

BURCH COLPOSUSPENSION – AN ACCEPTABLE ALTERNATIVE TO SYNTHETIC VAGINAL TAPE?

Hypothesis / aims of study

Burch colposuspension (BC) is a treatment for women with stress urinary incontinence (SUI). With the advent of synthetic vaginal tapes, its popularity has waned within the UK with both urology and urogynaecology trainees having little experience of BC. However, with 2 Food & Drug Administration warnings on the use of synthetic mesh in the vagina and a small but significant mesh erosion/migration rate being reported, there is an increasing need to consider and provide guidance on alternative procedures for treating stress urinary incontinence

Study design, materials and methods

A retrospective, single-centre case series of primary and secondary BC complications were analysed. Between January 2010 and December 2012, 95 Burch Colposuspensions were performed. 9 patients had a concomitant operation at the time of the BC, and were discounted from the analysis. The age range of the 86 analysed patients was 23 – 87 with a median age of 54 years.

Results

- 100% of patients underwent pre-operative urodynamic analysis, with 90% of these having pure stress incontinence.
- Mean operating time 46 minutes, median 43 minutes.
- Median length of stay 4 days
- 70% of patients no reported complications.
- 30% had complications
 - 7.0% *de novo* urge incontinence (UUI)
 - 2.4% with mixed incontinence with an increase in UUI
 - 7.0% wound infection.
 - 3.5% small skin dehiscence
 - 1.2% haematoma/skin dehiscence requiring evacuation
 - 5.8% urinary tract infection (UTI).
 - 1.2% chronic wound pain.
 - 2.4% unable to void short term
 - 1.2% unable to void long term
 - No blood transfusions
- Post-operative pain
 - 10.5% pain-free/no analgesia
 - 68.5% simple analgesia
 - 21% mild opioid

Interpretation of results

In this series, we have demonstrated that Burch Colposuspension is relatively quick to undertake and well tolerated with the majority of patients needing only simple analgesia post operatively. We have also shown comparable post-op *de novo* UUI and UTI comparable to both synthetic vaginal tapes and historical BC series.

A 4 day hospital stay is acceptable but considerably longer than synthetic vaginal mesh surgery but we feel we could further reduce this to 3 days with a change in our scheduling. The wound complication rate is comparable to other BC series but higher than expected for vaginal mesh surgery.

Though not formally assessed, 62 women were happy with either complete/significant resolution of SUI at 3 months post-op equating to a subjective success rate of 82% as 10 patients were lost to follow-up. This is comparable to both synthetic vaginal tape data and older BC series.

BC has a longer hospital stay and increased risk of immediate wound complications but no risk of long term groin pain or erosion/mesh shrinkage associated with vaginal tape surgery and we believe that this series shows that BC is still an acceptable primary operation in selected women with SUI.

Concluding message

Burch Colposuspension should be included in pre-operative counselling when discussing surgical treatments for Stress Urinary Incontinence, especially given recent controversies and litigation relating to synthetic vaginal mesh surgery, and this contemporary series could aid the counselling process.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Retrospective study of complications of standard procedure so no ethics committee approval needed. **Helsinki:** Yes **Informed Consent:** No