MODERATE INTRAPROSTATIC PROTRUSION AS A PREDICTIVE FACTOR FOR TERMINAL DRIBBLING IN SYMPTOMATIC BENIGN PROSTATE HYPERPLASIA

Hypothesis / aims of study
Terminal dribbling as one of the lower urinary tract symptoms (LUTS) but have not been clearly characterized. The aim of this study is to characterize “terminal dribbling” that investigate the association with International Prostate Symptom Score (IPSS) items and parameters of transrectal ultrasonography.

Study design, materials and methods
This study was part of a prospective longitudinal study that men aged 40 years and older participated in a prostate cancer screening survey between February 2008 and May 2010. IPSS including terminal dribbling, prostate-specific antigen (PSA), prostate total volume, transitional volume, and intraprostatic protrusion (IPP) were checked. Among the total of 221 men, 45 men (20.4%) complain of terminal dribbling. Men with more than moderate IPP (≥5mm) was 80 men (36.2%) and with more than severe IPP (≥10mm) was 38 men (17.2%). For statistical analysis, t test, Fisher exact test, and CHAID (Chi-square Automatic Interaction Detection) were conducted.

Results
The average age was 65.81±7.59 and average prostate total volume and transitional volume were 43.95±19.06 and 22.46±14.40. Among the IPSS items, 4th IPSS item and 6th IPSS item were higher in terminal dribbling group (P=0.037, 0.031, respectively). More than moderate IPP and more than severe IPP, both were related with terminal dribbling symptom (P=0.003, 0.013, respectively). Final predictive model using CHAID revealed that more than moderate IPP to be potential factor with 63% prediction (P=0.002).

Interpretation of results
After using predictive mode, terminal dribbling was predicted by more than moderate IPP. For prediction of IPP, the first predictive factor was prostate size and next was terminal dribbling.

Concluding message
Terminal dribbling was related with IPP. These findings suggest terminal dribbling could be key obstructive voiding symptom. Further larger studies including functional parameters are needed to establish confirmative characterization of terminal dribbling and also precise relationship with IPP.

Disclosures
Funding: This work was financially supported by the grant from the Industrial Source Technology Development Program (10033634) of the Ministry of Knowledge Economy(MKE) of Korea and supported by the National Research Foundation of Korea(NRF) grant funded by the Korea government(MEST) (No.2011-0020128). Clinical Trial: No Subjects: HUMAN Ethics Committee: Institutional Review Board of Korea Univeristy Hospital Helsinki: Yes Informed Consent: Yes