

Minimizing Knot Tying with Barbed Sutures in Robotic Sacrocolpopexies

Introduction and Objective: Since their advent, barbed sutures have been applied to an increasing array of surgeries, with proponents claiming that the barbs provide for a more secure closure while decreasing operative times by obviating the need for knot tying. We evaluate the feasibility, safety, and efficacy of using the unidirectional barbed V-Loc suture in robotic sacrocolpopexies and compare it with the standard PDS suture.

Materials and Methods: After obtaining IRB approval, we retrospectively reviewed patients who underwent robotic sacrocolpopexies using either the standard suture or the V-Loc suture over a 13-month period.

Results: A total of 21 consecutive patients were evaluated over a 13-month period, all of whom underwent a robotic sacrocolpopexy. Fourteen women underwent a robotic sacrocolpopexy using the V-Loc suture, while 7 underwent surgery using the standard PDS suture. In the V-Loc group 78.6% underwent a concomitant transobturator tape sling, vs. 85.7% in the standard group. There was 42.9% of the V-Loc group who had a concomitant surgery, compared to 71.4% in the standard group. Average age (V-Loc group: 66.3 years, standard group: 62.6 years) and BMI (V-Loc group: 26.4, standard group: 26.5) were similar between groups. The V-Loc group had a higher percentage of patients with a history of previous prolapse repair (57.1% vs. 14.3% in the standard group) and a lower average POP-Q score (2.2 vs. 2.7 in the standard group). The OR time in the V-Loc group was similar to that of the standard group (267.4 vs. 248.1 minutes), as was EBL (80.0ml vs. 82.9ml). Follow-up time was less for the V-Loc group (6.9 vs 13.6 weeks), and hospital stay and complication rates were similar.

Conclusions: The barbed V-Loc suture can easily be implemented during robotic sacrocolpopexies in a safe and efficacious manner.

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