Adrenalectomy for removal of adrenal incidentalomas: are we being too cautious? A Retrospective Database Analysis

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Category: Adrenal and steroids

Introduction

Incidentally discovered adrenal masses (‘incidentalomas’) are found in 2% of the population. Adrenalectomy is necessary only in a small proportion of such patients. Uncertainty exists over the need for removal of lesions between 4-6cm and those with low lipid content on CT scanning (found in 20% of benign adenomas). Our centre tends to offer surgery for all adenomas >4cm.

Method

We scrutinised our adrenal surgical database between 2009-2017. All patients who had undergone adrenalectomy due to size >4cm, imaging characteristics not typical of benignity (low lipid content) or growth velocity >20% over 12 months were identified. We then examined subsequent adrenal histology with original indication for surgery.

Results

The majority of excised lesions were benign cortical adenomas. Three tumours were histologically classified as phaeochromocytomas despite being biochemically silent. If size threshold had been increased to >6cm, removal of benign lesions is reduced by 39%.

Conclusion

In our series of 49 subjects who underwent adrenalectomy, only 8 (16%) were found to have malignant lesions. Increasing the size threshold to 6cm reduced the number of “unnecessary” operations, without missing malignancy. This favours a more conservative approach to management of patients, in whom, size >4cm would be the sole indication for surgery.

References