

Long term cardiovascular and renal outcomes in patients with primary aldosteronism: a comparison between surgical and medical treatment

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In Primary aldosteronism (PAL) high levels of plasma aldosterone may cause vascular, cardiac and renal damage, beyond the direct effects of hypertension. In 65% of the cases PAL is the result of and in 30% the result of. The appropriate management of bilateral hyperplasia of the adrenal gland (IHA) is pharmacologic intervention with an aldosterone receptor antagonist; on the other hand, in case of aldosterone producing adenoma (APA), unilateral adrenalectomy may be more appropriate.

The purpose of the present study is to evaluate whether a difference may be found between control of blood pressure, the renal and cardiovascular complications, in patients with PAL treated with aldosterone receptor antagonist and those submitted to unilateral adrenalectomy.

Methods: we reviewed the medical charts of 39 patients who were diagnosed as suffering from PAL (1996-2006), were treated either pharmacologically (n=25) or surgically (n=14) and were followed at least 2 years after starting specific treatment.

Results: patients were followed for a mean of 5 years and 2 months after treatment.. Systolic and diastolic blood pressure declined significantly ($p<0.0001$) and plasma potassium increased significantly ($p<0.0001$) after treatment in both groups, comparably. No difference was found between number of antihypertensive drugs before and after treatment in both groups. Most of the patients did not show any difference in proteinuria and LVH status after treatment in both groups and some of them showed an improvement.

Conclusions: both treatments (medical and surgical) had a beneficial effect on controlling blood pressure and plasma potassium levels and tended to affect positively proteinuria and LVH status.