

METABOLIC SYNDROME ASSOCIATED WITH REDUCED LOWER URINARY TRACT SYMPTOMS IN GENERALLY HEALTHY MIDDLE AGED MEN

Hypothesis / aims of study

To investigate the impact of metabolic syndrome (MS) on lower urinary tract symptoms (LUTS) in a sample of healthy middle aged men with mild prostate enlargement and LUTS

Study design, materials and methods

Subjects aged 45 years or older who voluntarily underwent a medical check-up were enrolled. Participant demographics and health history were collected by a self-administered questionnaire. All participants were stratified into two groups by the presence of MS, as defined according to the updated National Cholesterol Education Program's Adult Treatment Panel III. Prostate volume (PV) and prostate specific antigen (PSA) levels were used for subgroup analysis.

Results

During January through December of 2010, 707 men with a mean age of 55.6±9.72 years were enrolled into the study. Compared to the non-MS group, MS group had lower total IPSS (7.89±6.63 vs. 6.85±6.52, p=0.05), and lower severity of weak urinary stream (1.24±1.60 vs. 0.95 ±1.50, p=0.021). In the higher PV group (PV >25 ml), total IPSS, storage score and urinary frequency, urgency and incomplete emptying were lower in men with versus those without MS (all p <0.05). The negative association between voiding score, severity of LUTS and MS became particularly pronounced as the number of MS factors increased (p for trend <0.01)

Interpretation of results

Age-adjusted total IPSS and voiding scores were significantly lower in the MS versus the non-MS group. Additionally, men with MS were found to have approximately half the risk of developing moderate to severe LUTS in contrast to men without MS. Interestingly, the negative association between severity of LUTS and MS became more pronounced as the number of MS factors increased

Concluding message

MS had favorable effects on LUTS. This association was most pronounced in men with larger prostates and/or higher PSA.

References

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Disclosures

Funding: nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Research Ethics Committee of National Taiwan University Hospital **Helsinki:** Yes **Informed Consent:** Yes