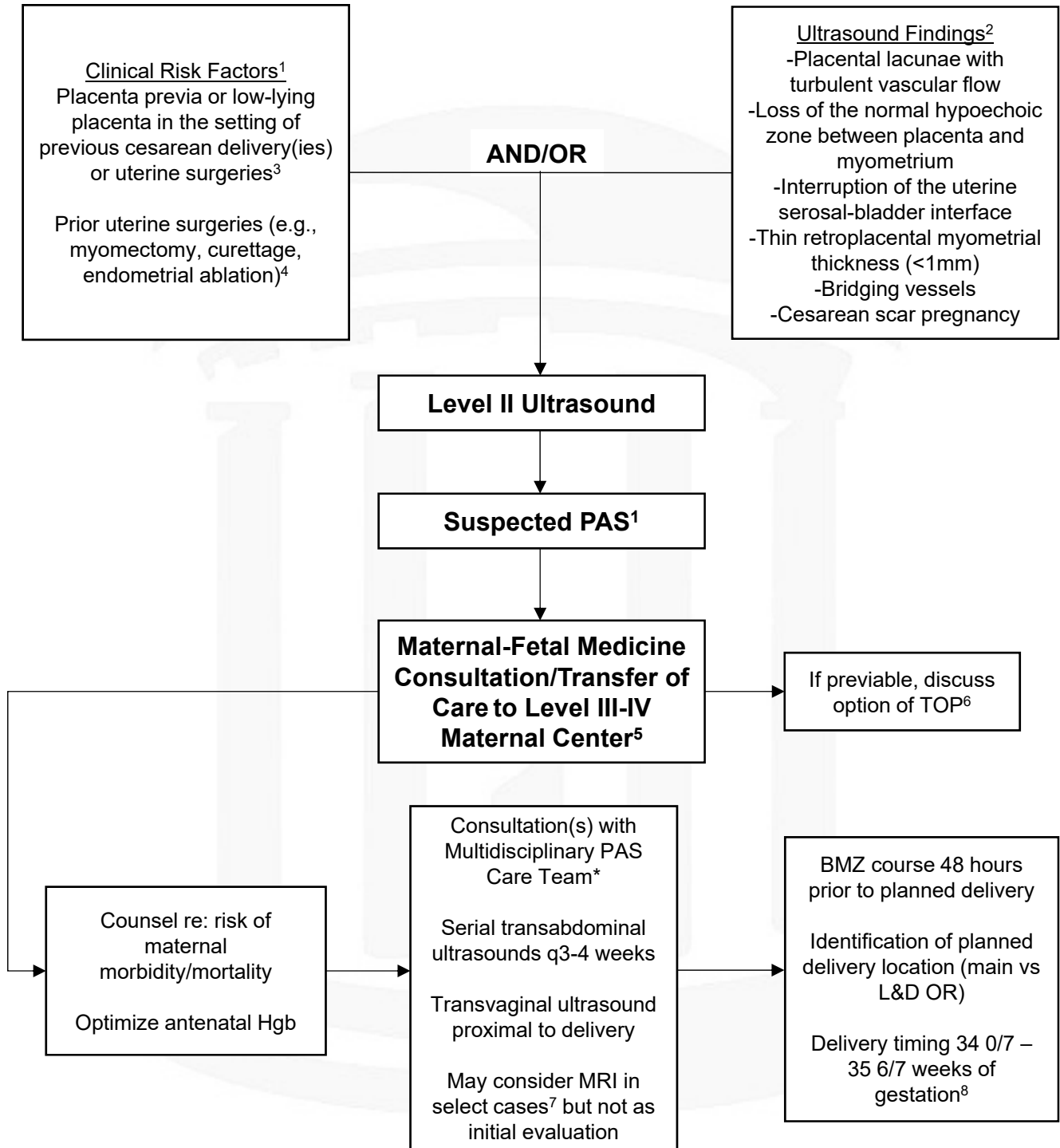


PLACENTA ACCRETA SPECTRUM (PAS)¹



*Multidisciplinary PAS Care Team

Maternal-Fetal Medicine OB Anesthesiology GYN Oncology	L&D RN-OB Transfusion Medicine Neonatology	†Interventional Radiology †Urology †Trauma or General Surgery
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†As clinically indicated for select high-risk cases

References

1. Obstetric care consensus #7: Placenta accreta spectrum. *Obstet Gynecol* 2018;132(6):1519-1521.
 - *Placenta accreta spectrum (PAS), formerly known as morbidly adherent placenta, refers to the range of pathologic adherence of the placenta, including placenta accreta, increta, and percreta.*
 - *The absence of ultrasound findings does not preclude a diagnosis of PAS. Clinical risk factors remain equally as important as predictors of PAS by ultrasound findings.*
2. Reddy UM, Abuhamad AZ, Levine D, Saade GR. Fetal imaging: Executive Summary of a Joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal-Fetal Medicine, American Institute of Ultrasound in Medicine, American College of Obstetricians and Gynecologists, American College of Radiology, Society for Pediatric Radiology, and Society of Radiologists in Ultrasound Fetal Imaging Workshop. *J Ultrasound Med* 2014;33:745-757.
 - *Obstetric ultrasound in the second or third trimester is the mainstay of antenatal diagnosis of PAS. Sensitivity and specificity of ultrasound for diagnosis of PAS is ~80-90%, with a PPV of ~65% and a NPV of ~98%.*
3. Silver RM, Landon MB, Rouse DJ, Leveno KJ, Spong CY, Thom EA, et al. for the NICHD Maternal-Fetal Medicine Units Network. Maternal morbidity associated with multiple cesarean deliveries. *Obstet Gynecol* 2006;107(6):1226-1232.
 - *In this study, placenta accreta was present in 15 (0.24%), 49 (0.31%), 36 (0.57%), 31 (2.13%), 6 (2.33%), and 6 (6.74%) women undergoing their first, second, third, fourth, fifth, and sixth or more cesarean deliveries, respectively.*
 - *In women with placenta previa, the risk for placenta accreta was 3%, 11%, 40%, 61%, and 67% for first (primary cesarean), second, third, fourth, and fifth or more repeat cesarean deliveries, respectively.*
4. Baldwin HJ, Patterson JA, Nippita TA, Torvaldsen S, Ibiebele I, Simpson JM, Ford JB. Antecedents of abnormally invasive placenta in primiparous women: Risk associated with gynecologic procedures. *Obstet Gynecol* 2018;131(2):227-233.
 - *In this population-based study, women with a history of prior invasive gynecologic procedures were more likely to develop PAS, and the risk increased with increasing number of prior procedures.*
5. Shamshirsaz AA, Fox KA, Salmanian B, Diaz-Arrastia CR, Lee W, Baker BW, et al. Maternal morbidity in patients with morbidly adherent placenta treated with and without a standardized multidisciplinary approach. *Am J Obstet Gynecol* 2015;212:218.e1–9.
 - *Maternal outcomes in cases of suspected PAS are optimized when delivery occurs at a level III/IV maternal care facility before the onset of labor or bleeding and with avoidance of placental disruption.*
6. Second-trimester abortion. Practice Bulletin No. 135. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;121:1394–406.
 - *Consider discussion of pregnancy termination in cases of PAS with high index of suspicion given the significant risk of maternal morbidity and mortality, although there are currently no data to support the magnitude of risk reduction, if any.*
7. Einerson BD, Rodriguez CE, Kennedy AM, Woodward PJ, Donnelly MA, Silver RM. Magnetic resonance imaging is often misleading when used as an adjunct to ultrasound in the management of placenta accreta spectrum disorders. *Am J Obstet Gynecol* 2018;218:618.e1–7.
 - *It is unclear whether MRI improves diagnosis of PAS beyond what is achieved by ultrasound alone. In this study of 78 women with suspected PAS, MRI confirmed an incorrect diagnosis or incorrectly changed a diagnosis based on ultrasound in 38% of cases.*
8. Robinson BK, Grobman WA. Effectiveness of timing strategies for delivery of individuals with placenta previa and accreta. *Obstet Gynecol* 2010;116:835–42.
 - *This decision analysis suggested that delivery at 34 weeks of gestation is optimal given the ability of most large centers to handle late preterm infant complications while considering the increased risk of maternal catastrophic bleeding after 36 weeks.*
 - *SMFM recommends planned delivery no later than 35 6/7 weeks of gestation, or earlier as clinically indicated in the setting of persistent bleeding or other complications.*

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These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities. The algorithms remain the intellectual property of the University of North Carolina at Chapel Hill School of Medicine. They cannot be reproduced in whole or in part without the expressed written permission of the school.