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**Title:** TUIBN HAD REMARKABLE EFFECTS(73%) AND SIGNIFICANT EFFECTS(27%) FOR TREATMENT OF DYSURIA IN FEMALE PATIENTS

**Aims of Study:**

To examine the effects of TUIBN of female patients.

**Subjects:**

Subjects were eleven female patients (age:42-86, mean age:65), who suffer from high residual urine or dysuria. Their conditions could not be controlled by giving  $\alpha$ -blockers, etc. It was explained to them that TUIBN could cause incontinence. They were also given information on other methods, such as self-urethral catheterization or assisted-urethral catheterization.

**Methods:** TUIBN was conducted under lumbar anesthesia. In the two early cases two incisions were made in the directions of 4 and 8 o'clock (120 and 240 degrees respectively), and in other nine cases, three incisions were made in the directions of 2,6,and 10 o'clock (60, 180 and 300 degrees respectively). In the direction of 6 o'clock (180 degree), an incision was made in the muscle at the spot of the bladder neck from the trigone of the urinary bladder to the center of the urethra to a depth of 5 to 8 mm. Residual urine, QOL, renal function, etc. before and after operation were compared. The observation periods ranged from 4 months to 17 years (average 45 months).

**Results:**

One case also conducted self-urethral catheterization twice a day, besides TUIBN, because the patient had residual urine of 10 to 250 ml. The other ten cases had satisfactory urination with no residual urine. Two cases showed incontinence. It was concluded that TUIBN was remarkably effective in 8 (73%) cases and significantly effective in three (27%) cases.

**Discussion:**

(Based on an experimental model of TUIBN ) Catheters of 10, 12, and 14Fr were cut into pieces of 5, 4, 3, 2, 1 cm long and water pressure of 50 cmH<sub>2</sub>O was added to them. The water flow within the catheters was measured. It was revealed that the amount of flow was influenced by the diameter of catheters more than by the diameter of catheters more than by their length. It is suggested that the shortened length of the functional urethra causes the expansion of the remaining part of urethra.

(Based on other reports) As for the treatment by TUIBN (in female patients), Petri E (1978) reported on 43 cases, and Hellstrom P (1987) on 30 cases (remarkably effective:23% and significantly effective:40%). It is suggested that by the TUIBN, which makes an incision in the mucous membrane and the muscle, the bladder neck opens wide and urine flows through the urethra easily, and then the bladder contracts, which

is a reflex action through the spine (Jung SY, 1999). It is also suggested that the smooth muscle of the urethra relaxes easily, which is exposed to NO that comes from the wall of blood vessels or the nerves of the remaining mucous membrane and lower mucous membrane (BC Bennett, 1995) that are usually resected in TURBN.

**Conclusions:**

The advantages of TUIBN (for female patients) are as follows:

Patients are released from CIC over a long period.

Urinary tract infection which is caused by long-term use of indwelling Foley, and disuse atrophy of the bladder can be avoided.

The incidence of the post-operative renal failure is lessened.

Patients are relieved from psychological stress that accompanies urination.