INAHTA Briefs

Issue 2001/09

Title **A systematic review of tension-free urethropexy for stress urinary incontinence: intravaginal slingplasty and the tension-free vaginal tape procedures**

Agency ASERNIP-S, Australian Safety and Efficacy Register of New Interventional Procedures - Surgical
PO Box 553, Stepney SA 5069 Australia; Tel: +61 8 8363 7513 Fax: +61 8 8362 2077;
http://www.surgeons.org/asernip-s/

Reference ASERNIP-S Report No. 11, ISBN 0 909844 40 2;
www.surgeons.org/open/asernip-s/publications.htm

Aim

To assess the safety and efficacy of tension-free urethropexy for treating stress urinary incontinence in women in comparison to the two "gold standard" procedures - the Burch colposuspension and the pubovaginal sling.

Conclusions and results

Low-level evidence suggested that tension-free urethropexy may have possible benefits with respect to post-operative voiding dysfunction, operating time, post-operative catheterization, resumption of voiding, and convalescence when compared to the traditional procedures. Short and medium term objective cure rates for stress incontinence were similar for the new and traditional procedures. There were no available contrasting data on long term objective cure rates.

Recommendations

It was recommended that a randomized controlled trial should be conducted to assess the safety and efficacy of the two-stage intravaginal slingplasty (IVS). Ideally, the two-stage IVS should be compared to the tension-free vaginal tape (TVT) procedure, along with the Burch colposuspension as the "gold standard".

For the TVT procedure, it was recommended that a randomized controlled trial be conducted, with the Burch colposuspension as the control arm. Such a trial is currently underway in the United Kingdom and full publication of its short and long-term results are awaited with interest.

Methods

A systematic review was conducted, with qualitative synthesis of information. Medline, Current Contents, Embase, and the Cochrane Library were searched for all studies on tension-free urethropexy up until August 2000. Recent grey literature was also canvassed. Independent assessment by two reviewers identified 17 peer-reviewed studies that met the specified inclusion criteria - all were pre-test/post-test case series and thus the lowest level of evidence. Data were extracted from these studies on specified safety and efficacy outcomes using tables developed *a priori,* and descriptive statistics were calculated. Critical appraisal was undertaken using a predetermined checklist. Data from 11 foreign language and grey literature abstracts were extracted, but could not be used to inform the safety and efficacy assessment. Due to the lack of comparative studies, high level evidence on the safety and efficacy of the "gold standard" procedures was identified to provide benchmark information.

Further research/reviews required

This review will be reappraised by ASERNIP-S in 12 months. Further research is suggested in the Recommendations presented above. Specifics regarding further research are also provided in the review.

Written by Merlin T et al, ASERNIP-S, Australia