

## PROSPECTIVE STUDY FOR DIFFERENCE OF CONTINENCE BETWEEN SIGMOID AND ORTHOTOPIC ILEAL NEOBLADDER

### Hypothesis / aims of study

The objective this of the study was to compare conti-nence rates and urodynamic parameters among patients who had undergone or-thotopic bladder substitution with sigmoid or ileal segments.

### Study design, materials and methods

Since 2001 to 2010, 39cases with bladder cancer were selected from the follow—up cases which had been performed orthotopic neobladder reconstruction after radical Cystectomy. Among them,22 cases were performed orthotopic ileal neobladder reconstruction (Hautmann W ,IN) ,and 17 cases were performed Sigmoid neobladder neobladder reconstruction (Reddy ,SN) . The inclusion criteria for the study were bladder cancer (Stage,T1G3, T2-3N0-NxM0).All cases were peromed urodynamic evaluation at a median time after surgery of 12 months, respectively. Continence and urodynamic parameters were compared in both groups.

### Results

There is no significant difference in completed daytime continence between the 2 group (89.1%VS 92.2%).However, compared with the functional nocturnal continence ,IN has better nocturnal continence than SN (68.3%VS 45.2%). The average reservoir capacity of the SN (360 ml) was lower than the IN (425 ml,  $p < 0.05$ ). Compliance was also lower in the SN (13.0 ml/cmH<sub>2</sub>O) than in the IN (19.7 ml/cmH<sub>2</sub>O) and again the difference was statistically significant ( $p < 0.05$ ).The average pressure at maximum capacity of the IN(41 cmH<sub>2</sub>O) was lower than the SN(55 cmH<sub>2</sub>O,  $p < 0.05$ ).Comparing the two groups no significant differences were found with maximal flow rate (SN 13.4 ml/s VS IN12.3 ml/s, $P>0.05$ ) and residual volume (SN 51ml VS IN 48 ml, $P>0.05$ )

### Interpretation of results

A neobladder constructed from detubularized ileum or sigmoid achieves adequate capacity with a satisfactory daytime continence rate.But, The sigmoid colon and ileum histological characteristics determine the differences between them in the new bladder.

### Concluding message

Nighttime incontinence in patients with IN can be at least partly explained by periods of low pressure due to neobladder have larger intial volume 、 greater compliance in combination with a relaxed sphincter during sleep.

### Disclosures

**Funding:** no **Clinical Trial:** Yes **Public Registry:** Yes **Registration Number:** the second affiliated hospital of Soochow uniwersity **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** the ethics committee of Soochow university **Helsinki:** Yes **Informed Consent:** Yes