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 women.

Study design, materials and methods
Female subjects 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.

Results
During January of 2011 through December of 2013, 972 women with a median age of 54 years were enrolled into the study. The prevalence of MS in this cohort is 18%. Compared to the non-MS group, MS group had significantly higher storage IPSS (3.65±2.99 vs. 3.22±2.57, p=0.05) higher score on item nocturia (1.45±1.18 vs.1.12 ±0.97, p<0.001), and borderline significantly higher score on item intermittency (0.72±1.34 vs.0.54 ±1.15, p=0.06). In the multivariate analysis, age-adjusted storage IPSS and item nocturia score was significantly higher in women with MS versus those without MS (all p <0.05).

Interpretation of results
Age-adjusted storage IPSS and item Nocturia were significantly higher in the MS versus the non-MS group. Additionally, women with MS were found to have higher risk of developing moderate to severe LUTS in contrast to women without MS.

Concluding message
MS had positive effects on female LUTS, especially item Nocturia.

Disclosures
Funding: nil Clinical Trial: No Subjects: HUMAN Ethics Committee: National Taiwan University Hospital research ethics committee Helsinki: Yes Informed Consent: Yes