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.

- 24 hour UFC 1058 nmol/24 hrs (1st sample) and 1114 nmol/24 hrs (2nd sample)
- cortisol after LDDS 615 nmol/l
- cortisol after HDSS 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.

Conclusions

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