

EPIDEMIOLOGICAL ASSESSMENT OF LUTS AND RELATED HEALTH PROBLEMS AMONG MIDDLE-AGED JAPANESE

Hypothesis / aims of study

To elucidate the influence of LUTS to health problems, such as health related quality of life(HRQOL), anxiety and depression, and late onset hypogonadism(LOH) among healthy Japanese middle-aged males

Study design, materials and methods

Cross-sectional study was conducted to elucidate the relationship between LUTS and health problems among healthy Japanese middle-aged males. Subjects were required to fulfill self-administered questionnaires which contained International Prostate Symptom Score(IPSS), SF36 for HRQOL, Hospital Anxiety and Depression(HAD) score, and International index of erectile function(IIEF) full version after their agreement on participating this study.

Among 1,1150 male who attended annual health examinations, 1,050 subjects were selected under the eligible criteria such as 1)married, 2)age 40-59, and 3)without no particular past histories.

LUTS was defined as IPSS score <8. Eight SF36 domain scores were calculated such as physical function(PF), role physical(RP), bodily pain(BP), general health(GH), vitality(VT), social function(SF), role emotional(RE) and mental health(MH). Anxiety and depression scores were based on HAD questionnaire. IIEF5 score and 5 domain score of IIEF(erectile function, intercourse satisfaction, overall satisfaction, orgasmic function and sexual desire) were calculated.

Comparative analysis were performed by two-way ANOVA of age and LUTS.

Results

Prevalences of LUTS were 12.2%(62/519) for 40's years and 22.6%(113/531) for 50's years, respectively.

Comparative analysis between LUTS and no-LUTS subjects were conducted to clarify the difference of 8 domain score of SF36. Fig 1 showed the results concerning the comparison between LUTS and no-LUTS. ANOVA indicated significant decreases of 8 SF36 domain scores in LUTS compared with those of no-LUTS.

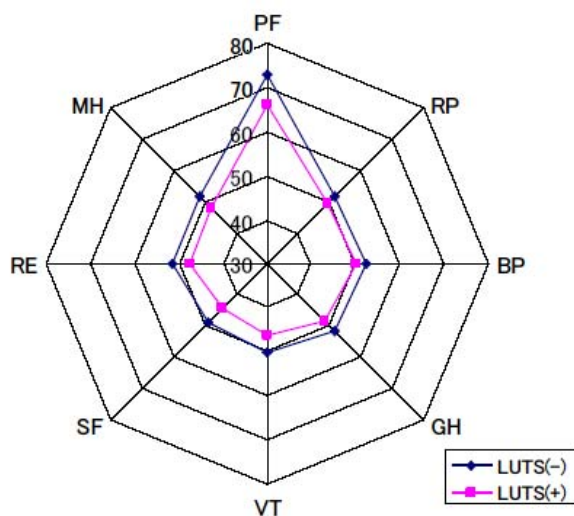


Fig 1 Comparison of SF36 by LUTS

Fig 2 illustrated the comparison of anxiety and depression scores between LUTS and no-LUTS. Anxiety score was significantly higher in LUTS(5.9 +/- 3.9) than in no-LUTS(4.4 +/- 3.1).(p<0.01) Depression score was also significantly higher in LUTS(5.6 +/- 3.6) than in no-LUTS(4.4 +/- 3.3).(p<0.01)

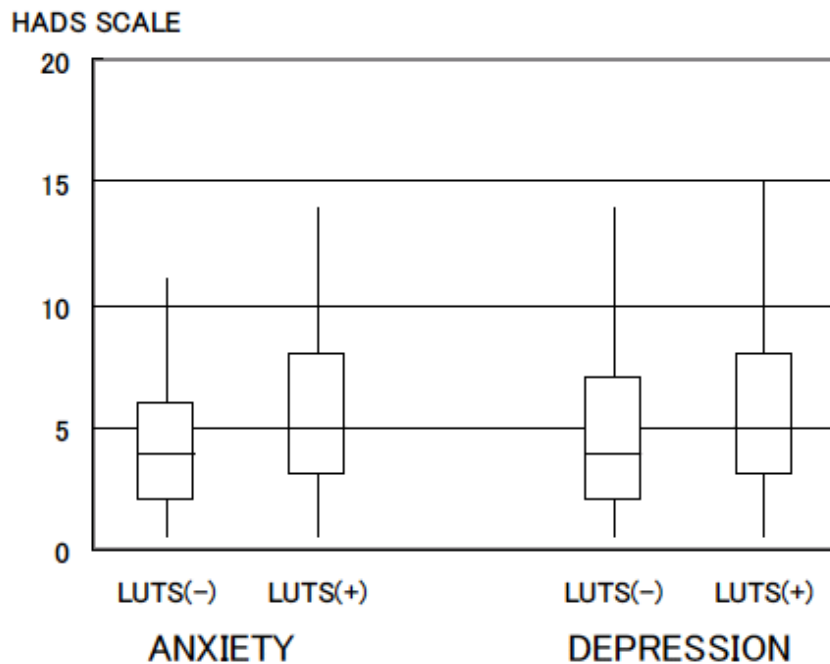


Fig 2 Comparison of HAD scores between LUTS and no LUT

IEF5 score was significantly lower in LUTS(16.2 +/- 7.5) than in no-LUTS(18.2 +/- 6.8).(p<0.01) All 5 domain scores were significantly lower in LUTS than in no-LUTS.(P<0.01)

Interpretation of results

Even among so-called healthy subjects without particular treatments, one-eights in 40's years and one-fifth in 50's years indicated lower urinary tract symptoms. There seem to be potential subjects who need to appropriate treatment for LUTS.

LUTS subjects showed about 10% decrease of 8 SF36 scores compared with no-LUTS subjects. LUTS seems to be one of causes to decrease HRQOL among middle-age males.

LUTS also increased anxiety and depression score in number among LUTS subjects, then LUTS seems to be one of causes to deteriorate mental health.

LUTS subjects showed significant decrease of erectile abilities compared with no-LUTS. This finding suggests comorbidity between LUTS and LOH epidemiologically.

Concluding message

There seem to be latent subjects who had LUTS among what we think of as healthy middle-age Japanese male. LUTS deteriorated HRQOL and mental health. LUTS also seems to be related to LOH among middle-age male.

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HUMAN SUBJECTS: This study was approved by the St Marianna University research ethical committee and followed the Declaration of Helsinki Informed consent was obtained from the patients.