Two incidental lesions: a benign adrenal schwannoma and cerebral meningioma

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INTRODUCTION

- Adrenal schwannomas are an extremely uncommon cause of an incidentaloma, originating from the neural sheath Schwann cells of the adrenal gland.
- We report a rare case of two incidental lesions, a benign adrenal schwannoma and cerebral meningioma.
- To our knowledge, there are no cases in the literature to link de-novo adrenal schwannoma and meningioma in patients.

CASE HISTORY

- A 76 year old Caucasian gentleman presented to ED with a seizure and a community-acquired pneumonia.
- Past medical history included atrial fibrillation and ischaemic heart disease, for which he was on warfarin and bisoprolol.
- He was started on antibiotics for pneumonia. Urgent CT head revealed a left frontal lobe lesion, radiologically in keeping with a meningioma.
- As part of his work-up, CT imaging revealed an incidental left adrenal lesion, approximately 5.5 x 4.0cm.
- On further assessment, he reported gaining little weight, but had no clinical signs to suggest cortisol excess. Abdomen soft with no palpable masses.

INVESTIGATIONS

Endocrine investigations revealed:
- Sodium 143mmol/L (137-147mmol/L)
- Potassium 4.4mmol/L (3.6-5mmol/L)
- Renin/aldosterone: normal
- 24-hour urinary catecholamines: normal
- 24-hour urinary cortisol: 171nmol/24hrs (normal)
- Overnight dexamethasone suppression test: 29nmol/L (normal)
- 24-hour urinary aldosterone: normal
- Parathormone: normal
- Triamcinolone suppression test: no significant reduction in cortisol

TREATMENT

- The case was discussed at both neurosurgical and adrenal MDTs. The neurosurgical MDT outcome was for resection of the brain tumour due to size and presentation with seizure.
- However, despite the initial presentation of a seizure, decision was made for left adrenalectomy prior to resection of the meningioma.
- Clinical priority was based on the adrenal lesion being radioologically suggestive of adrenocortical carcinoma, versus a likely benign meningioma.
- Final histology for both lesions confirmed a benign adrenal tumour consistent with schwannoma and a Grade 2 frontal lobe meningioma.

DISCUSSION

- To date, no cases of a link between de-novo adrenal schwannoma and meningioma in patients has been reported in the literature.
- Adrenal schwannomas overall are very rare tumours that are difficult to diagnose preoperatively.
- These adrenal tumours are characterized by a benign course, are encapsulated and vary from firm solitary masses to fluctuant cysts. However, large masses >4cm and in the context of possible malignancy, complete laparoscopic excision is the treatment of choice.
- This case highlights the importance of multidisciplinary working to ensure expedited management in such cases.
- Awareness of benign adrenal lesions is vital for accurate pathological diagnosis to guide optimal patient management.

References:

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