

**Methods:** All employees and retired workers of a factory in Dali were invited to take part in our study in May to July, 2010. Simple renal cyst was diagnosed using abdominal ultrasonic examination. Standard questionnaire was used to collect information on smoking and drinking habits, family history of hypertension, and diabetes mellitus.

**Results:** One thousand and thirty-five participants included 105 (6.8%) patients with simple renal cyst. Patients with simple renal cyst were older, had more men, higher body mass index, systolic and diastolic blood pressure, and higher serum uric acid, and had more hypertensive patients and patients with kidney stone ( $P < 0.05$ ). Sex (OR 1.80, 95%CI 1.09–2.96,  $P = 0.02$ ), age (OR 1.06, 95%CI 1.04–1.08,  $P < 0.001$ ), and kidney stone (OR 3.16, 95%CI 1.86–5.35,  $P < 0.001$ ) were independent risk factors for simple renal cyst. Simple renal cyst was significantly associated with a higher risk of hypertension before adjusted for confounding factors. However, further adjustment for confounding factors, including age, sex, smoking, drinking, body mass index, family history of hypertension, diabetes mellitus, serum uric acid, cholesterol, and triglyceride significantly attenuated the association between simple renal cyst and hypertension (OR 1.18, 95%CI 0.71–1.94,  $P = 0.53$ ).

**Conclusion:** The prevalence of simple renal cyst was 6.8%, and was common in men and elderly participants. Simple renal cyst was associated with a higher risk of hypertension, but not independently of sex, age, obesity and other traditional risk factors of hypertension.

**Keywords:** simple renal cyst, prevalence, hypertension

### A3963 PREVALENCE OF ISOLATED SYSTOLIC HYPERTENSION IN MIDDLE-AGED CHINESE

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**Objectives:** To investigate the prevalence and risk factors of isolated systolic hypertension in untreated middle-aged Chinese.

**Methods:** All employees and retired workers at a factory in Dali were invited to take part in our study in May to July, 2010, and participants without antihypertensive treatment and younger than 60 years were included in the present analyses. Standard questionnaire was used to collect information on smoking and drinking habits, family history of hypertension, and diabetes mellitus. Isolated systolic hypertension was diagnosed as office systolic blood pressure  $\geq 140$  mmHg and diastolic blood pressure  $< 90$  mmHg in untreated participants.

**Results:** One thousand two hundred and eight participants included 490 women and 905 normotensive participants. The prevalence of isolated systolic hypertension, isolated diastolic hypertension, and systolic diastolic hypertension were 3.4%, 3.0%, and 18.7%, respectively. Isolated systolic hypertension was prevalent in participants with older age and short stature. In logistic analysis, old age and short stature were significant risk factors for isolated hypertension. Indeed, a 10 years increase of age and a decrease of 5 cm of body height was associated with a 2.56 (1.62, 4.03) and then 1.46 (1.05, 2.04) times higher risk of isolated systolic hypertension. In further analyses, we found a significant interaction between age and body height in relation to pulse pressure. Only in those aged 50 to 60 years participants, lower body height was associated with a higher pulse pressure, a marker of arterial stiffness.

**Conclusion:** Isolated systolic hypertension was prevalent in middle-aged Chinese and associated with older age and lower stature. More attention is needed to pay for this special subtype of hypertension in Chinese.

**Keywords:** Isolated systolic hypertension, prevalence, age, body height

### A3459 BLOOD PRESSURE DYNAMICS AND OUTCOME IN PATIENTS WITH HYPERTENSIVE CRISIS AND ACUTE ISCHEMIC STROKE

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**Objectives:** Blood pressure (BP) reduction in the acute phase of stroke is controversial. The aim of the study was to analyze the BP dynamics and outcome in treated with antihypertensive medication patients with hypertensive crisis (HC) and acute ischemic stroke (IS).

**Methods:** The study included 70 randomly selected in-hospital patients with acute IS and HC at admission (systolic blood pressure /SBP/  $> 180$  mm Hg and /or diastolic blood pressure /DBP/  $> 120$  mm Hg). BP dynamics and its association with the outcome was assessed.

**Results:** The mean baseline BP values were  $205.5 \pm 22$  mmHg for SBP and  $114.4 \pm 13.6$  mmHg for DBP. Almost all patients received antihypertensive therapy and BP dropped in the next hours and days. The initial greater BP reduction

in the first 12 hours was followed by more gradual fall. BP decreased with 1/4th at the 24th hour compared with the baseline. Patients with clinical improvement demonstrated lower levels of BP (significant at baseline, 12th hour, third day, and at dismissal) and smoother BP decrease than those with worsening. Significantly higher values of SBP were observed in the persons with no improvement or deterioration than in those with improved status at the 24th hour, and of both SBP and DBP at the 3rd, 4th day and at dismissal. There were no statistically important differences in the outcome of patients with SBP and DBP reduction at the 24th hour  $> 20\%$  from the baseline and in those with no such reduction.

**Conclusion:** High BP might be associated with worse prognosis in the acute phase of stroke, although BP reduction with antihypertensive medication is debatable and usually not recommended, except for extremely elevated values. In this study patients with HC and acute ischemic stroke treated with antihypertensive drugs and lower values of BP showed better outcome than

**Keywords:** blood pressure, hypertensive crisis, ischemic stroke

### A2714 THE EFFICACY OF LOW-SALT DIET EDUCATION IN HYPERTENSIVE PATIENTS

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**Objectives:** The objectives was to analyze the efficacy of low-salt diet education project in "real-life" care of hypertensive patients living in Ukraine.

**Methods:** The low-salt diet education project was recommended to 88 hypertensive patients (53 women, 35 men) aged 43–75 years having poor controlled blood pressure (BP) level and received formerly prescribed baseline antihypertensive therapy (at least 2 drugs). Patients were randomized on 2 clinical groups, adjusted by age and sex. The first group included 44 subjects with usual prescription for nutrition. 44 patients of the second group received a circumstantial description and education concerning low-sodium diet. The dynamics of BP, rate of hypertensive crisis's, frequency of patient's recurrent visit to physicians relating antihypertensive treatment modification had been examined.

**Results:** A common tendency of BP level decreasing has been noted in both groups. The diastolic BP level in the second clinical group was on 15% ( $p = 0.02$ ) lower than in first group. The number of patients with poor-controlled BP above 140/90 mmHg in the first group decreased by 26%, in the second group - by 64% ( $p < 0.0001$ ). Concerted dietary interventions for salt reduction intake were associated with a significant reduction of the manifestation of ankle swelling (OR = 0.18;  $p = 0.0017$ ). In the second group, hypertensive crisis's were registered twice as less than in the first group (OR = 0.38;  $p = 0.10$ ). The rate of recurrent visits to the physician for treatment correction had been noted in 48% of first group patients and in 12% in the second group (OR = 0.15,  $p < 0.001$ ).

**Conclusion:** Low-salt diet tuition is essential for adequate BP control in hypertensive patients and for medical care globally due to diminishing the rate of urgent cases and recurrent visits to the physician.

**Keywords:** hypertension, salt, diet, education, project

### A7326 CARDIO-METABOLIC RISK FACTORS AMONG THE INHABITANTS ABOVE 3500 M IN NEPAL

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**Objectives:** The purpose of the study was to assess the cardio-metabolic risk factors in an isolated rural village above 3,500 meters above the sea level in Nepal.

**Methods:** A cross-sectional survey was conducted in a rural village situated at 3,570 m of northern Nepal. The participants of  $> 18$  years were randomly selected and each participant went through a questionnaire interview, physical measurements for height, weight, blood pressure (BP), hemoglobin (Hb), oxygen saturation (SpO<sub>2</sub>) and biochemical measurement for glycated hemoglobin (HbA1c). Systolic blood pressure (SBP)  $> 140$  mm Hg and/or diastolic blood pressure (DBP)  $> 90$  mm Hg and/or taking current antihypertensive medicine defined as HTN. Intermediate hyperglycemia when HbA1c value was  $> 6$  to  $< 6.5\%$ , and diabetes when  $> 6.5\%$ . SpO<sub>2</sub>  $< 90\%$  was defined as hypoxaemia. Overweight defined as Body Mass Index (BMI)  $> 25$  kg/m<sup>2</sup>

**Results:** Out of 285 eligible participants, 67% participated in the survey. From a total of 189 participants of mean age 46 years, 104 (55.03%) were women. The prevalence of current smoking, harmful alcohol consumer and overweight was