

EP16.63. Case of cervical trauma and insufficiency: LAC

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Introduction

Cervical insufficiency is a significant contributor to second-trimester pregnancy loss and spontaneous preterm birth. It is characterized by painless cervical dilation, often leading to pregnancy loss or extreme preterm delivery if left untreated. For patients with recurrent pregnancy loss despite cervical cerclage or those with severe cervical damage, abdominal cerclage has been increasingly recognized. Advances in minimally invasive surgery have further increased the importance of laparoscopic abdominal cerclage (LAC), offering advantages in selected cases.

Case Report

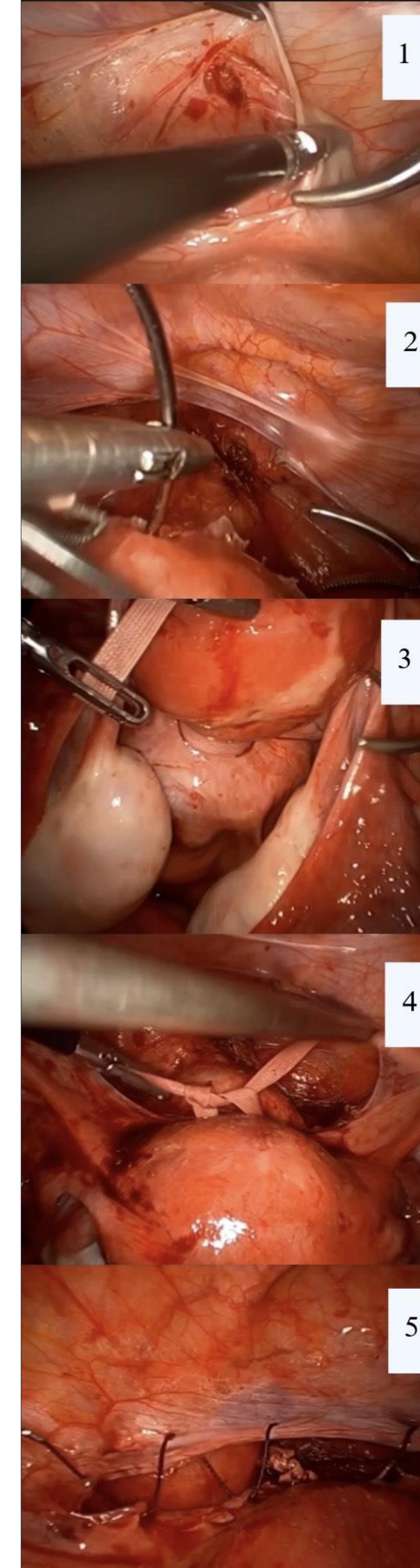
A 28-year-old woman with two consecutive first-trimester miscarriages conceived via IVF, resulting in a dichorionic diamniotic twin pregnancy. At 20 weeks, cervical shortening (22 mm) and dilation were detected. Despite transvaginal cerclage, indomethacin, and strict monitoring, the cervix continued to dilate. At 26 weeks, cerclage failure led to extreme preterm delivery; both neonates died due to prematurity complications.

One year later, the patient presented with a desire to conceive. A No. 8 Hegar dilator passed easily through the cervix.

Laparoscopic abdominal cerclage was chosen to optimize future outcomes.

Six months post-op, the patient conceived via frozen embryo transfer. The cervix remained stable until 32 weeks when contractions unresponsive to tocolysis led to preterm labor. A Caesarean section was performed after administering betamethasone, progesterone, and magnesium sulfate.

Despite prior transvaginal cerclage failure, laparoscopic abdominal cerclage provided effective cervical support, leading to a successful pregnancy outcome.



1. The vesicouterine peritoneum was dissected. The uterine vessels were bilaterally exposed.
2. Mersilene suture was passed medially to the uterine arteries, veins, and uterosacral ligaments in a posterior-to-anterior direction, forming a circumferential loop around the cervix.
3. The uterine manipulator facilitated precise placement.
4. The suture was tied anteriorly with four knots.
5. Lastly, vesicouterine peritoneum was closed using a continuous 1.0 Vicryl suture