434: Examining Patient Satisfaction in the Application of Periurethral Bulking Agent for Stress Urinary Incontinence Treatment in Women under Local Anesthesia

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Hypothesis / aims of study

Stress urinary incontinence (SUI) is a prevalent and often debilitating condition affecting many women. Surgical interventions offer a range of treatment options for SUI, from minimally invasive procedures to more extensive surgeries. In the United Kingdom and Ireland, periurethral bulking agent injection has gained popularity as a treatment option, particularly following the suspension of mesh Midurethral Slings (MUS) in 2018. This procedure can be performed under local or general anesthesia, depending on the surgeon's experience and patient preferences. Recent practice has seen an increase in the use of local anesthesia for periurethral bulking agent injections, resulting in reduced operating time and improved utilization of operating theatre resources. Moreover, patient outcomes have shown a promising cure rate, reaching up to 70%. This study aims to evaluate patient satisfaction with periurethral bulking agent injection procedures under local anaesthetic using an approved questionnaire.

Purpose: The primary objective of this study is to assess patient satisfaction during cystoscopy and periurethral bulking agent injections performed under local anesthesia.

Figure 1: Surgical Satisfaction Questionnaire (SSQ-8)

St. Michael's Hospital PELVIC FLOOR CENTRE

Surgical satisfaction questionnaire (SSQ-8)

Instructions
Below are a list of questions about your satisfaction with your surgery. All information is strictly confidential. Please mark the box that best answers the question for you.

	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied
How satisfied are you with how your pain was controlled in the hospital after surgery?					
How satisfied are you with how your pain was controlled when you returned home after surgery?					
How satisfied are you with the amount of time it took for you to return to your daily activities, for example housework or social activities outside the home?					
How satisfied are you with the amount of time it took for you to return to work?					
How satisfied are you with the amount of time it took for you to return to your normal exercise routine?					
How satisfied are you with the results for your surgery?					

	Yes	Maybe	Unsure	Do not think so	No
Looking back, if you "had to do it all over again" would you have the surgery again?					
Would you recommend this surgery to someone else?					

Study design, materials and methods

Methods: Patient satisfaction was assessed among individuals who underwent periurethral bulking agent injections under local anesthesia, all performed by a single practitioner in 2023 at The National Maternity Hospital and St. Vincents Private Hospital in Dublin. Prior to the procedure, patients received 600mg of ibuprofen and 1000mg of paracetamol in the morning, in accordance with established protocols . Additionally, local intraurethral lidocaine gel was applied at the time of the procedure to minimize discomfort(Petal et al., 2007). During the procedure, patients received a total of 5ml of periurethral injections containing lidocaine 1% and epinephrine, following the standard practice for local anesthesia administration.

To assess patient satisfaction, we employed The Surgical Satisfaction Questionnaire (SSQ-8) (O'leary et al., 2019), a validated tool commonly used to gauge patient experiences following surgical procedures. The SSQ-8 was administered to patients via telephone interviews conducted at various intervals, ranging from 6 weeks to 6 months post-procedure. These intervals allowed for a comprehensive evaluation of patient satisfaction over time.

Results and interpretation

The study involved 39 participants, with an average age of 50 (range: 34-78). 54% (n=21) were receiving periurethral bulking agents for the first time, while 46% (n=18) were undergoing the procedure for the second time.

The SSQ-8 questionnaire comprises eight questions designed to assess various aspects of patient satisfaction with the surgery. (see Figure 1). The total scores were computed, with a maximum satisfaction score of 40. Notably, 92% of patients (36 out of 39) reported SSQ-8 scores exceeding 30, indicating over 75% satisfaction. The highest recorded score was 40, reflecting 100% satisfaction, while the lowest was 28, signifying 70% satisfaction.

Patients also provided pain scores during and immediately after the surgery. During the procedure, 46% (n=18) reported a pain score of 5 or higher, with the lowest pain score recorded as 0 and the highest as 9. Pain scores immediately following the procedure were notably lower, with all patients reporting scores in the range of 0 to 3.

Interestingly, among those who reported a pain score greater than 5, 78% (14/18) expressed willingness to undergo the procedure under local anesthesia again.

When questioned about the percentage improvement in their SUI, 54% of participants (21/39) reported more than a 70% improvement

Conclusions

A retrospective comprehensive and validated questionnaire, which is the first patient satisfaction study regarding periurethral bulking agents performed under local anesthesia recorded in the existing literature.

While a significant number of patients reported considerable pain during the procedure, their post-procedural pain was, in contrast, minimal or absent. Despite the discomfort endured during the procedure, patients assigned high satisfaction scores and expressed their inclination to choose local anesthesia for this procedure in the future.

The protracted waiting times for urogynecological services designed to alleviate Stress Urinary Incontinence (SUI) symptoms have been identified as a significant factor impacting the quality of life for women. This study has highlighted consistently positive outcomes achieved through the periurethral bulking agent procedure under local anesthesia, along with improved patient turnover. These observations raise important considerations regarding the continued application of this approach in the management of stress urinary incontinence.

Our study suggests that periurethral bulking agents under local anesthesia are generally well-accepted by women facing the challenges of stress urinary incontinence. Further research with larger and more diverse patient populations will be instrumental in solidifying these findings and broadening the scope of their applicability. The positive implications for both patient satisfaction and access to treatment should not be overlooked, potentially enhancing the overall quality of care provided to women experiencing SUI.

References

1. O'Leary BD, Agnew GJ, Fitzpatrick M, Hanly AM. Patient satisfaction with a multidisciplinary colorectal and urogynaecology service. Ir J Med Sci. 2019 Nov;188(4):1275-1278. doi: 10.1007/s11845-019-02010-x. Epub 2019 Apr 3. PMID: 30945112.
2. Patel AR, Jones JS, Babineau D. Lidocaine 2% gel versus plain lubricating gel for pain reduction during flexible cystoscopy: a meta-analysis of prospective, randomized, controlled trials. J Urol. 2008 Mar;179(3):986-90. doi: 10.1016/j.juro.2007.10.065. Ep.
3. Cerruto MA, Zattoni F. Bulking agents: anesthesia techniques. Urologia. 2009 Jan-Mar;76(1):45-8. PMID: 21086329.