Can non-absorbable sutures prevent complete vaginal cuff dehiscence?

Louise van der Does
The Center for Innovative GYN Care, USA

Aim: The study aims to compare the risk of complete Vaginal Cuff Dehiscence (VCD) within the first 90 days of hysterectomy using absorbable versus non-absorbable sutures for vaginal cuff closure.

Method: IRB approved, retrospective chart review of patients undergoing laparoscopic hysterectomy for benign disease between October 2013 and April 2018 by two gynecological surgical specialists in an ambulatory surgery center in sub-urban Maryland, USA. Trans-vaginal cuff closure was performed using either absorbable (Vicryl) or non-absorbable (Ethibond) sutures. Non-absorbable sutures were surgically removed at 90 days post-op.

Results: Non-absorbable n=574; absorbable n=881. No statistically significant difference in age, race, weight, BMI, parity, uterine weight, number of previous abdominal surgeries or number of comorbidities between the non-absorbable and absorbable groups. We defined vaginal cuff dehiscence as complete separation of the vaginal cuff with or without abdominal or pelvic organ evisceration through the opening. At 90 days, 0 (0.0%) patients in the non-absorbable and 11 (1.2%) in the absorbable group had spontaneous complete cuff separation that required repair (P=0.004). The mean time between the initial hysterectomy and VCD in the non-absorbable group was 72 days.

Conclusion: Our data suggest that using a stronger, non-absorbable suture may be an effective approach to prevent spontaneous and complete vaginal cuff dehiscence in an uncontrolled setting. The benefits of a non-absorbable suture should be weighed against the inconvenience but low risk associated with removal of sutures in a controlled setting. Non-absorbable sutures should be further explored as a mechanism to prevent complete VCD.

Lvanderdoes@towersurgicalpartners.com