XANTHOGRANULOMATOUS PYELONEPHRITIS PRESENTING AS A PSEUDOTUMOR IN A 5 YEAR-OLD BOY

ABSTRACT

Introduction

Xanthogranulomatous pyelonephritis (XGP) is a rare, chronic inflammatory renal disorder associated with both chronic infection and obstruction. Most common in middle-aged females, it is important to recognize in children because it may be confused with childhood renal malignancies particularly Wilms' tumor.

Case Report

We report a case of a 5-year-old male patient with a 2-month history of unclear abdominal complaints, malaise, anorexia, weight loss and pale skin color. There was no history of urinary tract infections, symptoms or fever. Physical exam revealed a palpable left flank mass. The laboratory tests revealed anemia and leukocytosis. Urinalysis demonstrated pyuria with positive culture (Proteus mirabilis). Abdominal ultrasonography showed left renal enlargement with pelvicaliceal dilatation, parenchyma destruction and presence of calcifications. Abdominal CT scan confirmed global renal enlargement, parenchyma destruction, presence of calculi, spread of infiltration into de fat capsule, thickening of Gerota’s fascia and multifocal areas of varying density. Contralateral kidney was normal. Based on the clinical examination and imaging, above all, CT, the presumptive diagnosis of xanthogranulomatous pyelonephritis of the left kidney was made. A transperitoneal left nephrectomy was performed. The pathological report documented xanthogranulomatous pyelonephritis. The patient’s recovery was uneventful, and he has remained asymptomatic since surgery.

Conclusion

Xanthogranulomatous pyelonephritis is a relatively rare entity. The resultant unfamiliarity often delay diagnosis and therapy, which in turn affect the prognosis. It should be included in the differential diagnosis of children with a renal mass. Furthermore, this entity can be mistaken for renal tumors but nowadays this should be mostly eliminated with the advances in the imaging methods.

Key words: Xanthogranulomatous pyelonephritis, renal mass