OBESITY AND THE RISK OF URGENCY: ANALYSIS OF 1,296 HEALTHY YOUNG AND MIDDLE-AGED WOMEN.

Hypothesis / aims of study
In spite of intensive study, the association between lower urinary tract symptoms (LUTS) and obesity is still controversial. Moreover, these studies mainly focused on elderly adults, and information in women around age at onset of LUTS is limited. In this study, we evaluated the relationship between obesity and urgency, the most bothersome symptoms in LUTS in young and middle-aged adults.

Study design, materials and methods
This study included 1,296 healthy women ≥20 years; 294 in 20’s, 473 in 30’s, 368 in 40’s, and 133 in 50’s and over. LUTS was assessed using I-PSS questionnaire and urgency was evaluated using overactive bladder Symptom score questionnaire with higher score indicating more severe symptoms. LUTS was diagnosed as I-PSSS ≥8. Severity of LUTS was defined by I-PSS-QOL as follows; 0-1 as mild, 2-3 as moderate, and 4-6 as severe. Obesity was evaluated by body weight, BMI, circumference and visceral fat.

Results
LUTS was observed in 2.1% in 20’s, 3.5% in 30’s, 1.9% in 40’s, 6.4% in 50’s and older; growing prevalence of LUTS was found at the age of 50’s. For severity of LUTS, moderate LUTS increased sharply to 11% at age of 50’s. Controlling for age, women in the highest body weight quartile had a higher risk of urgency than those in the lowest body weight (Odds ratio [OR], 1.7, 95%CI, 1.1-2.5, p=0.022). Other factors such as BMI, circumference, visceral fat had similar results (OR, 1.7 (p=0.012), 2.0 (p=0.01), 2.3 (p=0.019), respectively). (Figure)

Interpretation of results
Association of obesity and the risk of urgency was found in young and middle-aged women.

Concluding message
Our findings indicated that weight loss for obese subjects may delay the onset of urgency.
c) circumference

\[ p \text{ trend}=0.028 \]

\[
\begin{array}{cccc}
\text{g1} & \text{g2} & \text{g3} & \text{g4} \\
37-48 & 49-52 & 53-57 & 58-99 (cm) \\
1.0 & 1.2 & 1.2 & 2.0 \\
& & \text{p} = 0.001 & \\
\end{array}
\]


d) visceral fat

\[ p \text{ trend}=0.014 \]

\[
\begin{array}{cccc}
\text{g1} & \text{g2} & \text{g3} & \text{g4} \\
10-19 & 20-28 & 29-41 & 42-187 \\
1.0 & 1.0 & 1.4 & 2.3 \\
& & * & \text{p}=0.019 \\
\end{array}
\]

Disclosures
Funding: NONE Clinical Trial: No Subjects: HUMAN Ethics Committee: Osaka University Clinical Trial Center Ethics Committee Helsinki: Yes Informed Consent: Yes