Methods and findings: The study population comprised 2,887 men aged 18-78 years at second phase recruitment of a population-based cohort in China. The CP patients and healthy controls were defined by the National Institutes of Health Chronic Prostatitis Symptom Index. Meanwhile, EPS specimens were collected and the leukocyte in EPS was counted. We analyzed the levels of 47 cytokines in the EPS in 118 individuals (30/health, 30/type-IIIB, 29/type-IIIA, 29/type-III IV) randomly selected from present population. Prevalence of CP (26.78%/total, 1.49%/type-IIIA, 6.27%/ type-IIIB and 19.02%/type-IV) is prevalent in China, and the prevalence of prostate inflammation (type-IIIA or type-IV CP) between the symptomatic men (type-IIIA/type-IIIA + IIIB, 19.20%) and asymptomatic men (type-IV/ type-IV + health, 20.62%) is similar. While IL-1 $\beta$ , IL-6, IL-8, IL-15, IL-17, basic FGF, G-CSF, MCP-1, MIP-1a, MIP-1 $\beta$ , TNF- $\alpha$ , IL-1 $\alpha$ , IL-16 and IL-18 levels were much higher in the type-IIIA and type-IV patient groups than in the type-IIIB and control groups, the levels of GM-CSF, PDGF-BB, SCGF- $\beta$  and TNF- $\beta$  was significantly lower in the type-IIIA and type-IV groups. The level of IL-1ra was clearly lower in the type-IIIB group, but LIF and  $\beta$ -NGF were elevated in type-IIIB groups of patients compared to controls type-IIIA and type-IV groups.

Conclusions: We think that type-IIIA and type-IV CP may have a similar pathogenesis, but type-IIIB CP may be a different disease with different pathogenesis.

Keywords: Type-IIIA prostatitis; type-IV prostatitis; chronic prostatitis (CP); cytokines

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# AB153. The relationship between serum uric acid (SUA) and metabolic syndrome (MetS) in a Chinese male population survey

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Background: The relationship between serum uric acid (SUA) and metabolic syndrome (MetS) has been reported in some epidemiology studies. Nonetheless, it is still controversial whether SUA is a risk predictor for the prevalence of MetS. The current study was designed to highlight the association of SUA and MetS and its components.

Methods: Serum samples from 3,675 healthy male subjects, aged 17-88 years, were collected from the Fangchenggang Area Male Health and Examination Survey (FAMHES) for cross-sectional studies. A representative sample of 2,575 individuals who did not suffer from MetS at baseline was recruited in the cohort study. The association between SUA quartiles and MetS was estimated using multivariable logistic regression. To further evaluate causality, we evolved a cox regression with data from 2- and 4-year large scale longitudinal study. MetS was defined based upon the updated National Cholesterol Education Program Adult Treatment Panel III for Asian American.

**Results:** In the cross-sectional analysis, men with MetS had a higher level of SUA than those without MetS (P<0.001). SUA showed a statistically significant negative correlation with high-density lipoprotein cholesterol and a positive correlation with blood pressure, triglycerides, waist circumference, and BMI (all P<0.001) while no significant relationship with glucose after adjusted for age (P=0.495). The strongest correlation was proven to be between SUA and waist circumference (r=0.318). In the multivariate analysis, increased odds ratios (ORs) for the MetS and its components were observed from the lowest to the highest SUA concentration. After adjustment for BMI, statistically significant difference maintained in MetS [OR =2.077; 95% confidence interval (CI), 1.470-2.936], hypertriglyceridemia (OR = 3.048; 95% CI, 2.216-4.192), hyperglycemia (OR =1.363, 95% CI, 1.071-1.734). In longitudinal analysis, examining the risk of developing MetS, SUA levels (hazard ratios comparing fourth quartile to the first quartile of 1.746; 95% CI, 1.265-2.411) were positively associated with incident MetS after adjusted for other confounders.

**Conclusions:** SUA was independently positively correlated with the prevalence of MetS. SUA may be a risk predictor for MetS. Further studies are needed to figure out the mechanisms behind the relationship.

**Keywords:** Serum uric acid (SUA); metabolic syndrome (MetS)

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## AB154. Effect of early adrenal vein ligation on blood pressure and catecholamine fluctuation during laparoscopic adrenalectomy for pheochromocytoma

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**Objective:** To find out whether previous control of the adrenal vein is a crucial procedure in laparoscopic adrenalectomy for pheochromocytoma.

**Method:** From January 2000 to December 2010, 114 pheochromocytoma patients underwent laparoscopic adrenalectomy through transperitoneal or retroperitoneal approach. All the 114 patients were divided into two groups randomly (group 1, dissection after ligation; group 2, dissection before ligation). Blood samples to dose catecholamines using high performance liquid chromatography were carried out at the following times: t1: test just before anesthesia; t2: during manipulation-extraction of pheochromocytoma; t3: after removal of pheochromocytoma. The blood pressure fluctuation was recorded.

**Results:** Laparoscopic adrenalectomy was successfully performed in 113 cases with 1 elective open conversion

because of dense peritumor adhesions. The operating time ranged from 80 to 150 minutes (mean 108, 102 in group 1, 110 in group 2). Mean blood loss ranged from 20 to 500 mL (mean 120 mL, 110 in group 1, 125 in group 2). The dosages of plasma catecholamines between the two groups had no statistical disparity. The blood pressure fluctuation incidence between the two groups had no marked difference. But the incidence increased with high functionary grade, and the difference was significant (P=0.043).

**Conclusions:** This study demonstrated that previous control of the adrenal vein was not a determinate factor in dealing with dangerous hypertension during laparoscopic adrenalectomies.

**Keywords:** Early adrenal vein ligation; blood pressure; catecholamine fluctuation; laparoscopic adrenalectomy

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# AB155. The relationship between sex hormones and erectile dysfunction: results from the population-based prospective cohort study

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**Background:** The decline of testosterone has been known to be associated with the prevalence of erectile dysfunction (ED). But the causal relationship between sex hormones and ED is still uncertain.

**Purpose:** To prove the association between sex hormones and ED, we carried out a prospective cohort study in a population-based sample.

Methods: A total of 926 men with fixed work units were recruited from the cross-sectional study in 2009 and