

SYNCHRONOUS ENDOCRINE MALIGNANCIES CASE STUDY

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Introduction

This is a case report of a patient diagnosed with adrenocortical carcinoma and metastatic papillary thyroid carcinoma.

Case study

A 65 year old lady presented to ophthalmologist with sudden visual loss due to retinal haemorrhage and was found significantly hypertensive.

She had 6 months history of rapid weight gain, ankle swelling, thin skin with easy bruising and muscle weakness. Physical examination was consistent with Cushing's syndrome.

Results

- 24 hour UFC 1058 nmol/24 hrs (1st sample) and 1114 nmol/24 hrs (2nd sample)

- cortisol after LDDS 615 nmol/l

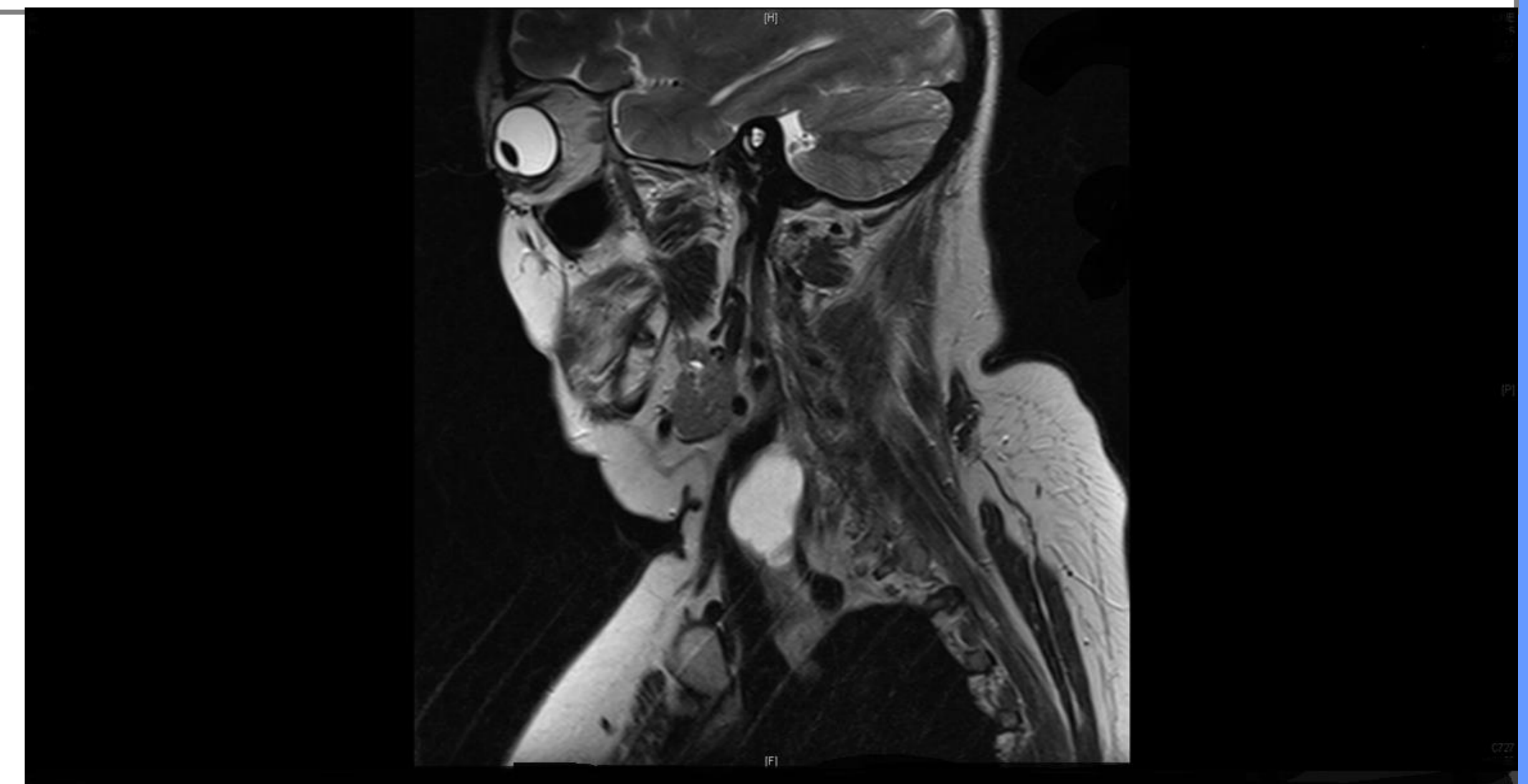
- cortisol after HDDS 554nmol/l-

- ACTH <5 ng/l

- **Urine steroid profile: cortisol metabolites are increased, typical proportion of Cushing's, no additional steroids that are markers for ACC**

- Normal 24 hour urine catecholamines, normal androstendione, DHEAS and testosterone, aldosterone/PRA 550

- CT abdomen and pelvis demonstrated 9 cm well defined, heterodense, retroperitoneal right soft tissue mass of 40-70 HU with areas of necrosis



Patient had right laparoscopic adrenalectomy -histology consistent with an **adrenocortical carcinoma**. Tumour had a mitotic count of 15 per 50 HPF indicating low grade tumour, venous invasion, no lymphatic or perineural invasion.

Patient could not tolerate mitotane.

Post-op PET/CT reported a right cervical soft tissue mass. US guided biopsy histology was suggestive of metastatic (adrenal) disease although features were not typical for adrenocortical carcinoma.

Surgical excision of the neck mass -histopathology reported lymph node **containing metastatic papillary thyroid carcinoma**.

Total thyroidectomy and neck dissection completed- **9 mm classical papillary thyroid microcarcinoma**. For RAI.

A recent PET/CT has shown disease recurrence in the right adrenal area and additionally a peritoneal nodule in the right upper quadrant of the abdomen. Further surgery is planned.

Synchronous endocrine malignancies represent very rare associations

Review of literature:

One case report of ACC (non-functioning) and multicentric papillary thyroid microcarcinoma

One child with Peutz-Jegers syndrome ACC and thyroid cancer

One case of papillary thyroid cancer with metastasis in adrenal gland

5 cases of ACC associated with non-endocrine synchronous malignancies

Conclusions