

Introduction

Urinary incontinence (UI) has a negative impact on many aspects of patients' quality of life, including their daily activities, personal relationships, and mental health.

Many studies have demonstrated a relationship between depression and UI. About 20-40% in female UI patients reported the depression symptoms.

Some research showed treatment of UI improved not only UI symptoms but depression symptoms especially in urge UI and mixed UI treated by pharmacological treatment.

However, we have a few reports about influence on treatment for stress UI surgery for mental status. Also, it is not clear whether surgical treatment for stress UI will improve the mental status such as depression/anxiety especially in long term.

The aim of this study is to evaluate the efficacy of mid-urethral sling surgery against SUI and its effects on anxiety and depression of SUI or SUI dominant MUI patients.

Methods and Materials

A total of 102 female SUI or SUI dominant MUI patients who underwent mid-urethral sling (MUS) surgery (retropubic or transobturator) and followed up for 12 months were enrolled in this study.

All subjects provided written informed consent before entering the study.

In order to examine the efficacy of the surgery on symptom for UI, overactive bladder (OAB), and anxiety and depression, the following tools were used to evaluate before treatment and 12 months after treatment:

ICIQ-SF: the International Consultation of Incontinence Questionnaire-Short Form

OABSS: Overactive Bladder Symptom Score

HADS: Hospital Anxiety and Depression Scale

The Wilcoxon signed-rank test was used for the statistical analyses and p-values of <0.05 were considered statistically significant.

Table 1. Patients' characteristics.

No Pts	102
SUI (%) : SUI dominant MUI (%)	74 (72.5%) : 28 (27.5%)
Age	57.5 (38-88)
BMI(kg/m ²)	23.2 (16.8-34.9)
No delivery	2 (0-3)
Total ICIQ-SF	12.5 (4-21)
Total OABSS	4 (0-15)
HADS-A	4 (0-15)
HADS-D	4 (0-13)
HADS-A ≥ 8	21 (20.6%)
HADS-D ≥ 8	15 (14.7%)

Median (range)

* HADS score: ≥8 diagnosed as clinical anxiety or depression

Results

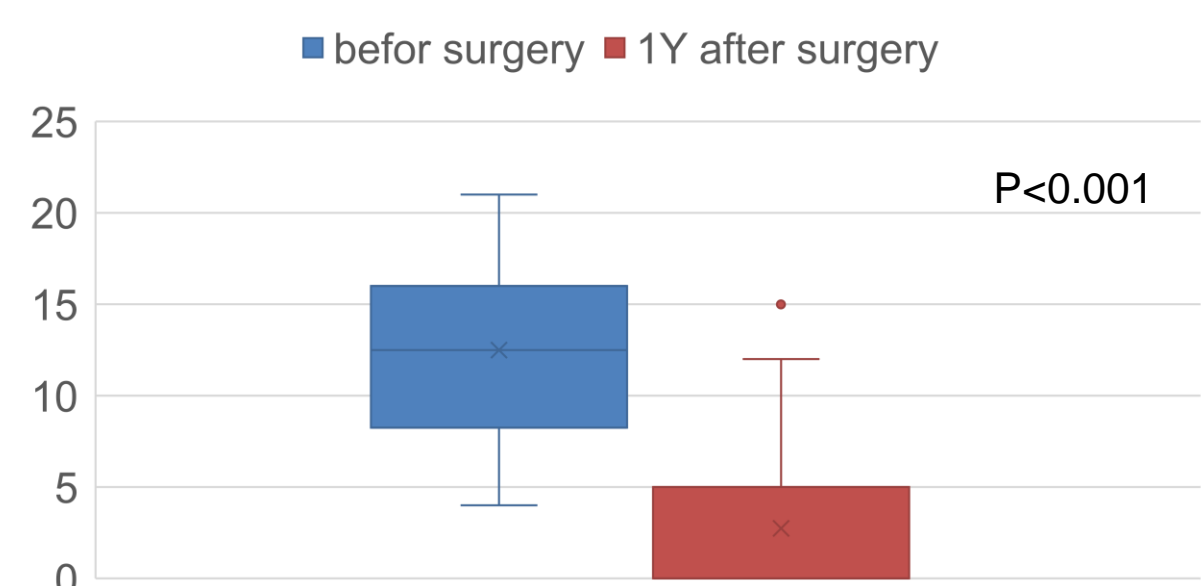


Fig 1. Changes of ICIQ-SF.

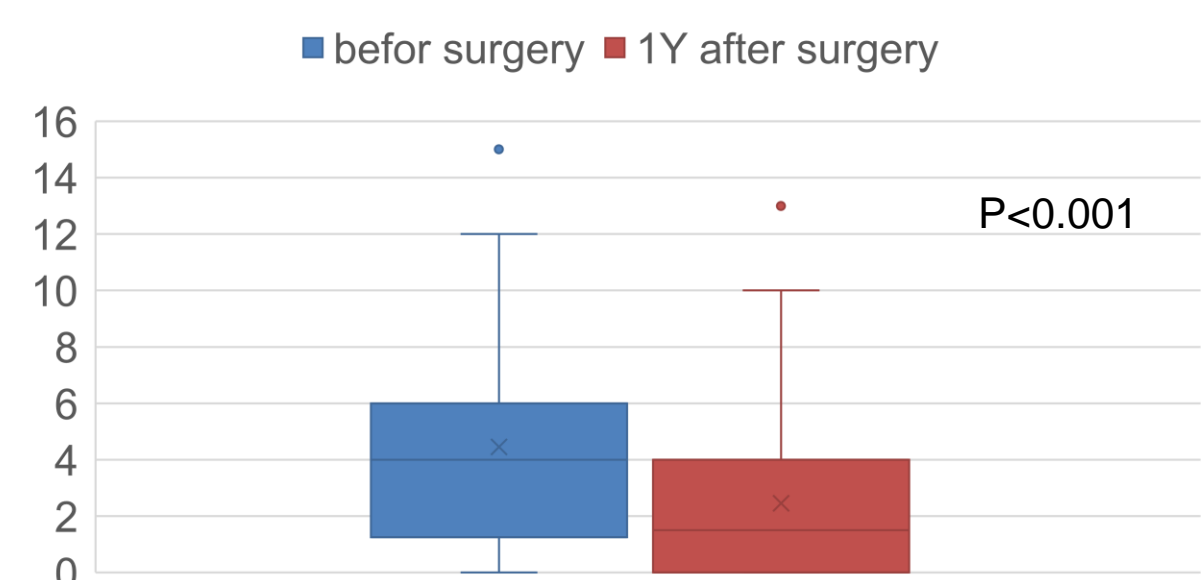


Fig 2. Changes of OABSS.

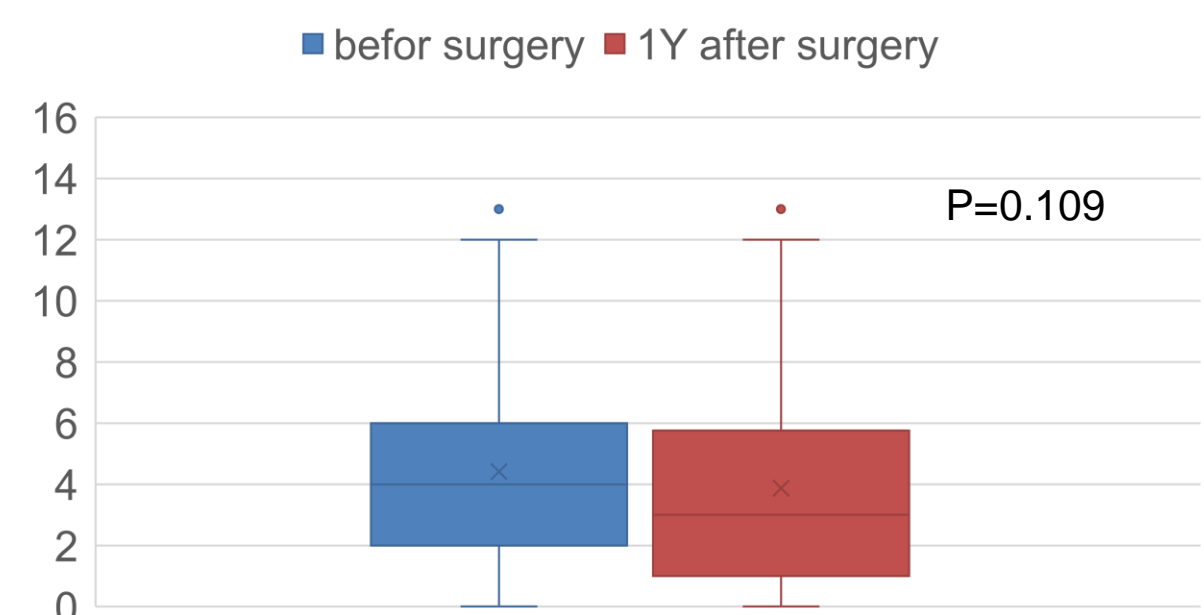


Fig 3. Changes of HADS-A.

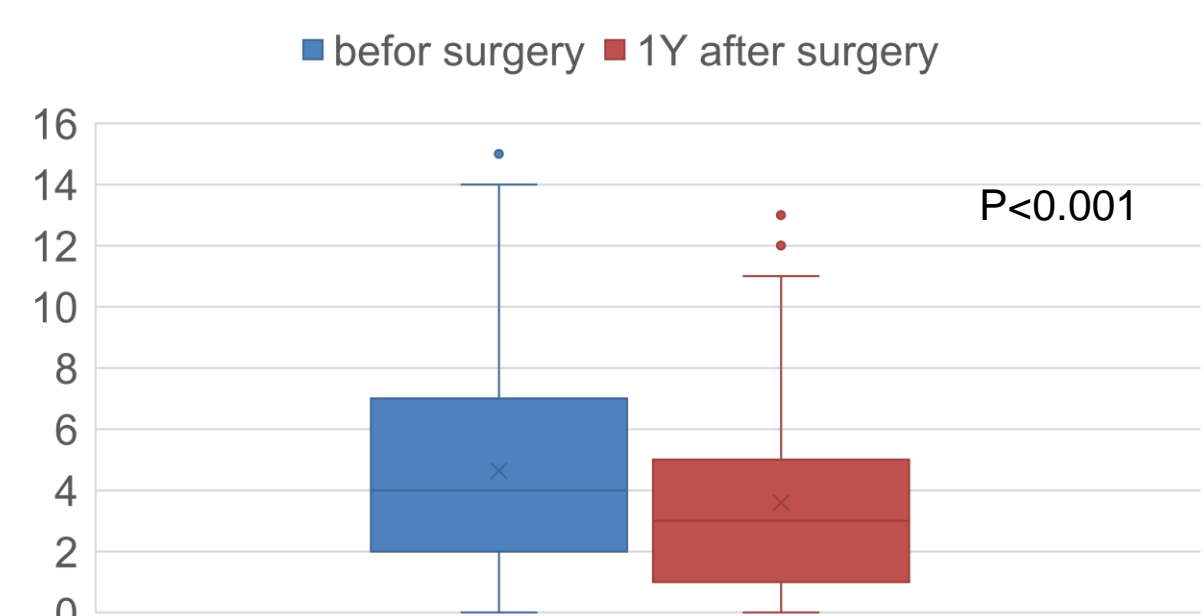


Fig 4. Changes of HADS-D.

Conclusions

This study demonstrated that MUS surgery significantly improved UI, OAB symptoms and depression, but not anxiety, in stress UI or stress UI dominant mixed UI patients.

It is assumed that the improvement of the patients' UI symptom helped to relieve their depression.

However, it suggested that patients' fear for recurrence of UI affected the HADS Anxiety score.