

An Unusual Presentation of Renal Parenchymal Malacoplakia

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Case Report

A 38-year-old lady presented with two-week history of right loin pain, fever and marked weight loss. Physical examination revealed a toxic looking lady with a pointing abscess and a mass at her right loin region. Laboratory investigations shown leukocytosis and normochromic normocytic anaemia. A plain X ray of the abdomen did not show any calcification. A diagnosis of perinephric abscess was made and urgent drainage of the abscess was done. About 100cc of pus was drained and *E.coli* was isolated. She was treated with antibiotics but the renal mass did not resolve. CT scan shows a contrast enhancing mass, suggestive of renal cell carcinoma arising from the middle part of the right kidney.

(Fig 1) Right radical nephrectomy and right hemicolectomy was done as the renal mass had infiltrated the ascending colon. Section of the kidney show an irregular yellowish mass measuring 6 x 7 x 8cm in the middle third of the kidney which had infiltrated through the renal capsule into the ascending colon.

Histological examination reveals that the mass is composed mostly of foamy histiocytes with scattered lymphocytes and plasma cells. Within the histiocytes, round bodies with a core of concentric membrane, amorphous material (Michaelis-Guttman bodies) are seen (Fig 2). These bodies stain positive for Periodic Acid Schiff stain and calcium (Von Kossa stain). Similar histiocytes with Michaelis-Guttman bodies are seen in the wall of the ascending colon. No evidence of



Fig. 1: The middle part of the right kidney had been replaced by inhomogeneous mass infiltrating the posterior abdominal wall.

malignancy noted. Final diagnosis of malacoplakia of right kidney with extension into ascending colon is made. The patient recovered well and follow-up cystoscopy was normal.

Comment

Ever since its first description by Michaelis and Gutmann in 1902 and Elaborated by von Hansemann in 1903, a total of 198 cases of malacoplakia had been reported in the literature¹.

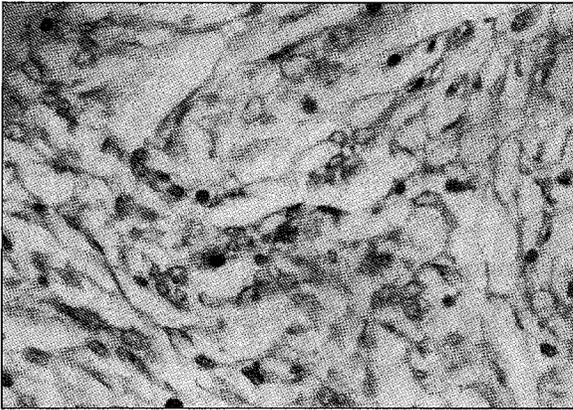


Fig. 2: Round bodies with a core of concentric membrane and amorphous material which stained positive on Periodic Acid Schiff stain.

Kidney is the second commonest organ involved in genitourinary malacoplakia. Patient normally presents with loin pain, fever and flank mass. It is difficult to differentiate malacoplakia from renal cell cancer clinically, thus majority of the patients were treated by nephrectomy and the diagnosis was derived after histological examination. The lesion is characterised by large histiocytes known as von Hansemann cells, and small basophilic, extracytoplasmic, or intracytoplasmic calculospherules called Michaelis-Guttman bodies².

It is believed that the pathogenesis of malacoplakia is due to a defect in intraphagosomal bacterial digestion³. Many of these patients, up to 90%, had urinary tract infection with *E.coli* being the commonest organism. Our patient had unusual clinical presentation i.e. pointing renal abscess, which had not been reported in the literature. Although perinephric involvement had been reported, infiltration into colonic wall is rare. In a chronically ill patient, especially female, with *E.coli* UTI and palpable flank mass, diagnosis of renal malacoplakia needs to be considered.

References

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