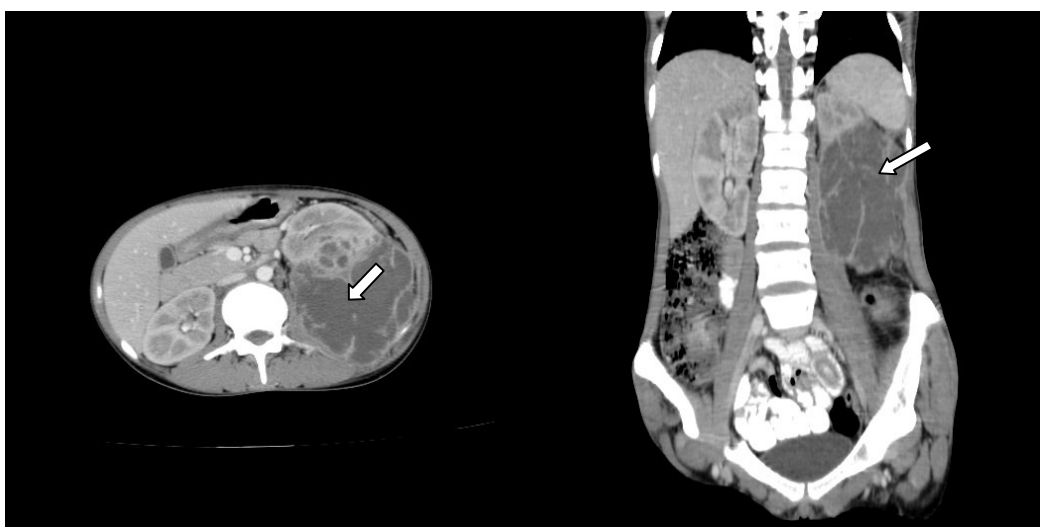
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CASE REPORT

A 26 year old female with a 3 yr history of SLE came to the medicine outpatient clinic with complaints of high grade fever for 2 weeks with associated chills and low backache for 1 week. She was diagnosed with SLE 3 years back and was on tablet hydroxychloroquine treatment. On examination, she was thin built, poorly nourished, pale and febrile. Malar rash was present. Vitals measured were stable. Her abdominal examination revealed a left hypochondrial mass. Clinically, the size of the mass was 10x8 cms and firm in consistency. The mass moved downwards and forwards with respiration, insinuation of finger between the mass and the left costal

margin was possible, colonic resonance was present over the mass and it was ballotable. There was tenderness in the left hypochondrial and lumbar region. With a differential diagnosis of left sided renal mass, ultrasound abdomen was done, which revealed hepatomegaly and a left sided renal mass suggestive of renal abscess. The findings were confirmed by CECT abdomen Figure-1). CT findings were enlarged left kidney showing large areas of peripherally enhancing thick walled multiloculated hypodense lesions measuring 12.0 * 7.2 cms predominantly in the subcapsular location, cortex and medullary region of mid and lower poles suggestive of a renal abscess.

Figure1
Contrast enhanced Computerized Tomography abdomen showing a left sided renal abscess



The investigations revealed the following results, ESR - 82mm, hemoglobin - 6.7 g/dl, peripheral smear showed microcytic hypochromic anemia with neutrophilia. Urine routine showed 5-6 RBCs/hpf, urine culture and blood culture showed no growth. The patient was treated with a broad spectrum antibiotic for which her response was not satisfactory. Hence, she underwent a CT guided percutaneous drainage of the abscess. Pus culture and sensitivity revealed MRSA sensitive to clindamycin, gentamicin, linezolid and tetracycline. On treating with linezolid, the patient recovered completely.

DISCUSSION

Systemic lupus erythematosus (SLE) being an autoimmune disease occurs most commonly in women of the childbearing age group. The prevalence of SLE among the Indian population is 3.2 per 1,00,000 which is low compared to other populations.¹ In SLE, the immunologic and genetic alterations along with immunosuppressive therapy used, increases the susceptibility to various infections, which remains an important cause of mortality.² Various abscesses have been reported in SLE, but a renal

abscess is a rare entity to our knowledge. Renal abscess accounts for about 2% of the intraabdominal abscess.³ Staphylococcus aureus renal abscess is caused commonly by hematogenous spread. In the post antibiotic era, staphylococcus aureus as the cause of renal abscess has declined, with Escherichia coli being the most common cause of renal abscess now-a-days.³ Antibiotic resistance among staphylococcus is an increasing the problem at present. Hence it is important to treat MRSA, according to the sensitivity pattern.⁴ The diagnostic imaging for renal abscess is ultrasound abdomen and abdominal CT. In 1996, Siegel, et al.⁵ suggested an algorithmic approach to the management of renal abscesses. According to the study, abscesses that were >5 cms had a good outcome when treated with percutaneous drainage and antibiotic treatment. Our patient presented with high spiking fever and abdominal pain. The presence of a large renal abscess measuring 12.0*7.2 cms was confirmed by contrast enhanced CT abdomen. She was treated with percutaneous drainage and antibiotics according to the sensitivity pattern. Early diagnosis is an important factor in the outcome of renal abscess. Mortality associated with undiagnosed renal abscess is high.

Even with early treatment, the mortality rates approached 39 – 50%⁶, stressing the importance of its early detection and treatment.

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CONCLUSION

Renal and perinephric abscess occurs rarely in SLE. Prompt diagnosis and aggressive treatment may prevent the need for nephrectomy and high mortality.

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