

Robotic-assisted laparoscopic removal of cesarean scar ectopic and hysterotomy revision

Matthew T. Siedhoff, Lauren D. Schiff, Janelle K. Moulder, Tarek Toubia, Thomas Ivester

A 38-year-old gravida 6 para 2042 woman presented in consultation regarding management of a uterine defect, or “niche,” following resolution of a cesarean scar ectopic pregnancy. She had 3 prior losses, followed by in vitro fertilization that resulted in 2 healthy births, both delivered by cesarean. A third in vitro embryo transfer resulted in the cesarean scar ectopic. After consideration of treatment options, she underwent multiple-dose parenteral methotrexate with eventual termination of the ectopic. Magnetic resonance imaging demonstrated a uterine defect, suspected to contain residual pregnancy tissue. Questions considered in her consultation included whether the defect should be repaired and, if so, from a hysteroscopic or laparoscopic approach, as well as her risk of intrauterine scarring, when, or if, it would be safe to pursue another pregnancy, and her subsequent risk of uterine rupture. Literature review regarding cesarean niche was helpful, but did not seem to completely inform this particular clinical scenario. She elected to proceed with robotic-assisted laparoscopic repair. The vesicovaginal space was opened to expose the defect. Dilute vasopressin was injected circumferentially around the defect to help minimize the use of electrocautery in opening the hysterotomy. Scar overlying the defect was resected and pregnancy tissue removed. The hysterotomy was closed with delayed-absorbable barbed suture, extrapolating technique from laparoscopic myomectomy. The first layer was imbricated with a second, similar to a 2-layer closure in cesarean delivery. Follow-up magnetic resonance imaging revealed resolution of the defect. After several failed attempts at repeat in vitro fertilization, spontaneous pregnancy was achieved 18 months postoperatively. The pregnancy was uncomplicated and she underwent scheduled cesarean delivery of a healthy neonate at 37 weeks’ gestation. The lower uterine segment was thick and developed, with no evidence of a dehiscence.