

ARR \geq 20 (ng/dl)/[μ g/(L·h)]combined with low renin activity was significantly higher than that of the low renin activity combined with high aldosterone level, ARR \geq 20 (ng/dl)/(μ g/(L·h) combined with high aldosterone level and ARR \geq 30 (ng/dl)/(μ g/(L·h) as a screening standard ($\chi^2=18.95$, $p<0.001$; $\chi^2=31.13$, $p<0.001$; $\chi^2=29.25$, $p<0.001$).

Conclusions The majority present moderate to severe hypertension with low rennin activity and normal serum sodium level in normokalemic and hypertensive primary aldosteronism patients. Cerebral vascular complication is relatively more common than coronary heart disease. It is helpful to decrease the missed diagnosis rate for ARR combined with low renin activity as a screening index of the patients with normokalemic and hypertensive primary aldosteronism.

GW23-e1137

EXPRESSION OF LYMPHOCYTE KCA3.1 AND CYTOKINE IN SHR

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Objectives to research the expression of intermediate-conductance Ca^{2+} -activated K^+ channel ($\text{K}_{\text{Ca}3.1}$), $\text{TNF-}\alpha$ mRNA and protein in lymphocyte derived from spontaneously hypertensive rat (SHR).

Methods Take SHR and Wistar rats as experimental animals, to separate peripheral blood lymphocytes in rats, using Real-time PCR and Western blot technique were used to detect the express of KCa3.1 , $\text{TNF-}\alpha$ in SHR lymphocytes.

Results

- (1) In SHR, the expression of KCa3.1 gene was significantly higher in lymphocytes (1.3025 ± 0.2117 vs 0.4475 ± 0.2012 ; $p<0.05$) compared with Wistar rats. The expression levels of $\text{TNF-}\alpha$ mRNA in the SHR lymphocytes were significantly increased compared with the control group (1.4257 ± 0.1317 vs 0.3836 ± 0.1626 ; $p<0.05$).
- (2) KCa3.1 , $\text{TNF-}\alpha$ protein expression were also increased in SHR than in control ($p<0.05$).

Conclusions The lymphocyte KCa3.1 , $\text{TNF-}\alpha$ expression are upregulated in SHR suggesting K_{Ca} channel may contribute to the development of hypertension by lymphocyte activation.

GW23-e1527

CLINICAL CHARACTERISES OF 224 CASES WITH NORMOKALEMIC AND HYPERTENSIVE PRIMARY ALDOSTERONISM

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Objectives To investigate the clinical characteristics of patients with normokalemic and hypertensive primary aldosteronism.

Methods The clinical data of 224 cases with normokalemic and hypertensive primary aldosteronism from 2006 to 2010 in the hypertension department of the people's hospital of Xinjiang Uygur autonomous region were analysed retrospectively. Primary aldosteronism was diagnosed by aldosterone-to-rennin activity ratio (ARR) screening and confirmation tests (including Captopril challenge test and sodium infusion test)

Results The prevalence of 1, 2 and 3 stage hypertension in all subjects were 4.47%, 18.3% and 77.23%, respectively. The main symptoms were headache (52.07%), dizzy (49.7%), fatigue (4.14%), palpitation (2.96%), limbs numbness (1.78%), respectively. The average serum sodium level was (140.75 ± 2.75) mmol/l. The incidence of hypernatremia was only 4.91%. The proportion of the patients with normokalemic and hypertensive primary aldosteronism who had the renin activity of less than $1 \text{ ng ml}^{-1} \text{ h}^{-1}$ was 97.32%. To screen the patients with normokalemic and hypertensive primary aldosteronism, the diagnostic positive rate of