



When to Remove the Indwelling Catheter after Minimally Invasive Sacrocolpopexy? CARESS (Catheter Removal after Sacrocolpopexy Surgery): A Randomized Controlled Trial

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Introduction: The use of overnight indwelling urinary catheters after minimally invasive pelvic organ prolapse (POP) surgery remains routine practice despite limited evidence to support their use. These catheters do not come without risks, which include increased bacterial counts and higher rates of positive urine cultures. Considering the clinical implications of overnight indwelling urinary catheters (i.e. length of hospital stay), evidence-based recommendations on catheter management would be helpful.

Objective: To determine the best practice guidelines regarding the use of indwelling urethral catheters after minimally invasive sacrocolpopexy.

Materials and Methods: We conducted a multicenter (three sites) randomized controlled trial comparing the removal of catheters immediately after surgery (group one) vs. postoperative day one (group two). The primary outcome was the need for re-catheterization. Secondary outcomes included the number of patients discharged with a catheter, length of hospital stay, number of urinary tract infections (UTI), patient satisfaction/pain scores, and whether patients would use the same treatment again. Data were analyzed using the chi-squared test, Student's t-test and the Mann-Whitney U test.

Results: We included 73 patients, mean age 62.4 ± 10 years, 10% Black. Patients in group one required re-catheterization a median of 1.0 (range 0-3) times vs. 0.0 (range 0-4) times in group two ($p=0.1$). The number of days with a catheter, operative time, and times to leave the operating room and hospital did not differ between the groups. No patients in group one and two patients in group two had a UTI. After dividing the groups based on whether they underwent a transvaginal tape procedure, the results were similar.

Conclusions: We did not observe a difference in the risk of re-catheterization or discharge home with a urinary catheter between the two groups. Adding transvaginal tape to sacrocolpopexy did not affect the risk of re-catheterization. Indwelling catheters may be safely removed immediately after minimally invasive sacrocolpopexy, but a larger sample size is needed to change practice.