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Case Report

Pseudoglandular and Myxoide Adenoma of Adrenal: Case Report

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Abstract

Myxoidal tumors of the adrenal cortex are rare. The first case was reported in 1979. Until 2008, 20 cases were reported, of which 11 were carcinomas and 9 were adenomas.

We report the case of a 40-year-old patient with no specific history who had left nephritic colic. The uroscanner revealed the presence of an adrenal mass of 5 cm long axis.

An incidentaloma diagnosis was made with a left adrenalectomy decision. Histological examination showed a tumor proliferation made of tubes of variable size, bordered by cubic and cubo-cylindrical cells with eosinophilic cytoplasm and nucleus without atypies and without visible mitoses. This proliferation is surrounded by a capsule with the persistence of a thin rim around the periphery of normal adrenal parenchyma. The immunohistochemical study is in favor of an adrenocortical adenoma.

In conclusion, the histological features of pseudoglandular myxoid adenoma are often clean for a primitive adrenal tumor even though they may be superficially interpreted as metastatic adenocarcinoma.

Introduction

Myxoid tumors of the adrenal cortex are rare. The first case was reported by Mr. Tangal in 1979. The pseudoglandular arrangement in tumors of the adrenal cortex has only rarely been mentioned. This tumor is clinically asymptomatic and its discovery is especially during a routine radiological examination.

The treatment is surgical with complete exeresis with a favorable prognosis for the benignity of the lesion.

The importance of this case is purely histological with a misleading morphology that may suggest a carcinoma from which the interest of a careful histological and immunohistochemical examination.

Case Presentation

The patient is 40 years old, he has no specific antecedents, he presented left renal colic for 1 month, and an uro scanner has been established and revealed the presence of a left adrenal mass of 5 cm long axis.

The biological assessment performed in the patient revealed no abnormality with a normal level of adrenal hormones.

An incidentaloma diagnosis was made with a left adrenalectomy decision. The macroscopic examination found an adrenal mass measuring 5×4×2cm, of soft consistency, showing a uniform yellowish-white appearance in the cup, centered by some haemorrhagic changes with a capsule was respected.

Histologically, it is a tumor proliferation made of tubes of variable size surrounded by cubic and cubo-cylindrical cells with eosinophilic cytoplasm and nucleus without atypies and without visible mitoses (Figure 1). In places, extracellular myxoid material is noted (Figures 2 and 3). This proliferation is surrounded by a capsule with the persistence of a thin rim around the periphery of normal adrenal parenchyma.

In the immunohistochemical study, tumor cells labeled anti-pancytokeratin AE1 / AE3 antibodies (Figure 4) and anti-Melan A (Figure 5). Anti-Chromogranin A and anti-synaptophysin antibodies were negative.

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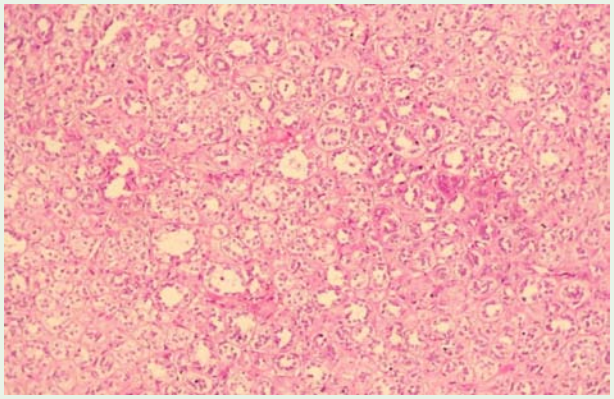

Figure 1: Tumor proliferation made of tubes of variable size bordered by cubic and cubo-cylindrical cells (HE, Gx100).

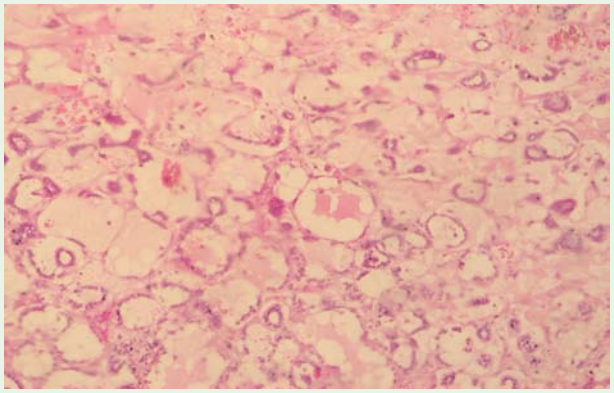

Figure 2: Abundant extracellular myxoid deposits (HE, Gx400).

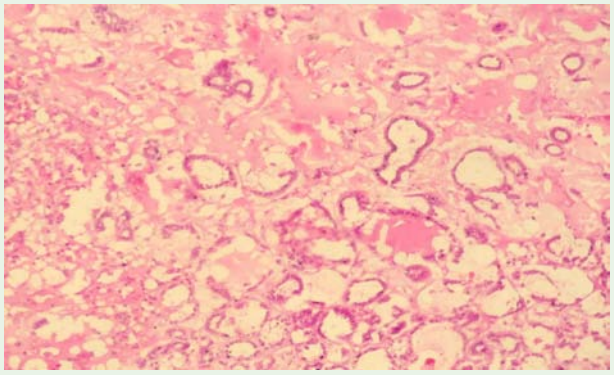

Figure 3: Abundant extracellular myxoid deposits (HE, Gx400).

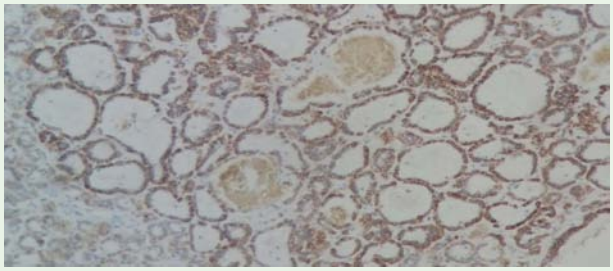

Figure 4: Expression of the pancytokeratin antibody (AE1 / AE3).

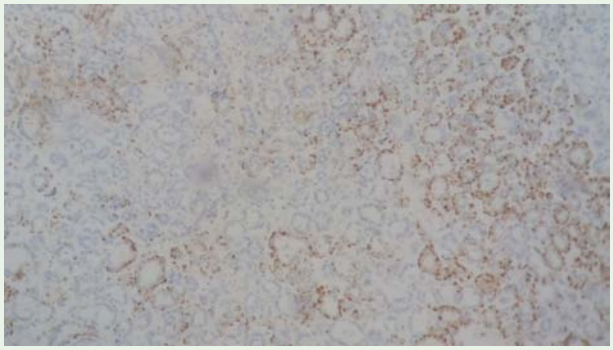

Figure 5: Expression of the antibody Melan A.

Discussion

Myxoid tumors of the adrenal cortex are rare. The first case was reported by Mr Tangal in 1979 [1]. Up to 2008, only 20 cases were reported including 11 carcinomas and 9 adenomas [2,3]. The myxoid zones often manifest themselves with a variable percentage. However, the pseudoglandular arrangement in tumors of the adrenal cortex has only rarely been mentioned. The presence of the pseudoglandular component initially evokes the metastatic mucinous adenocarcinoma in the adrenal gland, only the cyto-nuclear characters could guide the diagnosis. The presence of classical adenoma foci and clear cell foci will, in combination with immunohistochemical analysis, provide the correct diagnosis. The characteristic of adrenocortical myxoid is the abundant accumulation of myxoid material in extracellular, it is never seen in the cytoplasm of the tumor cell. The pseudoglandular component appears to be induced by partial degradation of cell adhesion due to degenerative processes and myxoid material deposition [4].

The origin of the myxoid material in these tumors remains unknown. It has been suggested that this could represent a degenerative disease or a product of stromal fibroblasts and tumor cells [5].

The differential diagnosis of adrenal myxoid tumor includes metastatic carcinomas, primary retroperitoneal tumors with myxoid components such as chordoma, chondrosarcoma, liposarcoma, leiomyosarcoma, and malignant fibrous histiocytoma [6].

The resemblance to glandular epithelial tumors was striking, and the differential diagnosis for metastatic adenocarcinomas is of paramount importance.

Regarding the immunohistochemical profile, the cases reported in the literature [1,4,6] expressed vimentin, synaptophysin and inhibin, and they were negative for chromogranin A, EMA, MUC1 and pancytokeratin AE1 / AE3. This profile is almost the same in benign adrenal adenomas [7].

Recently, Zhang et al reported the positivity of Melan A in more than 90% of adrenal cortical tumors, whereas this antibody was not mentioned in previous articles [2,3,8].

In our case the tumor expressed Melan A, and pancytokeratin, and it was negative for chromogranin A and synaptophysin.

Conclusion

The histological features of pseudoglandular myxoid adenoma are often peculiar to a primitive adrenal tumor even though they may be superficially interpreted as metastatic adenocarcinoma.

Immunophenotyping similar to that required for conventional adrenal adenomas can solve the problem especially by mentioning the classic cellular areas

The pathogenesis of this tumor remains unknown. Data is currently available on possible associations with genetic disorders. For example, Carney's complex disease affects the adrenal gland, and can, above all, be associated with myxoid tumors elsewhere in the body [9].

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Ethics approval and consent to participate: This work has respected all the rules of medical ethics and has been elaborated by all the authors.

Availability of material and data: All data is available in the military hospital of instruction Mohammed V Rabat Morocco

Author's contributions: All the authors contributed to the writing of this work.

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