

EP10.02

Ultrasound-guided fetoscopic laser ablation of type 2 vasa previa

Rodrigo Ruano MD PhD, Olivia Mihulka MD, Aishu Hombal MD, Natalia Ravelo MD, Lara Slesnick MD, Ugo Maria Pierucci MD
University of Miami Miller School of Medicine and Jackson Memorial Hospital

Introduction

Type 2 vasa previa is associated with increased risk of vaginal bleeding and fetal demise if premature rupture of the membranes (PPROM) occurs. We report on a patient that had type 2 vasa previa and elected to proceed with fetoscopic laser ablation. After the intrauterine procedure at 31w4d, she presented with PPRM but NO vaginal bleeding.

Case Presentation

A 40-year-old woman, gravida 3, para 0, was referred to our Fetal Center at 22w5d because of vasa previa diagnosed on routine ultrasound. Serial ultrasounds confirmed the presence of a low-lying posterior placenta with marginal cord insertion and anterior succenturiate placental lobe with vasa previa (one vein and one artery), consistent with type II vasa previa. After extensive discussion about the risks and benefits of expectant versus operative management, the patient elected to proceed with the ultrasound-guided fetoscopic laser ablation of type 2 vasa previa. The procedure was scheduled and performed successfully at 31w4d for the procedure. The two previa vessels (one artery and one vein) were photocoagulated using laser with energy of 9.318Kj, pulse 69 and total laser time of 5 minutes. The fetal heart rate was stable pre- and post-procedure, with no evidence of fetal bradycardia. Post procedure, a repeat transvaginal ultrasound showed no more previa vessels overlying the cervix. The patient met postoperative milestones and was discharged to home on post op day 2. At 36w5d the patient presented with premature rupture of the membranes without any evidence of contractions and no bleeding. Induction of labor was offered but the patient elected to proceed cesarean section. A primary cesarean section was performed at maternal request and a 2415g male was delivered with Apgar scores of 9 at 1, 5, and 10 minutes. A bilobed placenta was observed at delivery. Both the patient and the neonate did well post-delivery.

Conclusion: Fetoscopic laser ablation of type 2 vasa previa is feasible.

Keywords: Vasa previa, fetoscopic laser ablation, fetal surgery

Ruano R, et al. Fetoscopic Laser Ablation of Type II Vasa Previa - Case Report and Systematic Review. Prenat Diagn. Submitted.

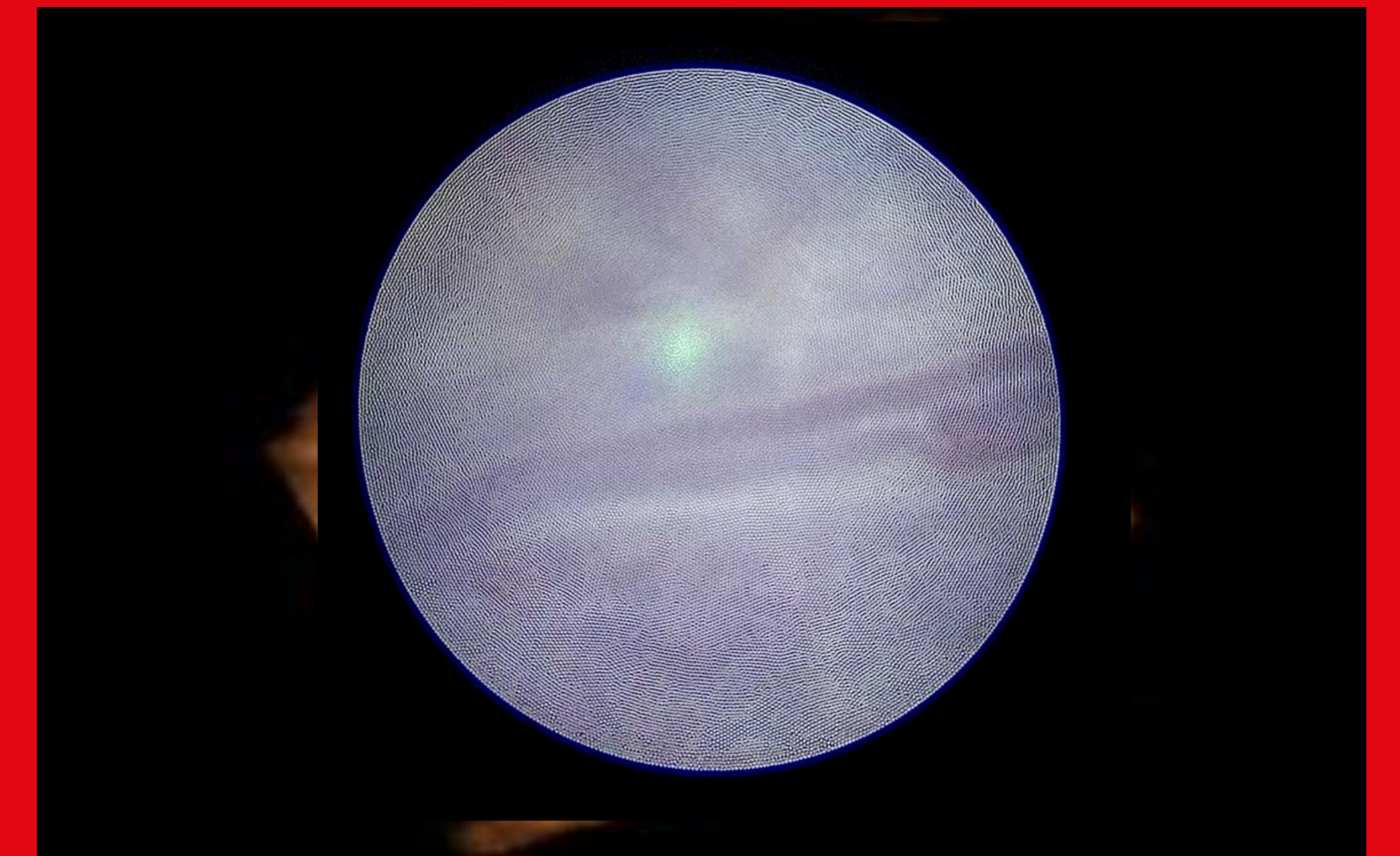


Figure 1. Intrauterine endoscopic view of type 2 Vasa Previa.

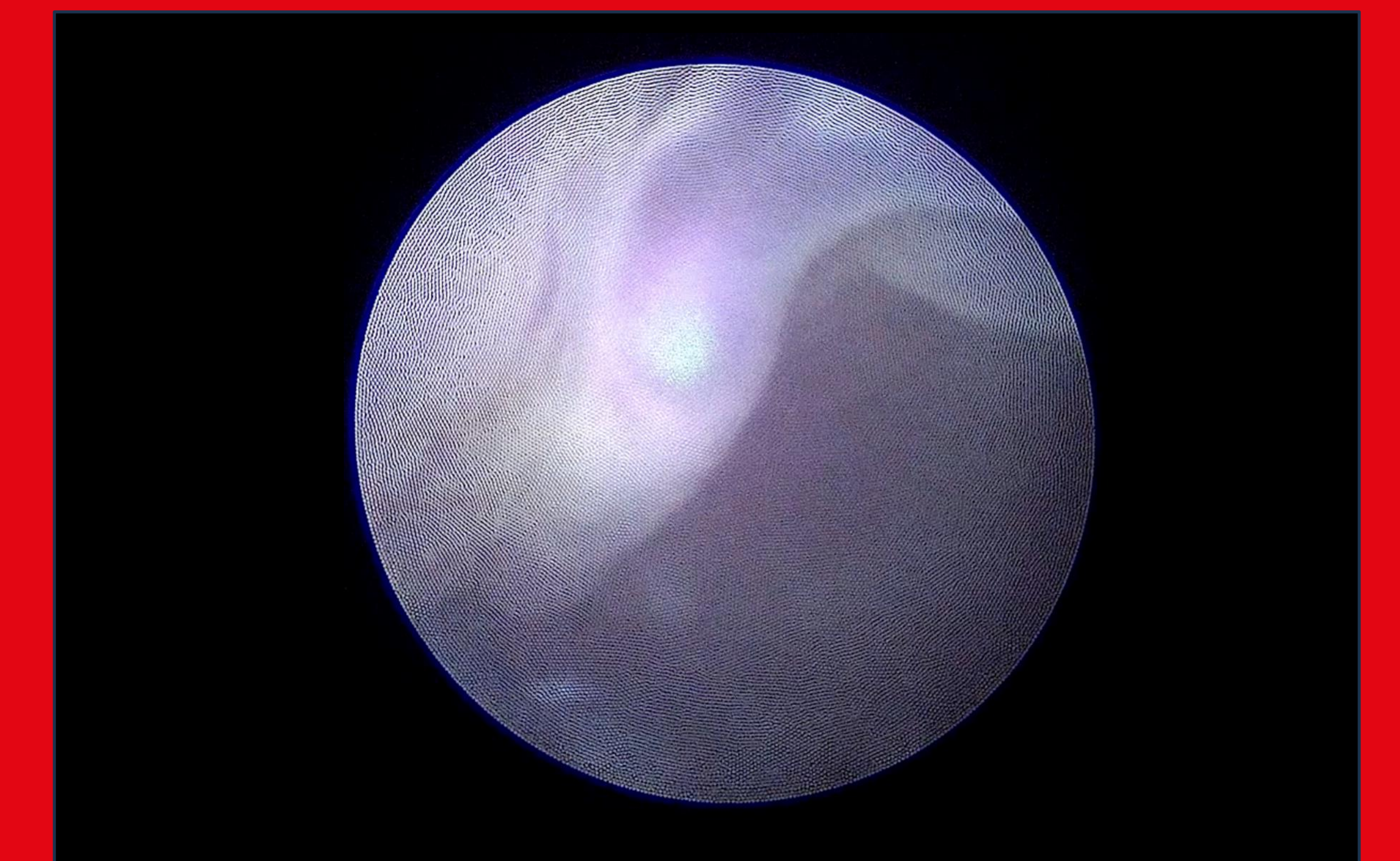


Figure 2. Intrauterine endoscopic laser ablation of type 2 Vasa Previa.