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# Placenta Percreta: The ghost of the Accreta opera

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**The authors have no conflict of interest to declare.**

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We thank Dr Palacios-Jaraquemada for his interest in our work.

Dr Palacios-Jaraquemada makes 2 assertions on Placenta Accreta Spectrum (PAS):

First that "histological diagnosis is not essential for decision making in the operating room". We agree that maternal morbidity from (PAS) is dependent on accurate preoperative diagnosis, and on management by an experienced multidisciplinary team (MDT). Triage of patients to hysterectomy, conservative (uterine sparing) surgery, or expectant management leaving the placenta in-situ depends on the gestational age at presentation, co-morbidities, desire for future fertility, and a detailed anatomic assessment by imaging and intraoperative dissection. However, like any other pathologic conditions in medicine, outcomes can only be improved by quality diagnosis including post-operative histopathology as definition may vary widely.

Our study showed that most reported cases were not confirmed by histology and that some cases reported in the literature were clearly due to causes other than PAS, including acute uterine rupture away from the area of implantation, cornual ectopic pregnancy, and misinterpretation of implantation site over the cervix as extension beyond the myometrium.<sup>1</sup> In case reports with gross images, it is clear that the photos were taken after substantial dissection of the uterus from the bladder in an area of scar dehiscence suggesting that the finding of exposed placenta was due to surgical artifact rather than extrauterine extension. None of the histologic photos showed evidence of transmural villous invasion, a classical description of placenta percreta.<sup>1</sup> The importance of a pathology reporting as part of quality assurance and training was even highlighted recently by Dr Palacios-Jaraquemada and colleagues.<sup>2</sup>

On the second point, Dr Palacios-Jaraquemada suggests that the Federation International of Gynecology and Obstetrics (FIGO) grading system for PAS does not include sufficient anatomic detail to define surgical risk of bleeding and cannot predict the success of conservative management. Here we feel that he is conflating resectability with extent of disease. As in the case of cancer, the ability of a surgeon to resect a tumor depends on anatomic considerations, preoperative conditioning or therapy, and surgical training. These factors are notoriously hard to capture in a scoring system or consensus guidelines. While FIGO grade is only one of many factors affect morbidity, including extent of pelvic scarring from prior surgery and extent of scar dehiscence, FIGO has value and does perform better than traditional 3-tiered classification (Accreta, Increta, Percreta) in predicting postoperative complications including the rate of readmission, bladder injury and blood loss.<sup>3</sup>

## References

Jauniaux E, Hecht JL, Elbarmelgy RA, Elbarmelgy RM, Thabet MM, Hussein AM. Searching for placenta percreta: a prospective cohort and systematic review of case reports. *Am J Obstet Gynecol.* 2022;226:837.e1-837.e13.

Nieto-Calvache AJ, Palacios-Jaraquemada JM, Aryananda RA. Factors to consider when seeking better results in placenta accreta spectrum. *Acta Obstet Gynecol Scand.* 2021;100:1932-1933.

Salmanian B, Shinker SA, Hecht JL, Modest AM, Castro EC, Seaman RD, et al. The Society for Pediatric Pathology Task Force grading system for placenta accreta spectrum and its correlation with clinical outcomes. *Am J Obstet Gynecol.* 2022;226:720.e1-720.e6.