Solitary Renal Actinomycosis

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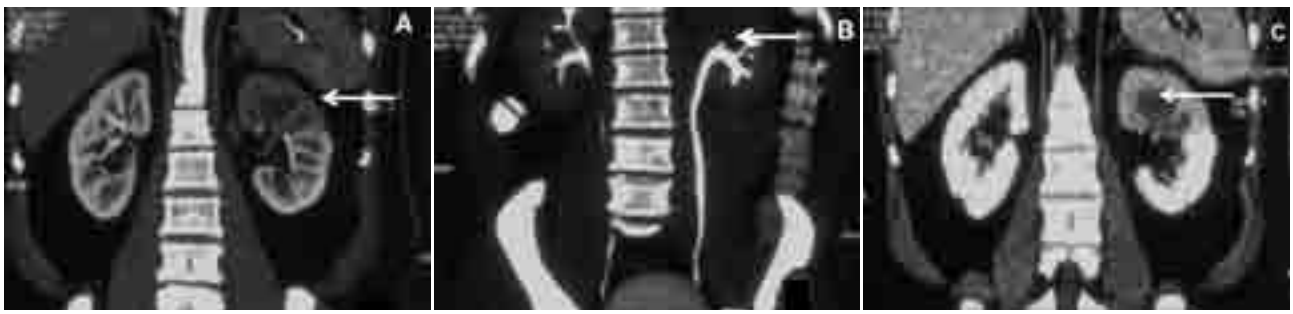

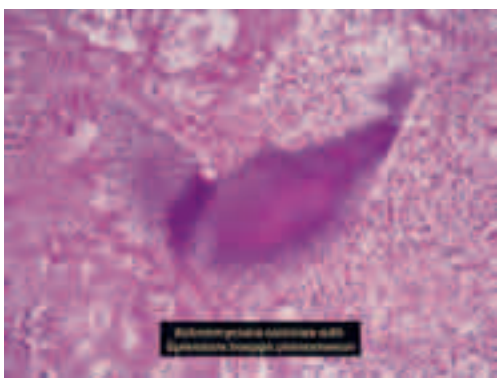

A 53-year-old man, who was a recurrent stone former and diabetic, presented with left flank pain, pyuria, and fever. He had undergone multiple interventions for removal of the left kidney stones and retained ureteral double-J stent. All blood and urine investigations were unremarkable and negative for fungus and tuberculosis. Computed tomography scan revealed an edematous left kidney with poorly enhancing upper pole having dilated calyces with hyperdense contents suggestive of abscess (Figure 1). Ultrasonography-guided aspiration of left renal abscess grew *Pseudomona Aeruginosa*. Thereafter, patient underwent left laparoscopic nephrectomy. On gross examination, yellow sulfur granules in the dilated upper pole calyceal system were seen (Figure 2). Microscopic examination of the sulfur granules demonstrated homogenous eosinophilic hyaline material coating actinomyces colonies surrounded by a dense lymphoplasmacytic infiltrate (Splendore-Hoeppli phenomenon) with concomitant pyelonephritis (Figure 3). The patient was discharged on long-term doxycycline as he was allergic to penicillin. Solitary renal actinomycosis can present as pyelonephritis, renal/perinephric abscess, or renal mass. [(1)] Multiple interventions, recurrent urinary tract infection, retained double-J stent, uncontrolled diabetes mellitus, and untreated dental caries are predisposing factors for this disease. With development of effective antibiotics, the challenge now lies in the clinician's ability to make the correct diagnosis, thus, ensuring timely recognition and renal salvage if possible. [(2)]

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