

OUTCOMES OF TRANSABDOMINAL AND TRANSVAGINAL BLADDER NECK CLOSURE

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Introduction and Objectives

Bladder Neck Closure (BNC) is a rarely performed procedure for intractable urinary incontinence. Two main approaches, transabdominal and transvaginal, are described. In this study, we assessed the outcomes of these two different techniques.

Material and Methods

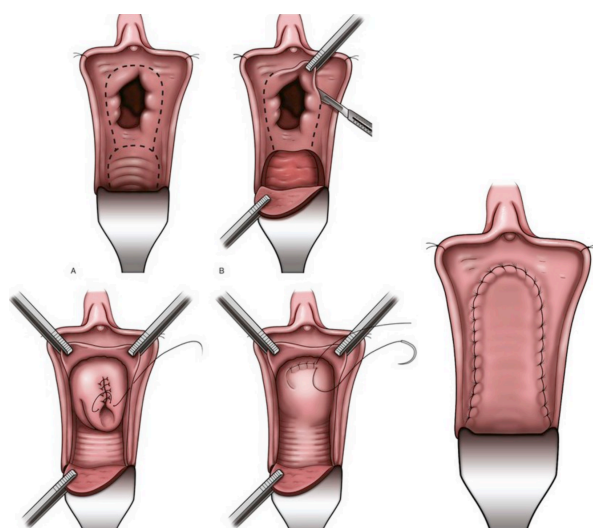
We reviewed the outcomes of 25 consecutive patients who had BNC performed in one unit for intractable urinary incontinence. Data assessed were patient demographics, underlying diagnosis, technique of BNC, the use and type of tissue interposition and whether concurrent bladder augmentation or urinary diversion was performed. Statistical analysis was by Chi Squared Test and significance determined as $P < 0.05$.

	Success n (%)	Failure n (%)	Revised n	Success after revision n (%)
Transabdominal	15 (83%)	3 (17%)	2	17 (94%)
Transvaginal	5 (71%)	2 (29%)	2	7 (100%)
Tissue interposition	20 (91%)	2 (9%)	2	
No tissue interposition	0 (0%)	3* (100%)	2	
History of Radiotherapy	2 (33%)	4* (67%)		
No Radiotherapy	18 (95%)	1 (5%)		

*P < 0,05

Results

Results are shown on table 1. 18 Patients had bladder neck closure via a transabdominal approach, and 7 had a vaginal one with a success rate of 83% and 71% respectively at first attempt. In total 4 patients had revision surgery and they were all successful.



Vaginal approach - **A**, An incision is made around the urethral opening to create the vaginal wall flap. **B**, The urethral meatus is dissected free, and the vaginal wall flap is created. **C**, The bladder neck wall musculature is vertically closed in a running fashion after the mucosal layer has a watertight closure. **D**, The final muscular layer is closed in a horizontal fashion and rotated superiorly behind the pubis. **E**, The vaginal epithelium is advanced over the entire defect and closed with a running suture.

Interpretation of results

From our results we can see how the use of tissue interposition correlated with a successful outcome in 91% of patients at first surgical attempt. When a previous history of radiotherapy treatment was present the success rate fell at 33%.

Conclusion

Bladder neck closure is a valid surgical option in patients with intractable urinary incontinence. History of radiotherapy and lack of tissue interposition were significantly associated with failure of BNC whilst route of repair did not.