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Short Communication

Adrenal Tuberculoma about a Case

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Introduction

The patient was K.Z, 44 years old. Clinically, he presented with right flank pain that had been developing paroxysm for 6 months in a context of altered general condition. The radiological work-up (ultrasound and CT scan) concluded to a well-limited right adrenal mass with low tissue density and low enhancement after injection of the contrast medium. Endocrinological investigations were negative, including a synacthen test. An adrenal MRI showed a 3 cm right adrenal nodule suggestive of a non-secreting adenoma. The treatment was lumbar adrenalectomy with simple postoperative care. Anatomopathological examination concluded to an adrenal tuberculoma. A posteriori, a tuberculosis work-up was performed (tuberculin test, BK test in sputum and urine) and was negative. The patient was put on an anti-tuberculosis treatment based on Isoniaside, Rifampicin, Pyrazinamide and Ethambutol for two months followed by ten months with the two major anti-tuberculosis drugs alone. The evolution was favourable.

Adrenal tuberculosis was initially described by ADDISON [1], and the term ADDISON's disease was attributed to this condition, which is responsible for a clinical picture of acute or chronic adrenal insufficiency [4] in the case of bilateral involvement. Indeed, adrenal tuberculosis is often asymptomatic, as shown by autopsy series which report an estimated frequency of 5-8% [3]. Previously, this location of tuberculosis was recognised by the presence of calcifications and adrenal atrophy [5]. With CT scans, adrenal tuberculosis can be discovered incidentally when an adrenal mass is found, especially since in the initial phase of the disease there is adrenal hypertrophy before the onset of hormonal insufficiency [6].

This pseudotumourous hypertrophy may be unilateral or even bilateral [6]. The CT appearance of adrenal tuberculosis depends on the chronicity and progression of the inflammatory process [7]. In the chronic form, the adrenal gland atrophies and calcifies, reflecting the healing of the tuberculosis [5]. This form is often accompanied by adrenal insufficiency. In its acute, progressive form, adrenal tuberculosis shows up on CT scan as a unilateral or even bilateral pseudotumour process with irregular contours. The central caseous necrosis appears as a hypodense area. After administration of the contrast medium, a heterogeneous appearance of the mass is noted, especially with enhancement of its peripheral wall [7]. According to ARCHAMBEAUD-MOUVEROUX, the CT aspects encountered during adrenal tuberculosis are variable [2]. The lesions are usually bilateral, in the form of hypertrophy or atrophy. The tumour syndrome may be homogeneous in density and may show multiple small images of hyperclarity after contrast injection, suggestive of a necrotic tumour [2]. More rarely, there is an appearance of a fluid collection [2]. Thus, the radiological features of adrenal tuberculosis are bilaterality and central hypodensity of caseous necrosis to distinguish tuberculosis from adrenal metastases.

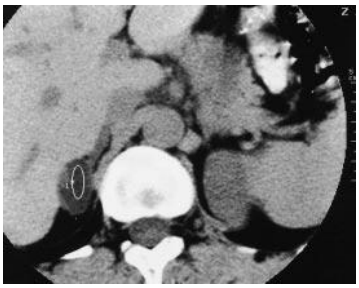

Figure 1: Abdominal CT scan: 3 cm hypodense mass over the right adrenal gland.

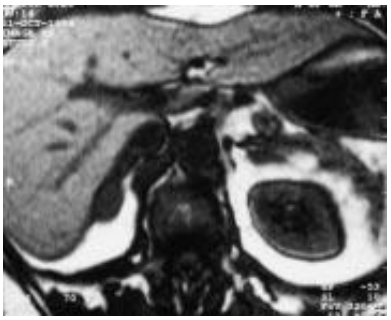

Figure 2. T1 abdominal MRI: 3cm mass hypo signal to the liver.

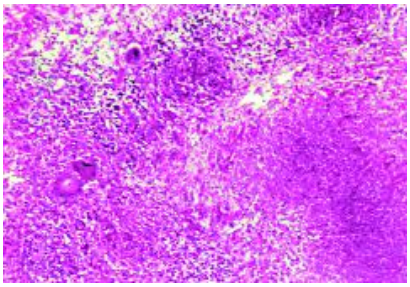

Figure 3. Histological appearance of adrenal tuberculosis with epithelial-giganto-cellular follicles and caseous necrosis (haematein-eosin stain, magnification x400).

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