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The Medical Journal of Australia
Media Release

PRIMARY ALDOSTERONISM: EARLY SCREENING BY GPs

EMBARGOED UNTIL 12:01am Monday 28 March 2022

PEOPLE with primary aldosteronism have poorer cardiovascular outcomes than people with essential hypertension matched for blood pressure, prompting a call for screening for the condition in general practice from the authors of research published today by the *Medical Journal of Australia*.

Primary aldosteronism (PA) is caused by overproduction by the adrenal glands of the hormone aldosterone that controls sodium and potassium levels in the blood.

"Only a minority of patients with PA receive targeted treatment, chiefly because the condition is often not recognised and diagnosed," wrote Dr Renata Libianto, an endocrinologist and PhD student in the Endocrine Hypertension group led by Dr Jun Yang at the Hudson Institute of Medical Research.

"[It has been] reported that the median time between diagnosis with hypertension and referral to the specialist service was 13.5 years, and that 26 of 62 patients with confirmed PA (42%) had end-organ damage at the time of referral.

"A survey of GPs in Victoria found that fewer than 0.1% of about 7000 patients with hypertension had been diagnosed with PA. Primary care investigations have estimated its prevalence among patients with hypertension lies in the range 1–13%."

Libianto and colleagues analysed data from adults with newly diagnosed hypertension and not taking antihypertensive medications who were screened for PA by their GPs and further evaluated at the Endocrine Hypertension Clinic at Monash Health between 2017–2020.

"Sixty-two of 247 screened participants had elevated aldosterone-to-renin ratio (ARR) values on screening (25%); for 35 people (14%), PA was confirmed by saline suppression testing. Baseline characteristics (mean age, sex distribution, median baseline blood pressure levels, and serum potassium concentration) were similar for people with or without PA," they reported.

"Our study suggests that PA is much more frequent in unselected general practice patients with hypertension than is recognised. Our finding also highlights the central role of GPs in the early detection of this treatable form of hypertension.

"We found that a large majority of people diagnosed with PA benefited from targeted treatment; hypertension was resolved for two by adrenalectomy, and blood pressure control and normalisation of renin level was achieved by 18 of 25 patients prescribed aldosterone blockers as monotherapy."

Libianto and colleagues concluded that "as early treatment is beneficial and early diagnosis enables early treatment, screening for PA is best initiated in general practice, early in the course of disease".

"Our findings suggest that it would be useful to evaluate the cost-effectiveness of screening all patients with hypertension for PA in primary care before initiating antihypertensive treatment.

"If cost-effective and acceptable to patients, PA screening could substantially change the management of hypertension in Australian primary care, and also bring GPs to the forefront of the timely detection and optimal management of a common disease."

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