

## THE EFFECT OF BODY MASS INDEX ON THE RESULT OF THE SPARC IN PATIENTS WITH STRESS URINARY INCONTINENCE

### Hypothesis / aims of study

Obesity is a risk factor for stress urinary incontinence (SUI) and detrusor instability. There are little studies about the effectiveness of SPARC in obese women. The aim of the study is to evaluate the clinical outcomes of SPARC sling operation for the treatment of SUI, according to the body mass index (BMI).

### Study design, materials and methods

A retrospective clinical trial was performed with 127 patients who underwent SPARC sling operation between January 2004 and July 2007. Based on BMI (2005 Asian body mass index), patients were categorized: normal weight (group A, 46 patients, BMI 18.5-22.9), overweight (group B, 60 patients, BMI 23-27.5) or obese (group C, 21 patients, BMI>27.6). The objective success rate and subjective success rate were assessed. Before surgery, the patients were evaluated with history taking, physical examination, and urodynamic studies. The objective outcome was evaluated with an 1-hour pad test in 6 month postoperatively and the subjective satisfaction rate was assessed using questionnaires for the patients' satisfaction and evaluating by recommendation rates of SPARC to other patients. The objective success rate included cure and improvement, the subjective success rate satisfaction and improvement.

### Results

There were no significant differences in preoperative characteristics except of body weight. The objective cure rates were 95.6% (A), 96.7% (B) and 95.3% (C) ( $p=0.994$ ). The subjective cure rates were 97.8% (A), 98.0%(B) and 95.2%(C) ( $p=0.750$ ). Recommendation rates for the SPARC sling operation were 91.3% (A), 93.3% (B) and 90.5% (C) ( $p=0.989$ ). The complication rates were similar among the groups: 6.5% (A), 6.7% (B) and 9.5% (C) ( $p=0.317$ ).

### Interpretation of results

The results of SPARC sling operation in overweight and obese patients were similar with those of non-obese women.

### Concluding message

Therefore SPARC sling operation can be done effectively and safely in overweight and obese women as well.

### References

1. Mommsen S, Foldspang A. Body mass index and adult female urinary incontinence. World J Urol 1994;12:319-22
2. Park SH, Lee KS, Kim DG. Effect of Body Mass Index on the Result of the Tension-free Vaginal Tape Procedure in Patients with Stress Urinary Incontinence. Korean J Urol 2004;45:337-340
3. Rafii A, Dara?E, Haab F, Samain E, Levardon M, Deval B. Body mass index and outcome of tension-free vaginal tape. Eur Urol 2003;43:288-92

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Inje University Sanggye Paik Hospital IRB(Institutional Review board)
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes