

Case Condensations

GRAVID UTERINE RUPTURE AFTER MYOLYSIS

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Advances in endoscopic surgical capabilities have influenced the management of a number of common gynecologic conditions. However, the advantages of lessening perioperative discomfort and hospitalization must not eclipse consideration of the long-term outcome. Myolysis, the laparoscopic coagulation of uterine leiomyomas, has been presented as an efficient treatment of symptomatic uterine smooth-muscle tumors. This procedure involves destruction of tissue via bipolar cautery transmitted through a pair of needles inserted into a leiomyoma. No excision or suturing of tissue is performed. In a MEDLINE search for articles on bipolar coagulation myolysis, no reports on the reproductive performance of the uterus after myolysis were found. We report one case of late second-trimester uterine rupture that occurred after myolysis performed several months before conception.

Case

A 30-year-old woman underwent a laparoscopy in New York during an evaluation for primary infertility and pelvic pain. A 3-cm intramural fundal leiomyoma was observed and was treated with repeated application of bipolar cautery via needles inserted into the leiomyoma. After surgery, the woman conceived on her third cycle of clomiphene citrate. A first-trimester transvaginal sonogram demonstrated a viable singleton intrauterine gestation. At approximately 26 weeks'

gestation, the woman presented to our emergency room with severe abdominal pain. Evaluation suggested intra-abdominal hemorrhage. At laparotomy, rupture of the gravid uterus in the fundal area and hemoperitoneum were observed. The 895-g female infant was delivered, and the large defect in the uterus was repaired with three layers of sutures. The neonate was assigned Apgar scores of 1, 5, and 6 at 1, 5, and 10 minutes, respectively. After 27 days of neonatal intensive care management, she died of multiple medical disorders related to prematurity and anemia. The mother's postoperative recovery was uneventful. However, a hysterosalpingogram performed 3 months later demonstrated direct passage of dye from the endometrial cavity to the peritoneal cavity in the area where the uterine rupture occurred. The woman elected to attempt pregnancy by in vitro fertilization and a gestational carrier.

Comment

Previous surgery may increase the risk of uterine rupture during pregnancy.¹ The literature documents reassuringly normal performance of uteri after abdominal myomectomy,² but the reproductive viability of the uterus after endoscopic treatment of intramural leiomyomas is less certain. Limited data focusing on pregnancy outcome after laparoscopic myomectomy have been presented.³ Further, besides a report of uterine dehiscence during pregnancy after laparoscopic electrocautery resection of a myoma,⁴ no publications have specifically presented experience with pregnancy outcome after myolysis. The outcome of the pregnancy described in this report suggests that great caution should be applied to the use of this technique on women who are planning future childbearing.

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