

Cesarean scar ectopic pregnancy: a case report on early diagnosis and management

Jorge B. Leão¹ , Jorge Leão^{2,3} , Mario Brock Leao⁴ , Marianna F.Brock^{2,3}

¹Federal University of Minas Gerais , ²University of Amazonas State, Manaus, Brazil; ³Faculdade Metropolitana do Amazonas, FAMETRO University, Manaus, Amazonas, Brazil ⁴University South Florida

Introduction / Objective

Cesarean scar ectopic pregnancy (CSEP) occurs when the embryo implants within the scar of a previous caesarean section. The increasing number of caesarean deliveries has led to a significant rise in CSEP cases. Early detection is crucial for planning pregnancy termination, reducing maternal morbidity and mortality rates. This case report highlights the importance of early CSEP diagnosis in minimizing maternal complications and risks.

Case report

43-year-old, GIV, PIII (PC), with a history of triple-negative breast cancer and BRCA1 and BRCA2 mutations, was referred for a first-trimester morphological ultrasound at 13 weeks of gestation, revealing a 13-week-and-4-day ectopic pregnancy implanted in the isthmic region, at the site of a previous cesarean section (figure1A) with myometrial thinning and increased vascularization in the anterior uterine wall adjacent to the bladder (figure1B). The myometrium in this area measured 0.2 mm. Given the patient’s clinical history, a total hysterectomy and bilateral adnexectomy were recommended. The isthmic myometrial thinning identified on imaging was confirmed during surgery (figure1C).

Discussion/Conclusion

CSEP results from the implantation of the blastocyst within the niche of a previous caesarean scar, leading to abnormal angiogenesis and vascular remodeling, causing progressive dehiscence of the uterine scar. High-risk patients should undergo systematic screening via transvaginal ultrasound in the first trimester, ideally between 5 and 7 weeks. The position of the gestational sac relative to the scar and the uterine cavity is the key parameter for early diagnosis.

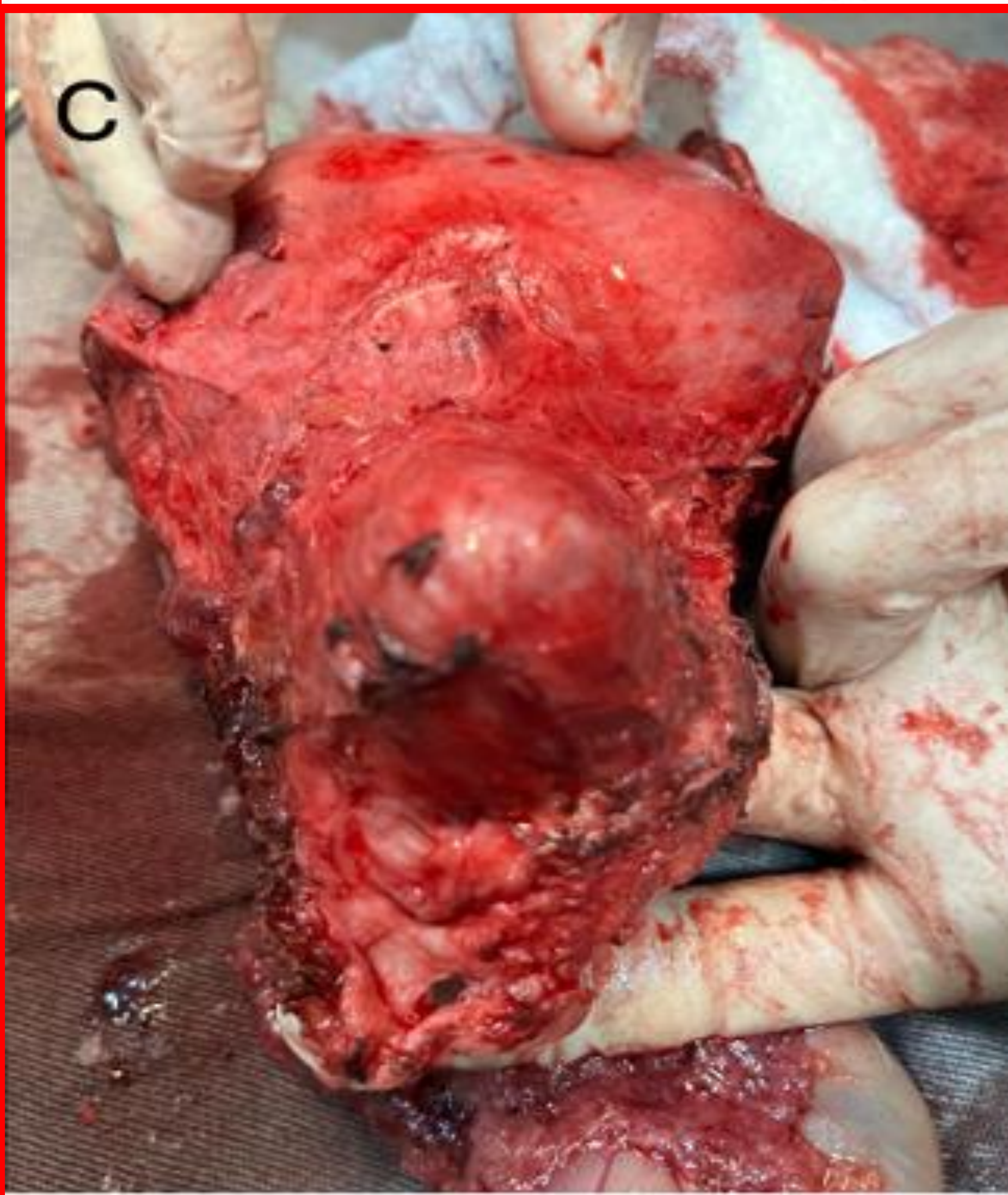
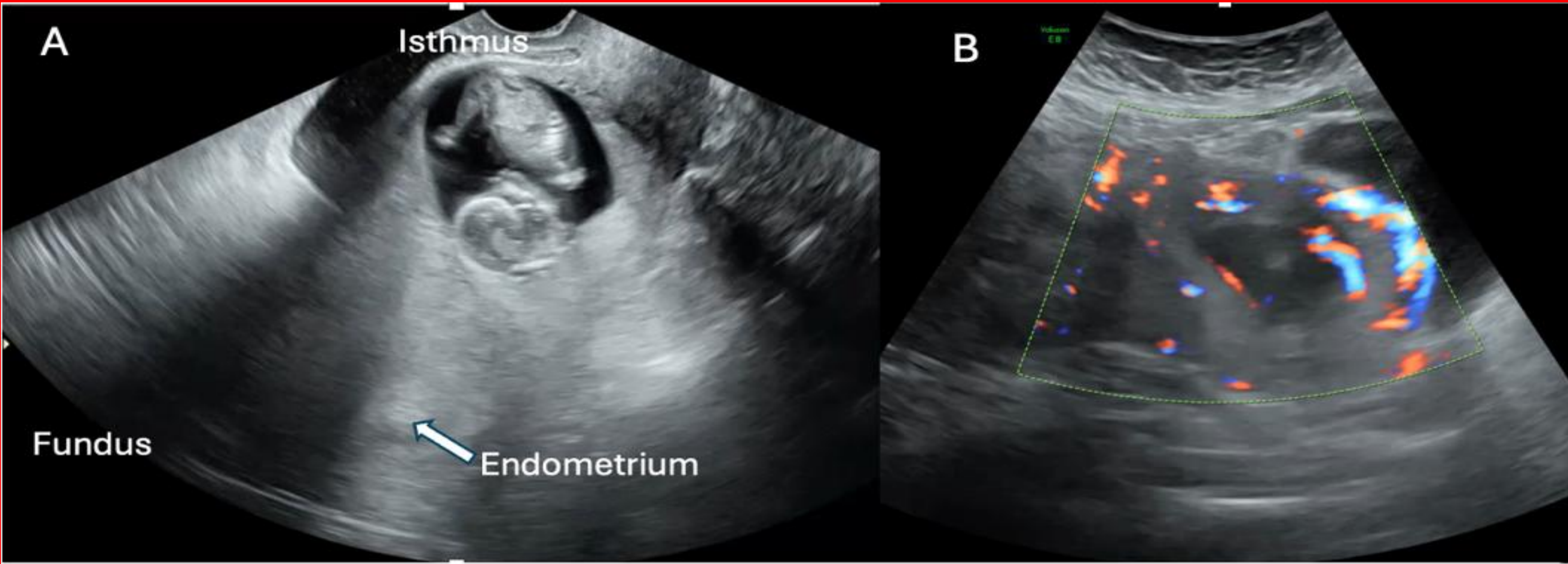


Figure1: A- Ectopic pregnancy implanted in the isthmic region, at the site of a previous cesarean section. B- myometrial thinning and increased vascularization in the anterior uterine wall adjacent to the bladder. C-Anatomical specimen showing bulging due to ectopic pregnancy.