

Pubovaginal Sling Procedure Using a Polypropylene Mesh Sling for Stress Urinary Incontinence

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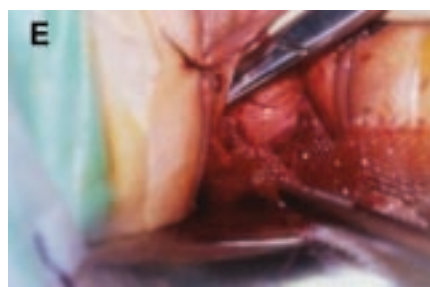
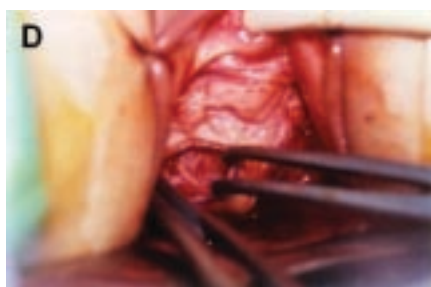
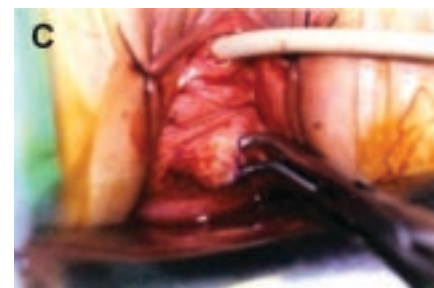
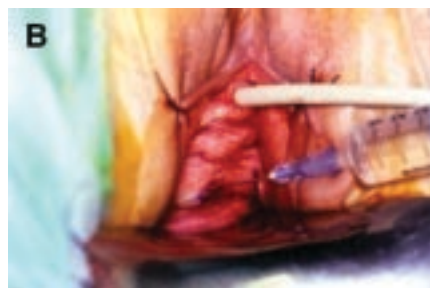
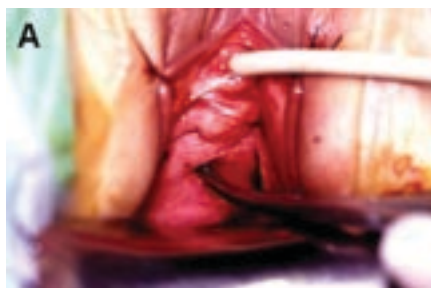
Suburethral slings are surgical operations used to treat women with urodynamic stress urinary incontinence. They were originally designed for recurrent stress incontinence but have also been used recently for primary cases. Although many different materials (autologous and synthetic) have been developed through different techniques (e. g. TVT, TOT, TVT-O, Sparc, Monarc, etc.) to achieve a simple and safe surgery, the cornerstone of success is to place the sling at the right suburethral position with adequate tension. Data are lacking to compare each surgical procedure with the traditional anti-incontinence surgeries [1]. Herein, the authors report a simple pubovaginal sling procedure for placing an adjustable suburethral sling [2].

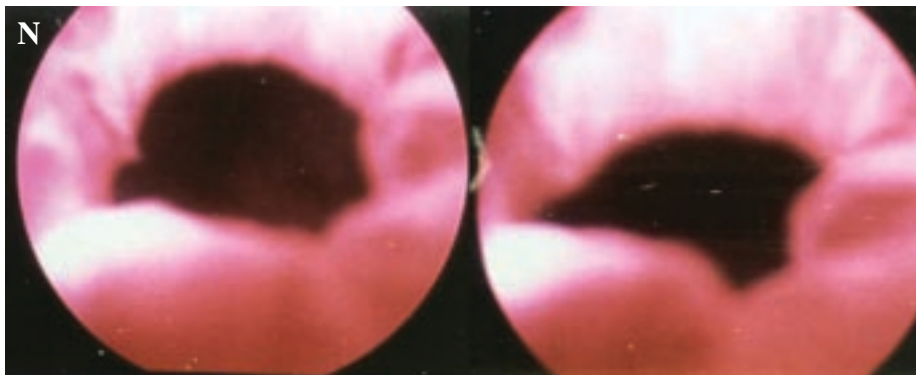
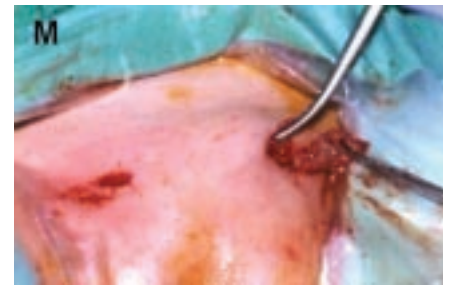
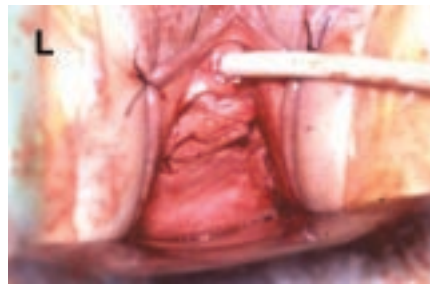
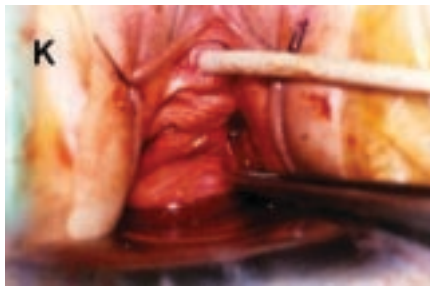
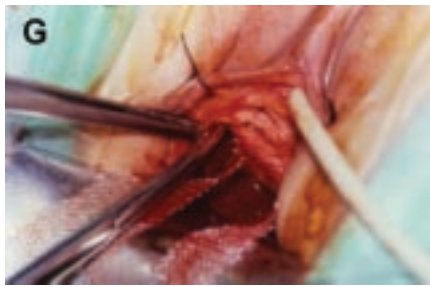
SURGICAL TECHNIQUE

After spinal anesthesia, the patient is placed in the lithotomy position.

- (A) The bladder neck is identified by cystoscopy with a hemostat placed against the anterior vaginal wall.
- (B) Water dissection is performed by injecting normal saline into the submucosal space between the vaginal epithelium and the underlying endopelvic fascia. This procedure can facilitate the dissection and creation of the suburethral tunnel.
- (C, D) Two vertical incisions are made along the folds of the anterior and lateral vaginal junction, and a right angle hemostat is used to dissect and create a suburethral tunnel.

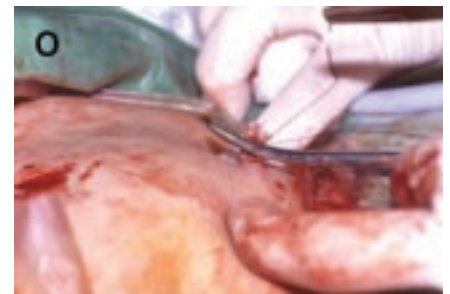
- (E) A 2 cm x 30 cm polypropylene mesh sling soaked in gentamycin solution is pulled through the suburethral tunnel.
- (F) Two suprapubic 1 cm incisions are made immediately beneath the pubic bone.
- (G) Dissection of the endopelvic fascia is performed using scissors to penetrate beneath the lower margin of the pubic ramus.
- (H) A large hemostat is inserted downward beneath the pubic bone and the index finger of the surgeon is inserted through the endopelvic fascia to penetrate the wound and meet the hemostat behind the pubic bone. No soft tissue should be noted to interpose the hemostat and index finger, and all procedures should be performed by feeling beneath the pubic bone.
- (I, J) Using the hemostat, one end of the sling is pulled out of the suprapubic wound. The same procedure is performed on the other side.
- (K) Do not pull the sling with much tension at this stage to prevent overcorrection of the urethral incompetence.
- (L) Close the vaginal wounds with continuous 3-0 Vicryl sutures. The bladder base and urethra are supported by the untied suburethral sling.
- (M) Pull one end of the sling to the other side through a subcutaneous tunnel created by a hemostat.
- (N) Cystoscopy is used to observe the appearance of the bladder neck and proximal urethra, and to observe if penetration has occurred during the previous procedures. The bladder is filled to 300 mL,





Preoperative

Postoperative



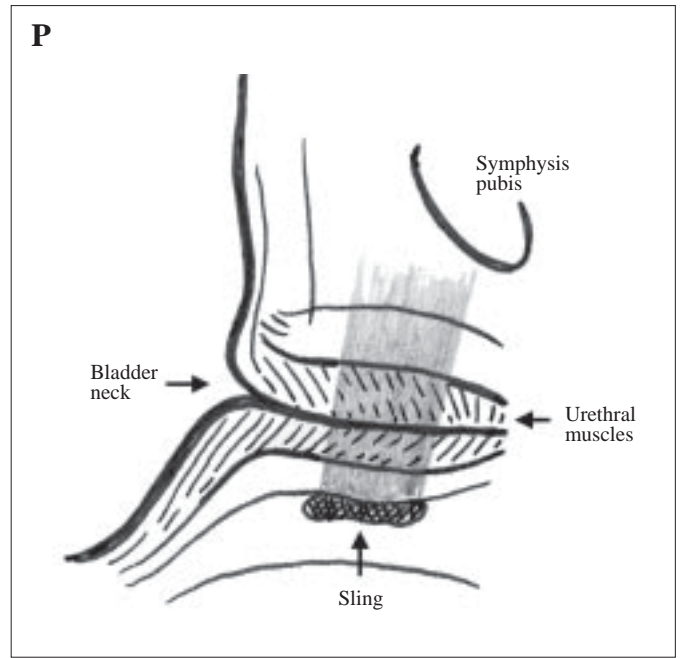
the cystoscope is removed and the patient is asked to make several vigorous coughs to ensure no urine leakage.

(O) The two ends of the sling are tied and sutured with 3-0 silk.

(P) The postoperative transrectal sonography should reveal a good sling position with good suburethral support. A Foley catheter is placed for 1-2 days, and a vaginal gauze roll is placed overnight for compression and hemostasis of the wound. The patient can be allowed to urinate after removal of the Foley catheter.

COMMENTS

This pubovaginal sling procedure is an easy and inexpensive procedure for treatment of urodynamic stress urinary incontinence in women. The operation can be accomplished within 30 minutes. The sling can be fashioned from surgical mesh made of polypropylene that has large mesh pores (PROLENE, Johnson & Johnson, USA). A high, durable success rate can be obtained using this technique [3,4]. In



some very obese women urinary incontinence might occur immediately after removal of the Foley catheter. It is very easy to strengthen the sling by tying the two sling ends, as in (O) above, under local anesthesia at the bedside. When large postvoid residual or urinary retention occurs after surgery, it is also very easy to find the knot of the sling ends and release the sling tension by cutting the knot. However, one must make accurate diagnosis of the postoperative condition before adjusting the sling tension. The sling tension is easy to adjust within the first week after surgery without creating new problems or complications.

REFERENCES

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台灣尿失禁防治協會

「失禁防治指導員」證書授予辦法

- 一、台灣尿失禁防治協會（以下簡稱本會）為推動失禁防治相關活動，培育醫事人員有關失禁防治相關學理與技能，使其具備專門知識及技能以利失禁防治之推展，特制訂本辦法並發給相關證書以資證明。
- 二、向本會申請「失禁防治指導員」證書者必須具備以下之條件：
 - (一)具中華民國醫事人員資格。
 - (二)曾從事婦產、泌尿、復健、失禁防治推展相關之醫療或保健業務工作一年以上。
 - (三)曾於二年內參加本會舉辦之「失禁防治指導員」研習班第一階段及第二階段之所有課程，並經筆試合格者。
 - (四)筆試合格六個月內參加本會舉辦之失禁防治指導員見習三天，並繳交案例分析貳篇。
 - (五)見習結束後六個月內再繳交原服務單位之案例分析貳篇，經專家審核通過。
- 三、凡具有本會授予之「失禁防治指導員」證書者，有效期限為六年，六年屆滿必需完成本會所舉辦之繼續教育積分六十分或於六年內發表研究論文乙篇或病例報告貳篇刊於國內外醫學雜誌，始可辦理展延一次六年。
- 四、繼續教育積分認定標準：出席本會年會十分、出席本會舉辦之研討會積分依時數計算、擔任本會所舉辦研討會座長或講師十分、投稿國內外醫學雜誌一篇十分。
- 五、本辦法經本會理監事會通過後施行，修改時亦同。