



Xanthogranulomatous Pyelonephritis in Childhood: Report of Non Surgical Management of a Case

Salem Yahyaoui*, Olfa Bouyahya, Sonia Mazigh and Samir Boukthir

Department of Pediatrics, Bechir Hamza Children's Hospital, Tunisia

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Xanthogranulomatous pyelonephritis; Renal mass; Childhood

Clinical Image

Xanthogranulomatous Pyelonephritis (XGP) is a rare form of renal suppuration in children. Its etiopathogenesis is poorly understood [1]. The differential diagnosis is difficult and includes neoplastic process and renal abscess. Herein, we describe a new case of XGP with successful conservative management. A 6-year-old girl was admitted to our hospital for a history of prolonged fever for 25 days. There is no previous history of urinary symptoms or weight loss. Upon admission, the physical examination revealed a right palpable lumbar mass which was painless. Laboratory investigations showed a white blood cell count of $16.900/\text{mm}^3$ and C reactive protein of 207 mg/L. The urine culture and the blood culture were negative. Ultrasonography showed a right mediorenal mass without urolithiasis or calcifications (Figure 1). Computed tomography showed multiple hypodense lesions with peripheral enhancement after contrast injection (Figure 2). Given the CT scan findings, renal tumor was unlikely and XGP was the most probable diagnosis. Under antibiotic therapy (Ceftriaxone: 50 mg/Kg/day), apyrexia was obtained in three days. The patient was asymptomatic and the ultrasound was normal after 3 weeks of antibiotic therapy.

Xanthogranulomatous Pyelonephritis (XGP) is a rare form of chronic pyelonephritis which is uncommon in childhood. It is characterized by destruction of renal parenchyma with replacement

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*Correspondence:

Salem Yahyaoui, Department of Pediatrics, Bechir Hamza Children's Hospital, Bab Saadoun Square, Tunis 1007, Tunisia,
E-mail: yahyaouisalem@yahoo.fr

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Figure 1: Renal ultrasonography showing a right renal mass.



Figure 2: Computed Tomography showing hypodense heterogeneous lesion with hepatic extension.

by granulomatous tissue containing lipid-laden macrophages [1]. CT findings are helpful to reach the diagnosis of XGP [2]. Management is still controversial and successful conservative management is a particularity of the presented case which also highlights the contribution of imaging in the diagnosis of XGP. Finally, Antibiotics should be recommended in first line therapy especially in localized forms.

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