

# 15. BÖLÜM

## PLASENTA İNVAZYON ANOMALİLERİ (PLASENTA AKREATA SPEKTRUMU)

Dr. Sonay ÖZTAŞ<sup>1</sup>

Postpartum kanamanın ve maternal mortalite ve morbiditenin önemli nedenlerinden biri olan plasenta akreata spektrumu (PAS) günümüzde obstetrisyenler için halen önemini koruyan bir konudur. Birçok çalışma, maternal morbiditenin PAS'ın prenatal tanısının konulması ve en uygun takip şartlarının sağlanması ile azaltılabileceğini gösterdiğinden PAS'ın risk faktörlerinin, etiyolojisinin, tedavi yöntemlerinin ve yönetiminin bilinmesi kritik önem taşımaktadır.

### Tanım

PAS; plasenta akreata, inkreata ve perkreatayı içeren anormal plasenta invazyonunu ifade etmektedir. Plasenta akreata yüzeysel miyometriyal invazyonu, plasenta inkreata derin miyometriyal invazyonu, plasenta perkreataya ise tam kat miyometriyal invazyonu ve bazen de uterus serozasının ve komşu organların tutulumunu tanımlamak için kullanılmaktadır<sup>(1)</sup>. Literatürdeki bir çalışmaya göre PAS vakalarının %75'i plasenta akreata, %18'i plasenta inkreata ve %7' si plasenta perkreatadır.

### Tarihçe

PAS ilk olarak 1937 yılında Irving ve arkadaşları tarafından doğumu takiben plasentanın uterin duvardan ayrılma başarısızlığı olarak tanımlanmıştır<sup>(2)</sup>. PAS'ın ilk prenatal tanısı 1967 yılında Sadovsky ve arkadaşları tarafından radyoizotop plasentatografi kullanılarak rapor edilmiş ve ilk prenatal ultrason açıklaması 1982 yılında Tabsh ve arkadaşları tarafından yapılmıştır.

<sup>1</sup> Uzman Doktor, SBÜ, Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi Kadın Hastalıkları ve Doğum Kliniği Email:sonayoztas@hotmail.com

## KAYNAKLAR

1. Miller DA, Chollet JA, Goodwin TM. Clinical risk factors for placenta previa-placenta accreta. *Am J Obstet Gynecol.* 1997 Jul; 177(1):210-4.
2. Irving C, Hertig AT. A study of placenta accreta. *Surgery, Gynecology & Obstetrics.* 1937;38(6):1088-1200.
3. Higgins M, Monteith C, Foley M et al. Real increasing incidence of hysterectomy for placenta accreta following previous caesarean section. *European Journal of Obstetrics & Gynecology, and Reproductive Biology.* 2013;171(1):54-56.
4. Picel, AS, Wolford, B, Cochran, RLet al. Prophylactic Internal Iliac Artery Occlusion Balloon Placement to Reduce Operative Blood Loss in Patients with Invasive Placenta. *J. Vasc. Interv. Radiol.*2018, 29, 219-224.
5. Jauniaux E, Chantraine F, Silver RM., Langhoff-Roos J., and for the FIGO Placenta Accreta Diagnosis and Management Expert Consensus Panel FIGO consensus guidelines on placenta accreta spectrum disorders: epidemiology. *International Journal of Gynecology & Obstetrics.* 2018;140(3):265-273.
6. Chuong E. Evolutionary perspectives into placental biology and disease. *Applied & Translational Genomics.* 2013;2:64-69.
7. Effect of cesarean delivery on the endometrium. Ben-Nagi J, Walker A, Jurkovic D, Yazbek J, Aplin JD *Int J Gynaecol Obstet.* 2009;106(1):30.
8. Jauniaux E, Collins S, Burton GJ. Placenta accreta spectrum: pathophysiology and evidence-based anatomy for prenatal ultrasound imaging. *Obstet Gynecol.* 2018;218(1):75.
9. Lynch CB, Keith LG, Lalonde AB et al. Doğum Sonu Kanama, 'Plasenta Anomalileri' Ankara 2010, 10, ss76-89.
10. Silver RM, Landon MB, Rouse DJ, et al. Maternal morbidity associated with multiple repeat cesarean deliveries. *Obstet Gynecol.* 2006;107(6):1226-1232.
11. Silver RM, Landon MB, Rouse DJ, et al. Maternal morbidity associated with multiple repeat cesarean deliveries. *Obstet Gynecol* 2006;107:1226-32.
12. Usta IM, Hobeika EM, Musa AA, et al. Placenta previa accreta: risk factors and complications. *Am J Obstet Gynecol* 2005;193:1045-1049.
13. Wu S, Kocherginsky M, Hibbard JU. Abnormal placentation: twenty-year analysis. *Am J Obstet Gynecol.* 2005;192:1458-1461.
14. Miller DA, Chollet JA, Murphy TM: Clinical risk factors for plasenta previa-plasenta acceta. *Am J Obstetrik Gynecology* 1998;177:210-214.
15. Finberg HJ, Williams JW. Placenta accreta: prospective sonographic diagnosis in patients with placenta previa and prior cesarean section. *Ultrasound Med.* 1992;11(7):333.
16. Guy GP, Peisner DB, Timor-Tritsch IE. Ultrasonographic evaluation of uteroplacental blood flow patterns of abnormally located and adherent placentas. *Am J Obstet Gynecol.* 1990 ;163(3):723-727.
17. Yang J, Lim Y, Kim H, Chang K, et al. Sonographic findings of placenta lacunae and the prediction of adherent placenta in women with placenta previa totalis and prior Cesarean section. *Ultrasound Obstet Gynecol.* 2006; 28(2):178-82.
18. Maldjian C, Adam R, Pelosi M, et al. MRI appearance of placenta percreta and placenta accreta. *Magn Reson Imaging* 1999; 17:965.
19. Kirkinen P, Helin-Martikainen HL, Vanninen R, Partanen K. Placenta accreta: imaging by gray-scale and contrast-enhanced color Doppler sonography and magnetic resonance imaging. *J Clin Ultrasound* 1998; 26:90.
20. Lax A, Prince M, Mennitt K, Schwebach J, et al. The value of specific MRI features in the evaluation of suspected placental invasion. *Magn Reson Imaging.* 2007; 25(1):87-93.
21. Thompson O., Ogbah C., Nnochiri A., Sumithran E., Spencer K. First trimester maternal serum biochemical markers of aneuploidy in pregnancies with abnormally invasive placentation. *BJOG.* 2015;122(10):1370-1376.

22. Lawrence J. B., Oxvig C., Overgaard M. T., et al. The insulin-like growth factor (IGF)-dependent IGF binding protein-4 protease secreted by human fibroblasts is pregnancy-associated plasma protein-A. *Proceedings of the National Academy of Sciences of the United States of America*. 1999;96(6):3149–3153.
23. Lyell D., Faucett A., Baer R., et al. Maternal serum markers, characteristics and morbidly adherent placenta in women with previa. *Journal of Perinatology*. 2015;35(8):570–574.
24. Warshak CR, Ramos GA, Eskander R, Benirschke K, Saenz C, Kelly TF, et al. Effect of predelivery diagnosis in 99 consecutive cases of placenta accreta. *Obstet Gynecol*. 2010;115:65–9.
25. D'Angelo LJ, Irwin LF. Conservative management of placenta previa: a cost-benefit analysis. *Am J Obstet Gynecol*. 1984 Jun;149(3):320–6.
26. Warshak CR, Ramos GA, Eskander R, et al. Effect of predelivery diagnosis in 99 consecutive cases of placenta accreta. *Obstet Gynecol* 2010;115:65–9.
27. Angstmann T, Gard G, Harrington T, et al. Surgical management of placenta accreta: a cohort series and suggested approach. *Am J Obstet Gynecol* 2010;202(38) :1–9
28. Pelosi MA, Pelosi MA. Modified cesarean hysterectomy for placenta previa percreta with bladder invasion: retrovesical lower uterine segment bypass. *Obstet Gynecol* 1999;93:830–3.
29. Belfort MA. Placenta accreta. *Am J Obstet Gynecol*. 2010;203:430–9.
30. Wright JD, Devine P, Shah M, et al. Morbidity and mortality of peripartum hysterectomy. *Obstet Gynecol* 2010; 115:1187.
31. Ryan GL, Quinn TJ, Syrop CH, et al. Placenta accreta postpartum. *Obstet Gynecol* 2002;100:1069–72.
32. Eller AG, Porter TF, Soisson P, et al. Optimal management strategies for placenta accreta. *BJOG*.2009;116:648–54.
33. Chandrachan E, Rao S, Belli AM, Arulkumaran S. The Triple-P procedure as a conservative surgical alternative to peripartum hysterectomy for placenta percreta. *Int J Gynaecol Obstet* 2012; 117:191.
34. Clausen C, Lönn L, Langhoff-Roos J. Management of placenta percreta: a review of published cases. *Acta Obstet Gynecol Scand* 2014; 93:138.
35. Teixidor Viñas M, Belli AM, Arulkumaran S, et al. Prevention of postpartum hemorrhage and hysterectomy in patients with morbidly adherent placenta: a cohort study comparing outcomes before and after introduction of the Triple-P procedure. *Ultrasound Obstet Gynecol*. 2015; 46:350.
36. Legendre G, Zoulovits FJ, Kinn J, et al. Conservative management of placenta accreta: hysteroscopic resection of retained tissues. *J Minim Invasive Gynecol*. 2014; 21:910.
37. Zuckerwise LC, Craig AM, Newton JM, et al. Outcomes following a clinical algorithm allowing for delayed hysterectomy in the management of severe placenta accreta spectrum. *Am J Obstet Gynecol*.2020; 222:179.e1.
38. Collins SL, Alemdar B, van Beekhuizen HJ, et al. Evidence-based guidelines for the management of abnormally invasive placenta: recommendations from the International Society for Abnormally Invasive Placenta. *Am J Obstet Gynecol*. 2019; 220:511.
39. Steins Bisschop CN, Schaap TP, Vogelvang TE et al. İnvaziv plasenta ve rahim koruyucu tedavi yöntemleri: sistematik bir derleme. *Kemer Jinekoloji Obstet*. 2011; 284: 491.
40. Collins SL, Alemdar B, van Beekhuizen HJ, et al. Evidence-based guidelines for the management of abnormally invasive placenta: recommendations from the International Society for Abnormally Invasive Placenta. *Am J Obstet Gynecol* 2019; 220:511.
41. Fox KA, Shamshirsaz AA, Carusi D, et al. Conservative management of morbidly adherent placenta: expert review. *Am J Obstet Gynecol*.2015; 213:755.
42. Picel AC, Wolford B, Cochran RL et al. Prophylactic Internal Iliac Artery Occlusion Balloon Placement to Reduce Operative Blood Loss in Patients with Invasive Placenta. *J. Vasc. Interv. Radiol*. 2018, 29, 219–224.

43. Ballas J, Hull AD, Saenz C, et al. Intravascular balloon catheters and surgical outcomes in pregnancies complicated by placenta accreta: A management paradox. *Am. J. Obstet. Gynecol.* 2012, 207, 216.
44. Cali, G.; Forlani, F.; Giambanco, L.; Amico, M.L.; Vallone, M.; Puccio, G.; Luigi, A. Prophylactic use of intravascular balloon catheters in women with placenta accreta, increta and percreta. *Eur. J. Obstet. Gynecol. Reprod. Biol.* 2014, 179, 36–41.
45. Wu Q, Liu Z, Zhao X, et al. Outcome of pregnancies after balloon occlusion of the infrarenal abdominal aorta during caesarean in 230 patients with placenta praevia accreta. *Cardiovasc. Interv. Radiol.* 2016, 39, 1573–1579.
46. D'Souza, DL, Kingdom JC, Amsalem H. Conservative management of invasive placenta using combined prophylactic internal iliac artery balloon occlusion and immediate postoperative uterine artery embolization. *Can. Assoc. Radiol. J.* 2015, 66, 179–184.
47. Silver RM, Fox KA, Barton JR, et al. Center of excellence for placenta accreta. *Am J Obstet Gynecol* 2015; 212:561.