Bilateral Renal Angiomyolipoma: Think of Bourneville’s Tuberous Sclerosis

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Abstract

Angiomyolipoma is a benign hamartomatous tumor. It constitutes the most frequent renal disease encountered in Bourneville’s tuberous sclerosis, the bilateral character of which is highly suggestive. We report the observation of a 48-year-old patient with Bourneville’s tuberous sclerosis with bilateral angiomyolipoma.

Keywords: Renal angiomyolipoma; Bourneville’s tuberous sclerosis; Bilateral

Introduction

Angiomyolipoma is a rare benign kidney tumor in the general population. It is made up of adipose tissue, smooth muscle and dysmorphic blood vessels. It represents the first cause of kidney damage during Bourneville’s Tuberous Sclerosis (BTS) [1]. We report a case of BTS with bilateral renal angiomyolipomas.

Case Report

A 48-year-old patient, with a family history of a similar case in the brother, presented for chronic low back pain, without hematuria. The urogenital examination found sensitivity without lumbar contact. The dermatological examination showed “fibrous plaque” with multiple tumors in the face, neck and shoulders corresponding to “angiofibromas” (Figure 1). As well as periangual fibromas corresponding to “Koenen’s tumors” (Figure 2). Renal ultrasonography revealed rounded, heterogeneous and bilateral hyperechogenic formations. Abdominal CT scan showed a bilateral kidney process with multiple tissue component and greasy islets, suggesting rensals angiomyolipomas (Figure 3). The rest of radiological exams including echocardiography and brain CT scan, was normal. On the biological assessment, the blood creatinine level was 15 mg / l, with a clearance at 60 ml / min, the 24 hours proteinuria was normal. The diagnosis of BTS was retained because of the presence of three major criteria
greater than 4 cm, responsible for hematuria and spontaneous rupture in the retroperitoneum [6]. Imaging surveillance is required when the tumor is small. For tumors larger than 3.5 cm, we can opt for an arterial embolization by angiography. Nephrectomy will be reserved for cases with massive hemorrhage or lesion larger than 4 cm [6,7].

**Conclusion**

Screening for renal disease should be systematic in patients with BTS complex through searching for hematuria and proteinuria, measuring serum creatinine and performing renal ultrasonography. Conservative treatment is recommended whenever possible and nephrectomy is reserved for extreme cases with an increased risk of bleeding.

**Authors Contributions**

All the authors contributed to the realization of this work. All authors have read and approved the final version of the manuscript.

**References**


