

## CAUSES AND MANAGEMENT OF FAILURE OF MINISLING (EPILOG) FOR STRESS URINARY INCONTINENCE

### Hypothesis / aims of study

Mid urethral sling is the most easy and efficacious method for treatment of the stress urinary incontinence (SUI). Even though its complications are not common, it also has post operative complications such as unresolved urine leakage and retention as well as other mechanical traumas. Mini slings have additional advantages to those of TVT or TOT type slings in terms of short operative time, easiness and effectiveness, less pain, and less traumatic complications. We would like to discuss about the complications of Minisling and management of them.

### Study design, materials and methods

A total of 44 patients with stress urinary incontinence were enrolled in this study. Their ages were from 37-74 years of age (mean, 51.95±6.9112). They were divided into 2 groups, Group I (former 17cases with less tension) and Group II (latter 27cases with more tension) according to the strength of tension of the tapes to the urethra. Their valsalva leak point pressure (VLPP) were 65-116CmH<sub>2</sub>o and proximal urethral descent in perineal ultrasonogram were 1.2-2.8cm. We used the polypropylene mesh tapes (Epilog™, Med-Rution, Seoul, Korea), 8cm in length and 1.1cm in width. It was introduced into the paraurethral route orienting to 45° from the sagittal midline toward the ipsilateral shoulder and anchored on the urogenital diaphragm and the posterior periosteum of the pubic bone.

### Results

There was no any traumatic complications. A total of 8 post operative complications (18.2%) were observed, 6cases (13.6%) of sustained urinary incontinence, 1case (2.3%) of retention, and 1case (2.3%) of vaginal erosion. In type I, postoperative complications were sustained SUI in 3patients (24%), but in type II, sustained SUI in 3patients (11.1%) and retention in 1 patient (3.7%). Diagnosis of sustained SUI were established in postoperative 7days to 120days (median 30days) and vaginal wall erosion was detected in one patient at 3 months after surgery. All patients having urinary incontinence needed to tense the tapes to the urethra by placation of the tapes. A patient with immediate postoperative retention underwent release of the tape.

### Interpretation of results

The most common complications of the minisling procedures were sustained incontinence and retention, and they were observed in short after operation. The maintenance of the ideal tension of the tape abutting the urethra is most important for continence.

### Concluding message

Postoperative urinary retentions and incontinences were detected shortly after operation and not improved with time. So, earlier revision of the tapes is more preferred for control of them. The sustained stress urinary incontinence were suggested to be resulted from the loose tension of the tapes to the urethra by wide dissection of the route for tape, inadequate anchoring of the tape out of the pubic periosteum or urogenital diaphragm, some space between the tape and the urethra, and migration of the tape to the proximal urethra.

<b>Specify source of funding or grant</b>	<b>none</b>
<b>Is this a clinical trial?</b>	<b>Yes</b>
<b>Is this study registered in a public clinical trials registry?</b>	<b>No</b>
<b>Is this a Randomised Controlled Trial (RCT)?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>This study and data in article is not concerned with patients' personal characteristics.</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>