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SURGERY FOR RECURRENT STRESS URINARY INCONTINENCE: SURGEONS' AND WOMEN'S VIEWS. THE THREE S STUDY

Hypothesis / aims of study

Primary incontinence surgery is highly effective, but a small proportion of women suffer treatment failure, or later recurrence of symptoms. At present, there are no published data to guide decision making about treatment choices for surgeons or women, when faced with recurrent or persistent stress urinary incontinence (SUI) after a primary mid-urethral tape (MUT) insertion. Potential options for treatment include further conservative treatment with pelvic floor muscle training, or secondary surgery which may be repeat midurethral tape, bladder neck injections, colposuspension or fascial sling. In 2009 the James Lind Alliance priority setting partnership identified treatment of recurrent SUI as one of the top 10 research priorities[1] and a systematic review[2] failed to identify any relevant randomised trials. This study used mixed methods to explore the views and preferences of UK surgeons and women who were suffering from recurrent SUI about treatment choices and preferences regarding the management of failed primary continence surgery. The intention was to collect data to support and inform the design of a future randomised controlled trial.

Study design, materials and methods

An online survey was distributed by email to all members of the British Society of Urogynaecology and the Section for Female Urology of the British Society of Urological Surgeons. The survey asked about current practice and treatments offered for recurrent SUI and presented alternative treatment options in the form of Surgical Equipoise Scales (SES)[3]. Two reminders were sent, each two weeks apart. Interested surgeons were invited to take part in follow-up semi-structured interview by telephone to explore their views in more detail. Women who had recently undergone secondary surgery, or who were on the waiting list, were invited to participate in a semi-structured interview by telephone. Invitations were sent by post or made face to face during consultation. Interested women returned a reply slip and consent form to the research team who then arranged the interview. All interviews (surgeon's and women) were recorded, transcribed and analysed using the constant comparative method to identify themes. Survey data were analysed using basic descriptive statistics and responses compared using chi square.

Results

673 survey replies were returned (38% response). More subspecialists (90% urogynaecology, 91.5% urology) performed repeat surgery than those with a special interest (64% gynaecology, 42.4% urology) ($p<0.001$). There were clear differences in procedures considered by subspecialisation and core discipline (Table 1). Pelvic floor muscle exercise (PFE) and repeat midurethral tape (MUT) surgery were more popular among gynaecologists. Single incision slings were not commonly considered. SES comparisons revealed wide variation in preferences and conviction between treatment options. For some interventions (PFE or bladder neck injection (BNI)) there were small variations between speciality groups (Table 2, row 1)). Comparisons involving colposuspension or fascial sling were dominated by these procedures with variations between speciality (Table 2, rows 2 & 3). Repeat MUT dominated irrespective of speciality or training (Table 2, row 4).

20 surgeons were interviewed. Discussion of current practice supported the variation observed from the survey responses. Treatment preferences were complex and influenced by a range of factors including: how/why the first procedure had failed; time since the first procedure; patient-related factors such as weight or other co-morbidities; patient preferences for treatment; severity of the incontinence; and what urodynamics and other investigations showed. Surgeons reported involving patients in decision-making to varying degrees, those doing so less frequently tended to rely on their own experience and/or believed patients wanted to be advised by them. The overall preference for a repeat tape observed in the survey was explained by this being: easier; more readily available; something they had more experience/expertise in; a way to avoid more invasive options. There was general agreement that this is an important research topic as evidence is needed, but views differed on what would be appropriate comparisons in an RCT and how this could be best designed.

11 patients were interviewed. Women were waiting for or had recently had a range of procedures including colposuspension, TVT, TOT, and bulking injections. Most had considered and discussed other options before deciding on their next treatment, including with doctors and family members. In reality though many felt their options were limited given their past treatment experiences and personal preferences (such as to avoid a general anaesthetic). Many were sure that they did not want certain treatments because they had already tried them and they had failed. With regard to a future RCT, most did not think randomisation would be acceptable, largely because of the chance of being randomised to repeat a procedure which had already failed for them.

Table 1	n (%)				
	Urogynaecology Subspecialist	Urology subspecialist	Urogynaecology "interest"	Urology "interest"	p
"Would you offer…"					
pelvic floor exercises	92 (58.3)	13 (31.7)	21 (63.4)	6 (42.9)	0.01
bladder neck injection	16 (48.5)	15 (39.5)	31 (41.3)	4 (30.8)	ns
single incision tape	4 (12.9)	2 (5.6)	11 (15.3)	3 (25)	ns
colposuspension	15 (48.4)	18 (50)	25 (34.7)	8 (66.7)	ns
repeat tape	22 (71)	8 (22.2)	55 (76.4)	5 (41.7)	< 0.001

Table 2. Examples of SES responses in favour of choice % in brackets

	Urogynaecology Subspecialist	Urology subspecialist	Urogynaecology "interest"	Urology "interest"	p
BNI vs PFE (injection)	10 (35.7)	18 (56.3)	22 (28.9)	4 (44.4)	0.01
Colposuspension vs PFE (colposuspension)	20 (74.1)	21 (70.0)	36 (56.3)	9 (100)	0.02
Fascial sling vs PFE (Fascial sling)	14 (50.0)	25 (78.1)	23 (30.3)	9 (100)	<0.001
Repeat MUT vs BNI (repeat MUT)	19 (70.4)	16 (66.7)	47 (66.2)	6 (66.7)	ns

Interpretation of results

As might be anticipated, there was wide variation about treatments offered, and preferences for different surgical comparsions among surgeons, demonstrating significant lack of consensus or equipoise. Surgeon interviews confirmed these findings, but also highlighted that clinicians recognised the importance of the research question. Some interesting observations regarding the relationship with training and choice of intervention were noted. From the patients, it was clear that patient choice and preference had a dominating influence on decision making, suggesting that standard randomisation would not be possible in any future trial.

Concluding message

A wide range of opinions about management of recurrent SUI exists. Conservative or minimally invasive options are regarded equally, but repeat surgery choices are dominated by repeat MUT, which probably reflects surgical competency. The design of any future intervention trial will not be straightforward, and alternative approaches to randomisation may be necessary.

References

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