FUNCTIONAL OUTCOME OF PELVIC FLOOR RECONSTRUCTION FOR FEMALE PATIENTS WITH PELVIC ORGAN PROLAPSE FOLLOWED-UP FOR A MINIMUM OF 5 YEARS

Hypothesis / aims of study
Patients with pelvic organ prolapse (POP) frequently suffer from lower urinary tract and sexual dysfunction. The POP is a disease of QOL causing various functional disorder as well as the organ descent. Therefore the goal of its treatment must accompany with QOL improvement including sexual function [1,2]. We prospectively observed time course of voiding and sexual function in 161 female patients with POP following at least five years after transvaginal mesh (TVM) procedure.

Study design, materials and methods
171 patients (average age of 67.4) with POP (159 cystocele, 20 uterine prolapse, 37 rectocele and 11 vault prolapse) underwent TVM (104 Anterior TVM, 2 Posterior TVM, 44 A&P-TVM, 11 Total TVM and 125 concomitant TOT/TVT) were followed for least 5 years at outpatient section of our institute. Among them, 161 (161/171, 94%) patients replied for questionnaires by the mailing method. We evaluated anatomical cure, IPSS (International Prostate Symptom Score), ICIQ-SF (International Consultation on Incontinence Questionnaires Short Form), the maximum flow rate, the residual urine volume, P-QOL (Prolapse Quality-of-Life questionnaire) and FSFI (Female Sexual Function Index) of 5 year following surgery. In a part of patients, FSFI scores were compared with those of age matched controls.

Results
The anatomical cure (POP-Q stage0) rate of 5 year was 86% (Table 1.). Both of voiding and storage symptoms which were measured by IPSS improved in most of cases after surgery (p=0.0001) (Fig.1.). Though we observed no change in the maximum flow rate, the mean residual urine volume decreased from 68 ml to 25 ml (p=0.0001) (Fig.2.). Only the independent factor that affected IPSS after surgery was intraoperative complication (p=0.0061). As for the sexual function, all domains of P-QOL were improved especially in perception, prolapse impact, roll limitation, social limitation and emotions. Among 25 patients who had sexual intercourse before surgery, 10 (10/25; 40%) withdrew after surgery. On the other hand, among 136 who had no sexual intercourse before surgery, 13 (13/136; 9.5%) restored. After surgery, these 13 patients had no significant difference in every domains of FSFI when compared with age-matched controls. Factors associated with restoring sexual intercourse included younger age, below or POP-Q 3 and absence of complication.

Interpretation of results
The long-term anatomical curative rate, effect for voiding and storage symptoms of TVM procedure were acceptable. Age and degree of POP apparently affected sexual function. About 10% of patients who were not sexually active became sexually active after surgery.

Concluding message
Results of the present study suggested surgeries are reasonable options for improve of QOL among POP patients.

<table>
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<th>POP-Q Stage</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>% Cure</th>
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<tr>
<td>Pre</td>
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<td>0</td>
<td>28</td>
<td>78</td>
<td>55</td>
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<tr>
<td>1 year (n=157)</td>
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<td>1</td>
<td>6</td>
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<tr>
<td>3 year (n=157)</td>
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<td>4</td>
<td>5</td>
<td>0</td>
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<tr>
<td>5 year (n=155)</td>
<td>139</td>
<td>8</td>
<td>8</td>
<td>0</td>
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Table 1. Anatomical cure.
Fig. 1. IPSS Total and QOL score.

Fig. 2. Maximum flow rate and Residual urine volume.

References

Disclosures
Funding: None. Clinical Trial: No Subjects: HUMAN Ethics Committee: The ethics committee and institutional review board of Nihon University School of Medicine. Helsinki: Yes Informed Consent: Yes