

LONG-TERM FAVOURABLE OUTCOMES OF AUTOLOGOUS PUBOVAGINAL SHORT SLING FOR THE TREATMENT OF FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

To assess the long-term outcomes of autologous pubovaginal short sling (APSS) for the treatment of female stress urinary incontinence (SUI).

Study design, materials and methods

From 2001 to 2013, 98 women with SUI underwent APSS in our institution. APSS is a modified pubovaginal sling technique using a 3 cm-long section of short rectus fascia with a simple procedure involving no retropubic manipulation. The surgical procedure of APSS was previously reported (1). The patients' age, laboratory findings, operative findings, hospital stay, early postoperative comorbidity, and early outcome were collected from their medical records. Of the 98 women with APSS, 83 contacted and postal questionnaires, including the International Consultation on Incontinence Questionnaire-Short Form (ICIQ-SF) and the King's Health Questionnaire (KHQ), were sent to their residences. Long-term subjective success and durability were evaluated.

Results

Median age at APSS was 63.5 (range 19–82). Median operative time and hospital stay were 84 (range 40–205) minutes and 10 (range 4–50) days. Three-month postoperative outcome evaluated by one-hour pad test was 88 dry (90%), 4 improved (4%) and 6 ineffective (6%). Perioperative comorbidity involved 1 pulmonary embolism (1%), 8 cases of transient urinary retention (8%), and 2 urinary tract infections (2%). Seven (7%) women needed re-operations for persistent SUI within 1 year postoperatively, including 6 APSSs, one transobturator synthetic tape, and 2 collagen injections (there is some overlapping). Of the 83 women contacted, 39 (47%) returned the postal questionnaires. At a median follow-up of 90 months (range 28–175), the median age at the questionnaire was 73 (29–95) and subjective success (dry or a small amount leakage) rate was 77% (30/39). The total ICIQ-SF score was significantly improved from 10.3 preoperatively to 6.3 postoperatively ($p = 0.002$). The KHQ scores also significantly improved in 3 components out of 8 components, including "incontinence impact" (from 48.1 to 30.8, $p = 0.040$), "physical limitations" (from 73.3 to 27.3, $p < 0.001$) and "emotions" (from 50.6 to 30.1, $p = 0.049$). During long-term follow-up, one (3%) had transvaginal synthetic tape because of recurrent SUI 8 years after the APSS surgery and 5 (13%) had begun to take anticholinergics because of urgency, but there were no other late onset comorbidities.

Interpretation of results

Long-term subjective outcome and durability of APSS was favourable. Serious complications were rare and late complications were few.

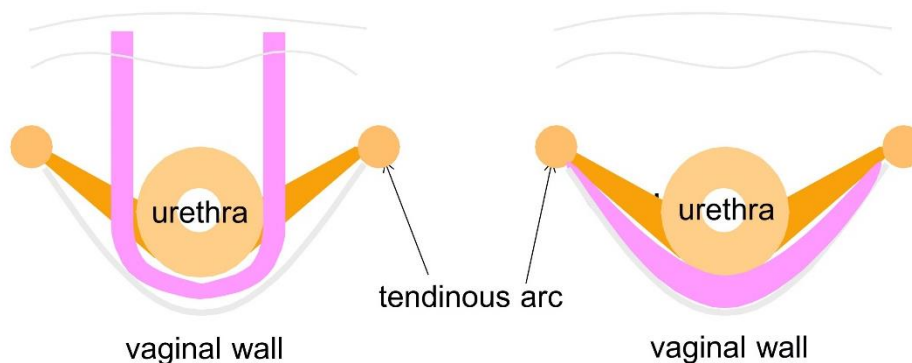
Concluding message

APSS could be an option for the treatment of female SUI, although it requires a small abdominal incision and a hospital stay.

Key words: Stress Urinary Incontinence; Surgery; Female, Questionnaire

Figure 1

autologous pubovaginal sling autologous pubovaginal short sling (APSS, Yamada procedure)



References

1. Yamada T, et al. New hammock hypothesis-based method for the treatment of stress urinary incontinence: the first 29 urethral supports with a small fascial patch. Int J Urol. 2005;12:806-9.

Disclosures

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