



Review

Sexual function after urinary incontinence surgery



G. Thiagamorthy*, S. Srikrishna, L. Cardozo

King's College Hospital, Denmark Hill, London SE5 9RS, United Kingdom

ARTICLE INFO

Article history:

Received 2 March 2015

Accepted 3 March 2015

Keywords:

Stress

Urgency

Urinary incontinence

Sexual function

Dysfunction

ABSTRACT

Urinary incontinence (UI) affects between 42 and 71% of women. Sexual dysfunction is prevalent in the general population, but in women with UI, the prevalence is greater (42–56%). This review assesses the effects of urinary continence surgery on the sexual function of women with UI.

Stress UI is surgically mostly managed via Burch colposuspension or a mid-urethral sling. These operations are as effective as each other with regards to maintaining or improving in sexual function. One of the main risks of these operations are that urgency UI (UUI) may be exacerbated or arise de novo and this has been shown to decrease sexual function.

Severe refractory UUI requires complex surgery, such as percutaneous sacral nerve stimulation (SNS) then augmentation cystoplasty or urinary diversion. SNS may improve sexual function by direct action on the pudendal nerve as well as improving incontinence. Urinary diversion and augmentation cystoplasty are procedures of last resort in women who are refractory to all other UUI treatments. The majority of women report no change or improvement in sexual function as the urinary diversion negates the requirement for incontinence pads and indwelling catheters. Deteriorated sexual function has also been described in up to 37.5%. Thirty percent of women undergoing urinary diversion would have liked more 'sexological' counselling.

Conclusion: The majority of women enjoy maintained or improved sexual function after surgical treatment of UI. It is important to ensure women have appropriate pre-operative assessment and counselling so they may be advised of the risks of failed surgery including deteriorated sexual function.

© 2015 Elsevier Ireland Ltd. All rights reserved.

Contents

1. Surgical management of SUI	244
1.1. Mid-urethral slings (MUS)	244
1.2. Retropubic vs transobturator	244
1.3. TOT vs TVT-O	245
1.4. Burch colposuspension	245
1.5. Peri-urethral bulking agents	245
1.6. Artificial urethral sphincter	245
2. Surgical management of UUI	245
2.1. Sacral nerve stimulation (SNS)	245
2.2. Urinary diversion and augmentation cystoplasty	246
3. Discussion and conclusion	246
Contributors	246
Competing interest	246
Funding	246
Provenance and peer review	246
Brief summary	246
References	246

* Corresponding author. Tel.: +44 20 3299 3568; fax: +44 20 3299 3201.

E-mail address: Gans.t@nhs.net (G. Thiagamorthy).

Table 1
Questionnaires to assess sexual function in Urogynaecology [15].

Questionnaire	Items	Domains
Bristol Female Lower Urinary Tract Symptoms (BFLUTS) now known as		Incontinence
International Consultation on Incontinence Modular Questionnaire Female Lower Urinary Tract Symptoms (ICIQ-FLUTS)		Storage symptoms
Short Form	14	Voiding symptoms
Long Form	33	Sexual Function
Female Sexual Function Index (FSFI)	19	Quality of life
		Arousal and desire
		Lubrication
		Orgasm
		Satisfaction
		Pain/Discomfort
International Index of Erectile Function (IIEF)	15	Erectile function
		Orgasm
		Sexual desire
		Intercourse Satisfaction
		Overall Satisfaction
Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire (PISQ-12)	12	Sexual activity (desire, orgasm, satisfaction, pain)
		Impact of incontinence on sexual activity
		Impact of partner related/erectile dysfunction on sexual activity

The latest International Consultation on Incontinence (ICI) defined urinary incontinence (UI) as the complaint of any involuntary loss of urine [1]. UI can cause embarrassment, unemployment, depression and social isolation [2,3] and its incidence varies between 42 and 71% [4,5]. Up to 25% of women attending a urogynaecological clinic may suffer with coital incontinence, two thirds suffering leakage on penetration and one third on orgasm. In the group who leaked on penetration, 70% were shown to have stress urinary incontinence (SUI) and 4% had urinary urgency incontinence (UUI). In the group who experienced incontinence on orgasm, 42% had SUI and 35% had UUI [6].

Sexual dysfunction is prevalent in the general population, affecting 27–30% without urinary urgency but in those with UI, the prevalence was significantly greater at 42–56% [7–12]. Thirty five percent of women without urinary urgency are not sexually active but this increases to nearly 50% in women with UUI [7]. Severity of UI may play a part in this decision as the women who avoid sexual activity have higher ‘incontinence pad weights’ (55.3 g vs 38.2 g) and urgency scores than those who do not [13]. UI clearly has a huge effect on a woman’s quality of life and as such will also impact on her family [5]. Male partners of women with UI have been seen to have statistically significantly diminished overall sexual function with less satisfaction, lower frequency of intercourse and more erectile dysfunction compared with men in relationships women without UI [14].

The aim of this review is to assess the effects of urinary continence surgery on the sexual function of women with UI. This review will assist clinicians in comprehensively advising patients due to undergo surgery for UI of the possible implications on their sexual function. With recent emphasis on functional outcome measures in urogynaecology there have been many quality of life questionnaires developed particularly focussing on sexual function. A detailed discussion regarding these is beyond the scope of this review but some examples can be found in Table 1 [15].

One might hypothesise that anything which improves UI would improve sexual function, the concern however, is that the surgery itself may worsen sexual function. This may be secondary to effects on the neurovasculature of the vagina and the clitoris, affecting sensation, lubrication and orgasm. There are also concerns with

regards to altering the pliability of the vagina secondary to the synthetic tape which may lead to dyspareunia or even pain to the partner, ‘hispareunia’ [16].

1. Surgical management of SUI

SUI is surgically mostly managed via the insertion of a mid-urethral sling (MUS) or a Burch colposuspension. A meta-analysis of 11 studies reported on coital incontinence after either of these two operations and found that there was a significant improvement after SUI surgery (OR 0.12; 95% CI 0.08, 0.17) [17].

1.1. Mid-urethral slings (MUS)

MUS are tension free transvaginal tapes which support the mid-urethra and reduce SUI [18]. Since the introduction of the first MUS, the ‘TVT’ in 1995, MUS have become the most popular means of surgically treating SUI and the TVT has a 90% objective success rate at 17 years [19]. MUS can be in the form of a retropubic (TVT) or a transobturator tapes. Transobturator tapes can be inserted either ‘outside-in’ (TOT) or ‘inside-out’ (TVT-O).

The concern with any of the MUS are that they may irritate the bladder and whilst attempting to treat the SUI, result in urgency and UUI. In addition, women with high urinary urgency scores have also been shown to demonstrate poorer post-operative sexual function [20]. There is also the risk of dyspareunia secondary to the sensation of tape under the vaginal epithelium or worse, a vaginal erosion of the tape through the epithelium [21].

A systematic review and meta-analysis of 18 studies assessed 1578 women who underwent SUI surgery [17]. When the group who had undergone MUS was analysed, 56.7% of women had no change in sexual function, 33.9% enjoyed improvement and 9.4% felt things had deteriorated. The authors highlighted that with MUS insertion the chances of improved sexual function were more than three times the likelihood of a deterioration of sexual function.

The effects of MUS on the woman’s partner’s sexual function has also been assessed [22]. Twenty-eight couples where the woman was due to undergo TOT were asked to complete sexual function questionnaires. The women completed the Female Sexual Function Index (FSFI) and the men completed the International Index of Erectile Function (IIEF-5) questionnaires at baseline and 3 months after surgery. The improvement in both the FSFI and IIEF-5 scores were statistically significant. The authors postulated the improvement in the male sexual function may have been due to the narrowing of the vagina, cessation of coital incontinence, and improvement in the female partner’s sexual interest and function.

1.2. Retropubic vs transobturator

Since the transobturator tape was first described in 2001 [23], there has been a long-standing debate of which MUS should be used as routine and also in specific clinical scenarios. To play a part in making this decision, the possible effects of the TVT and TOT on sexual function have been analysed. Colour flow Doppler ultrasonography was used to assess clitoral blood flow after TVT or TOT and found that in the TVT group, the mean pulsatility index and mean peak systolic velocity were significantly lower, whilst the mean resistance index was significantly greater compared with the pre-treatment baseline values ($p < 0.05$). In the TOT group, the Doppler measurements were similar to that obtained at baseline. This in theory may imply that the women who undergo TVT insertion might have decreased clitoral sensitivity and possibly poorer sexual function than those with the TOT [24]. This was however, not found at meta-analysis of 4 studies comparing TVT to TOT with 246 women in the TVT arm and 290 in the latter [17]. The improvement in sexual function in both arms was very

Download English Version:

<https://daneshyari.com/en/article/10743168>

Download Persian Version:

<https://daneshyari.com/article/10743168>

[Daneshyari.com](https://daneshyari.com)