

Adrenal Leiomyoma: A Rare Cause of Adrenal Incidentaloma

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INTRODUCTION

- Leiomyomas are benign tumors originating from the smooth muscle cells. They occur more frequently in the uterus and in the gastrointestinal system.
- Adrenal leiomyomas are rare tumors arising from the the smooth muscle of the adrenal vein and its tributaries.
- There are few cases described in the literature.

CASE REPORT

Identification: 72 year-old man

Date of 1st consult: April 2013

Presented to our consult with a history of left adrenal incidentaloma detected in abdominal-pelvic CT performed for the study of splenomegaly

Past Medical History: Arterial hypertension

Therapy: Pantoprazole 40mg, Lisinopril 20mg, Amlodipine 5 mg

Family history: Irrelevant

Physical examination: Without signs suggestive of hyperfunctioning incidentaloma;
 Weight 70Kg, Height 1.73m, BMI 23.4Kg/m²



Fig.1. Abdominal-pelvic CT may/2012: Left adrenal incidentaloma with 20 mm of maximum diameter

Table 1. Functional Study of Incidentaloma

May 2013

- Cortisol after 1-mg overnight dexamethasone suppression test: 1.8 µg/dL
- DHEA-S 64.8 µg/dL (33.6-249)
- Androstenedione 1.44ng/mL (0.6-2.63)
- Morning Cortisol – 15.6 µg/dL
- Evening Cortisol – 8.6 µg/dL
- Morning ACTH 20.6 ng/L
- Evening ACTH 16.3 ng/L
- Renin 13.5 µU/mL
- Aldosterone 15.6 ng/dL



Fig. 2. CT may/2013: Left adrenal nodule with 25 mm, with density values compatible with atypical adenoma

Table 2. Functional Study of Incidentaloma

September 2013

- Cortisol after 1-mg overnight dexamethasone suppression test 1.4 µg/dL

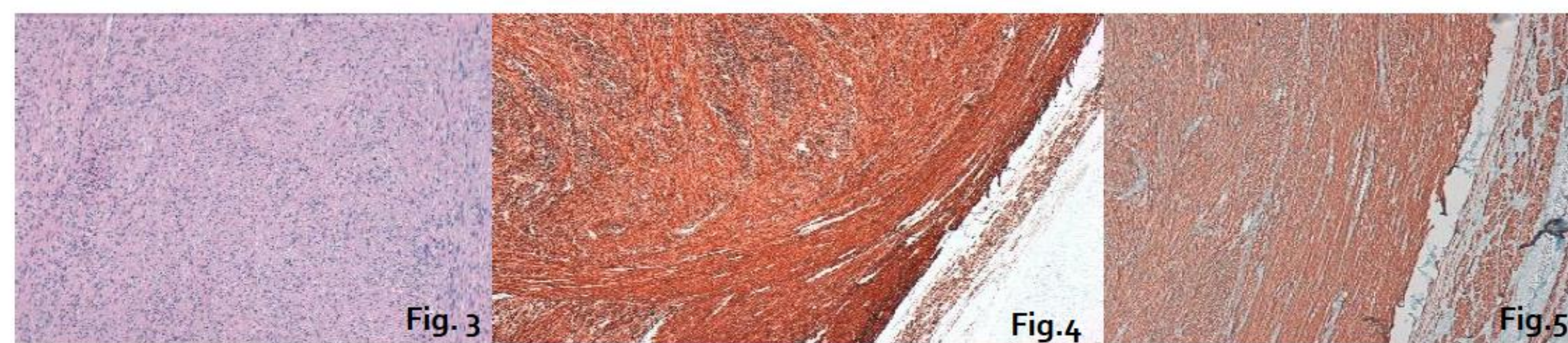
September 2014

- UFC* – 139 µg/dia (36-137)
- Urinary catecholamine: normal
- Urinary metanephrines: normal

* Urine free cortisol

CT april/2015: Left adrenal nodule with irregular borders, 38mm, with 34HU and slow contrast washout

Considering the lesion characteristics, the patient underwent left adrenalectomy



Clinical pathology report: Well-differentiated smooth muscle neoplasm with leiomyoma characteristics (fig. 3). Immunohistochemical study confirmed the diagnosis of leiomyoma with positive cells for alpha-actin (fig. 4) and desmin (fig. 5) and negative for c-Kit and S100 protein.

CONCLUSIONS

- The adrenal incidentaloma are often found during the investigation of other diseases not related to adrenal and may be a variety of tumours.
- The leiomyoma is very rare and should be considered in the differential diagnosis of incidentalomas.
- Surgical removal is the curative treatment of this benign condition.

