Case Report:

Pyogenic renal abscess mimicking as Malignancy

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Abstract

A 64 years male farmer presented with history of painless gross hematuria for 1 month and severe loss of weight and appetite for 2 months. There was a history of single episode of fever for 1 day without chills and rigors, about 1 month ago. There was no history of tuberculosis. On examination patient had severe pallor, no raised temperature and no tenderness at renal angle. His hemoglobin on admission was 5.7gm%. Enhanced CT scan showed right kidney having irregular low density lesion at the lower pole with perirenal fluid collection. Urine for culture sensitivity showed growth of Escherichia coli sensitive to norfloxacin and so patient was put on oral norfloxacin for 14 days. A CT guided fine needle aspiration biopsy was planned for the patient for a definite diagnosis. But a repeat ultasonography before the procedure, showed both kidneys to be normal. The lesion had vanished!

Key words: pyogenic; renal abscess; malignancy; image-guided biopsy.

Case report:

A 64 years old non diabetic male farmer presented to emergency with history of painless gross hematuria for 1 month and severe loss of weight and appetite for 2 months. There was a history of single episode of fever for 1 day without chills and rigors, about 1 month ago. There was no history of tuberculosis.

On examination patient had severe pallor, tachycardia but no fever and no obvious swelling palpable per abdomen. Renal angle was non tender. His hemoglobin on admission was 5.7gm% and total count of white blood cell was 4500. Ultrasonography showed a hypoechoic lesion 3.1x2.5 cm at the lower pole of right kidney.

Patient received 6 units packed cell transfusion and was put on intravenous ciprofloxacin. Contrast Enhanced CT scan showed right kidney having irregular low density lesion at the lower pole with perirenal fluid collection. Left kidney, ureters, urinary bladder and prostate were normal. [Fig1] Urine for culture sensitivity showed growth of Escherichia coli sensitive to norfloxacin and so patient was put on oral norfloxacin for 14 days.

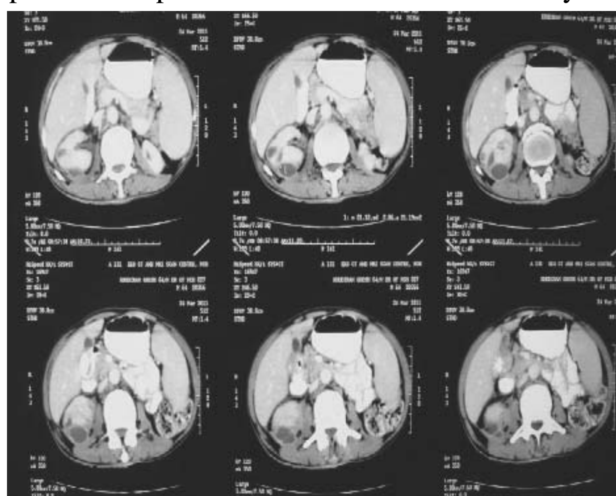

Figure 1: Contrast Enhanced CT of the patient showing right kidney having irregular low density lesion with perirenal collection. Left kidney appears normal.

History and presentation was suggestive of renal malignancy, but CECT showed low density lesion and urine had no malignant cell. Pyogenic abscess was a possibility but patient had no burning sensation of urine, single episode of fever without chills

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and rigor or back pain and total count of white blood cells was also normal. Tubercular abscess was another possibility as patient presented with pallor and weight loss but his chest x-ray was normal, sputum and urine for acid fast bacilli was negative, montaux test was also negative.

Repeat hemoglobin was 9.8 gm % and total count of white blood cell was 4000. A CT guided fine needle aspiration biopsy was planned for the patient for a definite diagnosis. But a repeat ultasonography before the procedure, showed both kidneys to be normal. A thin rim of perirenal collection was seen around the right kidney with minimal collection noted in hepatorenal pouch of Morrison. The lesion had vanished! Patient had been on oral norfloxacin for about 2 weeks. Patient was asked to continue antibiotic for 2 more weeks. On follow up, after 6 months of discharge patient was asymptomatic with normal kidneys on ultrasonography.

Image guided renal biopsy is safe, reliable and accurate. It changes clinical management in many cases avoiding nephrectomy or other surgical options. It should be promoted as a potentially useful option for managing suspicious or indeterminate renal masses[1, 2]. This case did not require image-guided biopsy but one should not hesitate in cases of suspicious renal lesions.

Treatment of renal abscess requires at least 4 weeks of antibiotic therapy according to etiological agent[3-4]. Larger abscess may require parenteral antibiotic or surgical intervention if fever or symptoms do not settle down.

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