The clinical course of patients with adrenal incidentaloma: is it time to reconsider the current recommendations?

Ivana Kraljevic, Mirsala Solak, Tanja Skoric Polovina, Nikola Knezevic, Marko Kralik, Maja Baretic, Darko Kastelan
Department of Endocrinology, University Hospital Zagreb, Zagreb, Croatia

INTRODUCTION

The current guidelines for the management of adrenal incidentaloma advise hormonal and radiological follow-up of the patients for 2-5 years after the initial diagnosis. However, a vast majority of adrenal incidentaloma are non-functional, benign cortical adenomas that require no treatment, so the routine application of the current strategies often results in a number of unnecessary biochemical and radiological investigations.

OBJECTIVE

The aim of this study was to analyse the clinical course of patients with adrenal incidentaloma and to provide a critical review of the current management strategy of the disease.

DESIGN AND SETTING

This was a retrospective study performed in the Croatian Referral Center for adrenal gland disorders. The study included 319 consecutive patients with adrenal incidentaloma 174 of which were followed for at least 24 months.

RESULTS

A vast majority of patients were diagnosed with benign adrenal masses whereas in about 5% of them adrenal tumor corresponded to adrenal carcinoma or metastasis. Tumor density was found to be superior to tumor size in distinguishing benign adrenal masses from malignant tumors and pheochromocytomas. During the follow-up no patient demonstrated a clinically significant increase in tumor size. In addition, no changes, either in metanephrines and normetanephrines or in the activity of renin-aldosterone axis, were observed during the follow-up. Six patients developed SCS.

CONCLUSION

The study indicates that the risk of an adrenal mass initially diagnosed as benign and non-functional to become malignant or hormonally active is rather low. Therefore, the clinical management of those patients should be tailored on an individual basis in order to avoid unnecessary procedures.