

## Background

Schwannoma (Sch) is a rare peripheral nerve sheath tumor comprised entirely of neoplastic Schwann cells\*. Adrenal Sch are extremely rare. Most adrenal Sch are incidental, and patients with Sch may not have any complaints.

## Clinical case

### Step 1. Urologist

Woman, 58 y.o.,  
Complaint: painless  
macrohematuria

**MRI was performed:**  
giant mass (14x13x11cm)  
with cystic degeneration  
and calcification, which  
was located in  
retroperitoneum

### Step 2. Endocrinologist

#### Hormonal examination according to current protocols

plasma cortisol after 1-mg DST	48 nmol/l	< 50 nmol/l
urinary fractionated metanephrines (M)	59 mcg/24- hour	< 320 mcg/24- hour
urinary fractionated normetanephrines (NM)	144 mcg/24- hour	< 390 mcg/24- hour

### Step 3. Urologist

Preliminary diagnosis - **adrenocortical carcinoma** because of the size of the tumor, heterogeneous structure, absence of known cancer in anamnesis.

Right laparotomic **adrenalectomy was performed** without any intraoperative and postoperative complications.

### Step 4. Results

Immunohistochemical assay showed that tumor cells were positive for S-100 protein and vimentin, which was consistent with **schwannoma**.

Genetic testing didn't revealed any associated mutations of schwannomatosis or neurofibromatosis type 2.

## Conclusions

1. Because of rarity of adrenal Sch, it is of great importance to describe any case in order to understand true prevalence and natural history of the disease.

2. Sch as may be discovered incidental, as may be non-specific symptomatic.

3. Preoperative diagnosis of Sch is impossible in most cases, that's why strict following to diagnostic protocols is demanded in order to exclude all other causes of incidentalomas firstly.

Reference. \*Hadfield KD et al. Molecular characterisation of SMARCB1 and NF2 in familial and sporadic schwannomatosis. J Med Genet. 2008;45(6):332

