

Prevalence of primary hyperaldosteronism in moderate to severe hypertension in Central Europe region

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Recently published studies from different parts of the world report significantly higher prevalence of primary hyperaldosteronism (PH) in hypertensives (ranging from 5-25%) than the previously accepted figures. There have been no data so far about the prevalence of PH in Central Europe. Therefore we have undertaken this study to evaluate the prevalence of PH in patients with moderate to severe hypertension in Czech Republic, together with the determination of the percentage of different subtypes of PH including familial forms. In addition to that, we have evaluated the prevalence of other types of secondary forms of hypertension.

402 consecutive patients /230 females and 172 males/ with hypertension referred to our Hypertension unit, were studied. Positive aldosterone/renin ratio (ARR, ng/100 dl// ng/ml/h) ≥ 50 as a more strict marker of PH was found in 87 patients /21,6%/, 30% of them were normokalemic. The diagnosis of PH was later confirmed in 77 cases (89%), the total prevalence of PH was thus 19%. PH consisted of following forms: idiopathic hyperaldosteronism 42%, unilateral aldosteron – producing adenoma 36%, unilateral hyperplasia 7%, non-classifiable PH (refused operation/ catetherization) 13%, familial hyperaldosteronism type I. 2%. The prevalence of other types of secondary hypertension was as follows: pheochromocytoma 5%, renovascular 4,5%, hypercortisolism 2%, renal 0,75%.

In conclusion we have noted, that PH is in Central Europe region (Czech Republic) the most frequent form of endocrine hypertension with a considerably high prevalence in moderate to severe hypertension. Application of more strict criteria raises the probability of correct diagnosis of PH including the early normokalemic stages of PH.

Keywords: primary aldosteronism, prevalence, aldosterone-renin ratio

