## Challenges in the diagnosis of pheochromocytoma - a case report

Aleksandra Zdrojowy-Wełna, Grażyna Bednarek-Tupikowska Department of Endocrinology, Diabetology and Isotope Therapy, Wrocław Medical University



## Introduction

Adrenal pheochromocytomas are rare neuroendocrine tumours, however their prevalence is probably underestimated - in some series 50% were diagnosed at autopsy. The clinical presentation varies among patients, that is why diagnosis might be delayed.

## Case report

49-year old woman with hypertension was referred to the Endocrinology Department in Wrocław with suspected pheochromocytoma.

2002: operation of right carotid paraganglioma

2012: operation of left carotid paragangioma, complicated with stroke

Adrenaline in blood	<b>10,64</b> nmol/l [<0,69]
Noradrenaline in blood	<b>20,5</b> nmol/l [<3,55]
Adrenaline in urine	<b>1230</b> nmol/l [<110]
Noradrenaline in urine	<b>3423</b> nmol/l [<535]
Metoxycatecholamines in urine	<b>4503</b> ug/24h [<1000]

- administration of anticoagulants
- bleeding from gastrointestinal tract
- CT of abdomen:

tumour in the right adrenal gland  $6,5 \ge 5,5 \ge 4,3$  cm

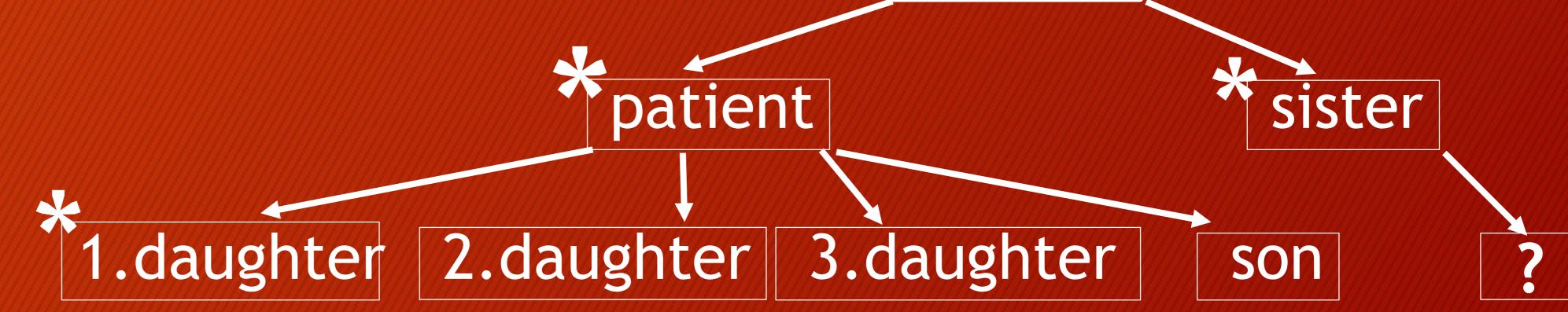
tumour in left ovary 14 x 18 x 7 cm

Clinical symptoms: uncontrolled hypertension with episodes of hypotension, weight loss (11 kg in 2 months), diabetes

Family history: sister - caraotid paraganglioma father - cardiovascular disease (†56yr) The patient was operated on January 2013 after administration of alfa- and beta-blokers. Histopatological examination: **pheochromocytoma epinephri:** IKi67 (+)<1%, synaptophysin (+), chromogranin A (+), S100 (+), CD56(-), Melan A (-), alfa 1 inhibin (-), CD34 (-), Calretinin (-) **teratoma maturum cysticum ovarii** After removing pheochromocytoma most of the clinical symptoms subsided.

Genetic screening mutation in SDHD gene positive (\*) Diagnosis: pheochromocytoma-paraganglioma syndrome





## Conclusions

1. Occurrence of paraganglioma with hypertension suggest need of screening for pheochromocytomaparaganglioma syndrome, especially in case of paragangliomas in family history.

2. Early treatment is crucial to avoid life-threatening cardiovascular complications.