Management and Outcomes of Female Stress Urinary Incontinence Surgery at a UK District General Hospital

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Hypothesis / aims of study

Prior to April 2022 only bulkamid under general anaesthetic (GA) was offered for female patients who wished surgical management of stress urinary incontinence (SUI) at South Tyneside and Sunderland NHS Foundation Trust (STSFT), UK. With the introduction of two new Urogynaecology consultants we wished to look at the management and outcomes of stress urinary incontinence surgery at STSFT.

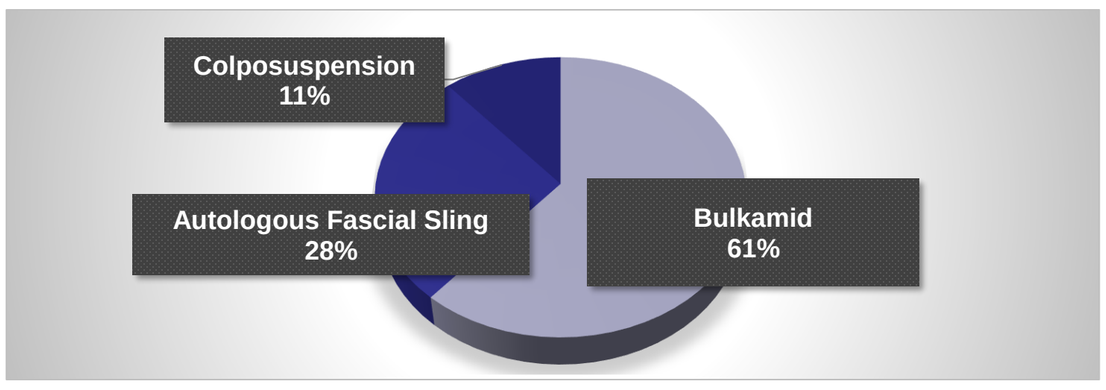
Study design, materials and methods

This was a retrospective audit of 62 patients who underwent SUI surgery over 2 years between June 2022 and June 2024. We assessed compliance towards NICE guidelines[1] by reviewing electronic case notes including clinic appointments, physiotherapy review, urodynamic studies, MDT discussion, operation notes, surgical admission and post operative clinic review to assess initial assessments and treatments, surgical care, cure rate and post operative complications (post op pain, urinary tract infections (UTI), change in overactive bladder symptoms (OAB) and voiding dysfunction).

Results

62 patients had SUI surgery over 2 years;

- 38 Bulkamid
- 17 autologous fascial sling.
- 7 colposuspension



- 54/62 were **primary procedures**.
- 8/62 were **repeat** SUI surgery
  - 1 previous TVT who received bulkamid
  - 7 had previous bulkamid
    - 5/7 opted for repeat bulkamid,
    - 2/7 had a secondary sling following bulkamid.

Compliance with NICE guideline

- 62/62 completed initial management with physiotherapy/incontinence nurse
- 62/62 urodynamics confirmed SUI
- 62/62 discussed in MDT

Admission

- All bulkamid (38/38) were **day cases**
  - 37/38 under **Local Anaesthesia (LA)**
  - 1 requested GA as previous seizure with LA
- All colposuspension/sling patients had one night admission only under GA

Immediate complications

- 2/62 bladder injury with sling requiring delayed Trial Without Catheter (TWOC)

References
1.Urinary incontinence and pelvic organ prolapse in women: management. NICE guideline [NG123]Published: 02 April 2019

Voiding dysfunction

- Bulkamid; 1 required double voiding, 1/38 required ISC < 6 weeks, ISC performed x 2 weekly only and minimal residual.
- Sling; 3/17 failed initial TWOC, 1 required ISC when drinking alcohol <6/12.
- Colposuspension; 2/7 1 failed 1st TWOC, 1 required ISC but for <1/12 and only when drank alcohol.

Return to hospital

- 11/62 returned to hospital for procedure related event 30 days post operatively
  - 7/62 for TWOC
  - 1 for constipation requiring enema
  - 1 wound infection post colposuspension and 2 wound infections post sling.
- UTI; 2/17 post sling, 1/7 post colposuspension, 2/38 post bulkamid (1/11 no antibiotic prophylaxis, 1/27 antibiotic prophylaxis)
- 0/62 were admitted to hospital for procedure related event.

Pain

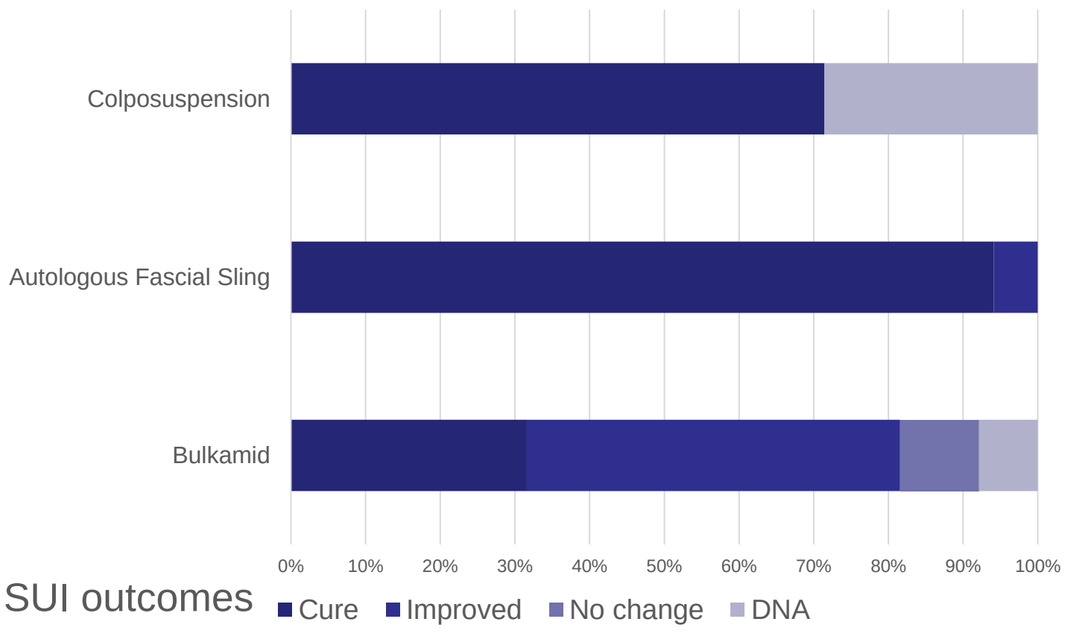
- 1/35 bulkamid mild urethral pain 5/12 post op (await further FU)
- 1/17 sling abdominal pain; found to have an inguinal hernia (not incisional), history of previous abdominoplasty. Inguinal hernia repair 10/12 post sling.
- 0/5 colposuspension.

OAB

- Bulkamid; 5/35 OAB same (1 wished to consider SNS), 5/35 OAB >before (1/35 received botox, 1 anticholinergics, 1 bladder retraining, 2 not bothersome)
- Sling; 3 OAB < before, 2 >before commencing anticholinergics with response, 1 new OAB mild commenced bladder retraining.
- Colposuspension; 4/5 OAB < before, 1/5 nil

Cure rates

- **Of all those reviewed 53/57 (93%) have improved/cured SUI**
- **Bulkamid (3 DNA FU)**
  - **12/35 cured** (1 wished repeat as symptoms returned 4/12 after initial cure)
  - **19/35 improved (88% improved/cured rate)** (1 had top up after initial improvement providing further improvement)
  - **4/35 no change;** 1 awaiting autologous fascial sling, 1 had repeat bulkamid with improvement, 1 awaiting top up of bulkamid, 1 referred for physio and aiming to reduce BMI before considering repeat bulkamid
- **Sling; 16/17 cured, 1/17 improved (100% improved/cured)**
- **Colposuspension; 5/5 cured (100% cured) (2 DNA FU)**



Conclusion

We can use this data to better inform our women of our local management and outcomes of SUI surgery, that we comply with national guidelines and can offer all 3 surgical procedures for SUI, including bulkamid under LA. Preliminary data including cure rates look excellent (93% improved/cured) with minimal complications. The BSUG mentorship scheme has been a helpful means for us to offer colposuspensions and is recommended for other new consultants considering introducing new surgical procedures. Our success with bulkamid means we are now due to open a Urogynaecology treatment clinic in October 2024 to offer bulkamid under LA in an outpatient setting.