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INTRODUCTION
Adrenal incidentaloma is a problem with increasing importance. There are CT-density and washout criteria for distinction between adrenal adenoma and other tumors, there are well established protocol of screening for malignancy and/or hormonal dysfunction. But there remains small portion of atypical adenoma where detailed diagnostic is needed. One relatively new option is endosonography-guided fine-needle aspiration biopsy.

Aim: To assess validity, complications and diagnostic contribution of endosonography-guided fine-needle aspiration biopsy in patients with atypical adrenal tumor.

DIAGNOSTIC ALGORITHM
1) Overall malignancy screening: physical examination, chest X-ray, prostatic specific antigen (men), gynecology examination including transvaginal ultrasonography (women), faecal occult blood detection or primary screening colonoscopy
2) CT criteria: size (> 4cm), density (washout), homogeneity
3) hormonal screening: common biochemistry, morning cortisol and low dose (1mg) dexamethasone suppression test, aldosterone/renin ratio, plasmatic metanephrines, (optionally dehydroepiandrosteron sulphate)

WHAT MEANS “ATYPICAL” TUMOR?
- hormonally inactive
- slow washout and/or native density above 40HU
- non-homogenous structure on CT scan

Part of atypical adrenal tumors are lipid-poor adenoma, and therefore is important to distinguish between this type of adenoma and metastasis or adrenal carcinoma.

RESULTS
In one case of unilateral tumor no biopsy was performed – adrenal gland was too small for secure biopsy; in one case of bilateral tumor was performed only one sample from anatomical reasons.

| 17 samples in 14 patients; 2 marginally sufficient; 15 sufficient |
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| S cases – resulted to adenectomy | biopsy | histology from surgery |
| 1x feochromocytoma | feochromocytoma |
| 1x suspected NET | metastasis of ovarian NET (patient was after hysterectomy) |
| 3x adrenal malignancy | 2x adrenal carcinoma 1x adrenal cortex tumor with borderline characteristic between adenoma and carcinoma |

CONCLUSION
Endosonography-guided fine-needle aspiration biopsy seems to be useful and safe method of differential diagnosis of atypical adrenal tumours. It can reveal any primary or secondary malignancy in early stage, with good possibility of surgical treatment. Small number of patients makes statistic analysis impossible.