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Research Paper

A case of giant adrenal pseudocyst mimicking an inter hepato renal cyst

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Abstract:
Adrenal pseudocysts are cystic lesions arising within the adrenal gland, surrounded by a fibrous connective tissue wall devoid of lining cells. They can grow to enormous size and pose a diagnostic problem with a wide range of differentiations, including benign and malignant neoplasms. There are only a few small series and case reports describing these lesions. The management of adrenal cysts is always difficult, particularly in the young. Through this observation we discuss the pathogenesis, diagnosis and treatment of adrenal pseudocysts.
Keywords: *adrenal gland - neoplasms - adrenal pseudocyst - Adrenal CT*

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I. Introduction :

Adrenal pseudocysts, although rare, are important clinical entities due to their varied presentations. However, they represent the most common form of benign cystic lesion affecting the adrenal gland. It is often asymptomatic and of incidental discovery. The aim of this case report is to highlight the clinical presentation, diagnostic strategies and treatment options of this rare entity.

Clinical case :

A 36-year-old female patient, with no notable pathological history, consulted for moderate abdominal pain localized to the right hypochondrium with inter-scapular irradiation. General physical examination revealed her to be overweight, normotensive to 121/68 mmhg. Abdominal ultrasonography revealed a fluid-dense right interhepatorenal cystic formation measuring 10cm× 8.4 cm. Adrenal CT confirmed the presence of a well-limited, thin-walled, spontaneously hypodense 15 HU, rounded adrenal cystic formation measuring 9.4cm ×10cm × 9.4 cm with confluent osteolytic lesions of the right iliac wing without marginal sclerosis.

Biological workup revealed no abnormalities suggestive of a secretory tumor or adrenal insufficiency. A right adrenalectomy was recommended by a multidisciplinary decision and performed without notable complications. Histopathological analysis confirmed the non-malignant nature of the adrenal pseudocyst. The outcome was favorable.

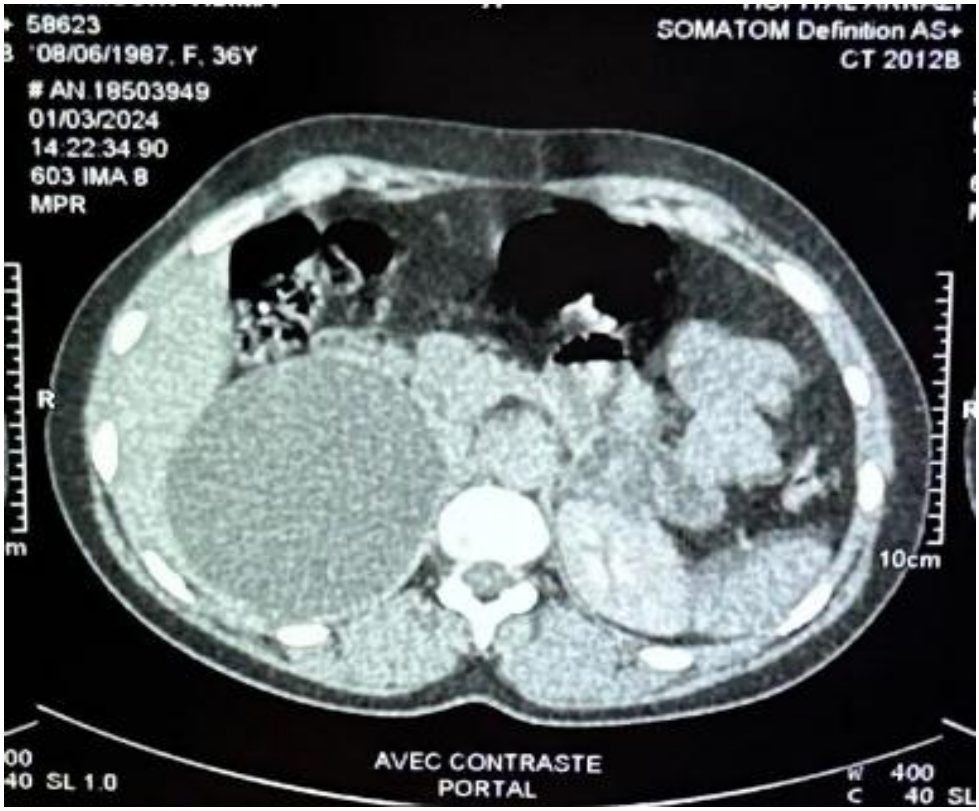

Figure 1: CT image showing a right adrenal cyst

II. Discussion

Among adrenal masses, only 0.06% to 0.18% are cysts, and of these, pseudocysts are the second most frequent lesion (39%). Their incidence seems to have increased due to the increased use of imaging examinations. [1]

They can occur at any age, but are particularly common in newborns and in people between the ages of 50 and 70, especially in women. [2]

Pseudocysts of the adrenal gland are most often unilateral with no right or left predominance, but autopsy series have revealed up to 8% of bilateral forms. Histologically, they fall into different categories, ranging from parasitic cysts to pseudocysts and endothelial forms, each with its own distinct characteristics. [3] [4]

Although most are asymptomatic, some can cause back pain or digestive problems. Arterial hypertension is common, but endocrine manifestations are rare. Traumatic rupture of the cyst or intracystic haemorrhage may give rise to acute pictures, but these situations are also uncommon. [5][6]

Diagnosis is based on computed tomography (CT), the gold standard for imaging the adrenal gland. Simple cysts have a characteristic hypodense appearance, while ultrasound is an excellent test for screening or confirming the fluid nature of a lesion found on CT. [7][8]

Plasma or urinary assays (cortisol, ACTH, methoxylated derivatives) are almost always normal, as these cysts rarely have endocrine repercussions. Hydatid serology is always desirable, despite the rarity of this etiology .[9] [10]

There is no consolidated consensus on the management and treatment of pseudocystic adrenal lesions, due to the low incidence of these lesions, as well as the difficulty of establishing a definitive preoperative diagnosis, adrenalectomy remains the first choice to treat cysts larger than 4-5 cm in diameter, or in cases of suspected malignancy [11].

III. Conclusion:

Pseudocysts of the adrenal gland are a heterogeneous, generally benign, and poorly understood pathology. They have a non-specific clinical presentation and variable radiological appearance. Surgical excision of large, symptomatic adrenal pseudocysts is required to rule out malignancy, arrive at a definitive diagnosis, and cure the patient.

Declaration of ties of interest: The authors declare that they have no ties of interest and have no relevant affiliation or financial involvement with any organization or entity that has a financial interest or financial conflict with the subject discussed in the manuscript.

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