

Xanthogranulomatous Pyelonephritis of the Kidney

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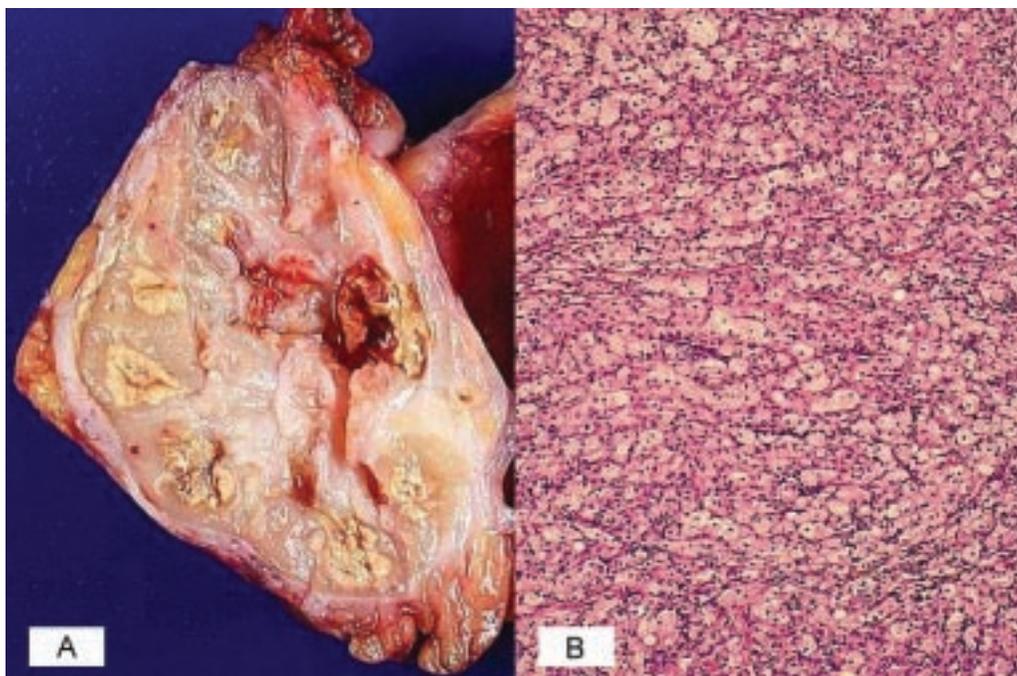


Fig. 1. (A) Grossly, numerous yellowish nodules fill the renal medulla. (B) Histopathology demonstrates numerous foamy histiocytes (hematoxylin and eosin $\times 100$).

An 89-year-old woman had a low-grade fever and lower back pain for one week. Abdominal computed tomography showed a left renal abscess. She received a nephrectomy. Grossly, multiple yellowish patches filled the renal medulla (Fig. 1A). Histopathology showed chronic inflammation with some lymphocytes admixed with numerous foamy histiocyte aggregations diagnostic of xanthogranulomatous pyelonephritis (Fig. 1B). Xanthogranulomatous pyelonephritis is an uncommon form of chronic pyelonephritis that is caused by a variety of pathogens, including proteus, *E. coli*, Klebsiella, and pseudomonas. The name derives from the yellow gross appearance of the nodular renal lesions, caused by numerous lipid-laden foamy macrophages (xanthoma cells). This disease can occur at any age, but it is more common in adults in the fifth through the seventh decades. It is twice as common in women as in men. Urinary obstruction is almost invaria-

bly present and is most often caused by stones. The disease is usually unilateral. The clinical and pathologic features can be confused with renal cell carcinoma.

FURTHER READING

1. Li L, Parwani AV: Xanthogranulomatous pyelonephritis. Arch Pathol Lab Med 2011; **135**:671-674.
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3. Korkes F, Favoretto RL, Broglio M, et al: Xanthogranulomatous pyelonephritis: Clinical experience with 41 cases. Urology 2008; **71**:178-180.