

29. BÖLÜM

YÜKSEK RİSKLİ GEBELİKLERDE ANESTEZİ YÖNETİMİ

Uğur Kemal ÖZTÜRK¹

GİRİŞ

Gebelik sürecinde fetusun büyüme ve gelişiminin desteklenmesi, gebelik ve doğum sırasında annenin bazı risklerden korunması amacıyla çeşitli fizyolojik değişiklikler meydana gelir. Gebelik haftası ilerledikçe büyüyen uterusun vena kavaya basısı nedeni ile kalbe venöz dönüş azalır. Buna bağlı olarak kardiyak outputta azalma meydana gelir. Yine uterusun diyaframa basısı nedeni ile total akciğer kapasitesi ve fonksiyonel rezidüel kapasite azalır. Gastrointestinal sistemde ise progesteronun etkisiyle alt özefageal sfinkter tonusunun azalması reflü özofajit sıklığını arttırır. Yine gebelik haftası ilerledikçe kilo artışı, meme boyutlarında artış ve üst havayolu mukozasında ödem meydana gelmektedir. Oluşan tüm bu değişiklikler gebe olgularda anestezi sırasında trakea aspirasyonu ve zor entübasyon ihtimalini arttırmıştır. Bu nedenle gebelerde anestezik yaklaşımlar normal kadınlara göre farklılık göstermektedir (1,2).

¹ Uzm. Dr., Zeynep Kamil Kadın ve Çocuk Hastalıkları Eğitim ve Araştırma Hastanesi, Kadın Hastalıkları ve Doğum, ugurkemalozturk@hotmail.com

olur. Vajinal doğum ise sadece fetusun iyi olduğunun belirlendiği gizli prolapsus olguları ile servikal açıklığın tam olduğu, doğuma yakın olgularda bir alternatif olabilir (43).

KAYNAKLAR

1. Munnur U, De Boisblanc B, Suresh MS. Airway problems in pregnancy. *Crit Care Med.* 2005;33(10):259-68.
2. Demirel I, Ozer AB, Bayar MK. Gebelik ve Yoğun Bakım. *Türkiye Klinikleri J Anest Reanim-Special Topics* 2013;6(2):76- 83.
3. Committee on Obstetric Practice, American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 295, Pain Relief During Labor, July 2004. *Obstet Gynecol.* 2004 Jul;104(1):213.
4. Practice Guidelines for Obstetric Anesthesia: An Updated Report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia and the Society for Obstetric Anesthesia and Perinatology. *Anesthesiology.* 2016;124(2):270.
5. Cunningham, FG. 2018. *Obstetrical Analgesia and Anesthesia.* F. Gary Cunningham. *Williams Obstetrics* (485-514). New York: McGraw-Hill
6. UPTODATE (2021). Neuraxial analgesia for labor and delivery (including instrumented delivery) (12/03/2021 tarihinde https://www.uptodate.com/contents/neuraxial-analgesia-for-labor-and-delivery-including-instrumented-delivery?search=Anesthesia%20Pregnancy%20birth&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2#H2512245194 adresinden ulaşılmıştır.)
7. UPTODATE (2021). Anesthesia for cesarean delivery (12/03/2021 tarihinde https://www.uptodate.com/contents/anesthesia-for-cesarean-delivery?search=general%20anesthesia%20pregnancy&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2 adresinden ulaşılmıştır.)
8. Bucklin BA, Hawkins JL, Anderson JR, et al. Obstetric anesthesia workforce survey: twenty-year update. *Anesthesiology.* 2005;103(3):645.
9. Yoo KY, Lee JC, Yoon MH, et al. The effects of volatile anesthetics on spontaneous contractility of isolated human pregnant uterine muscle: a comparison among sevoflurane, desflurane, isoflurane, and halothane. *Anesth Analg.* 2006;103(2):443.
10. Mhyre JM, Riesner MN, Polley LS, et al. A series of anesthesia-related maternal deaths in Michigan, 1985-2003. *Anesthesiology.* 2007;106(6):1096.
11. UPTODATE (2021). Adverse effects of neuraxial analgesia and anesthesia for obstetrics. (12/03/2021 tarihinde https://www.uptodate.com/contents/adverse-effects-of-neuraxial-analgesia-and-anesthesia-for-obstetrics?search=Anesthesia%20Pregnancies&source=search_result&selectedTitle=6~150&usage_type=default&display_rank=6 adresinden ulaşılmıştır.)
12. Bloom SL, Spong CY, Weiner SJ, et al: Complications of anesthesia for cesarean delivery. *Obstet Gynecol* 106:281, 2005

13. Kuipers PW, Kamphuis ET, van Venrooij GE, et al. Intrathecal opioids and lower urinary tract function: a urodynamic evaluation. *Anesthesiology*. 2004;100(6):1497.
14. Anim-Somuah M, Smyth RM, Cyna AM, et al. Epidural versus non-epidural or no analgesia for pain management in labour. *Cochrane Database Syst Rev*. 2018;5:CD000331. Epub 2018 May 21.
15. Thew M, Paech MJ. Management of postdural puncture headache in the obstetric patient. *Curr Opin Anaesthesiol*. 2008;21(3):288.
16. Chen LK, Huang CH, Jean WH, et al. Effective epidural blood patch volumes for postdural puncture headache in Taiwanese women. *J Formos Med Assoc*. 2007;106(2):134.
17. Shearer VE, Jhaveri HS, Cunningham FG. Puerperal seizures after post-dural puncture headache. *Obstet Gynecol* 86:255, 1995.
18. Loughnan BA, Carli F, Romney M, et al. Epidural analgesia and backache: a randomized controlled comparison with intramuscular meperidine for analgesia during labour. *Br J Anaesth*. 2002;89(3):466
19. Rawal N, Schött U, Dahlström B, et al. Influence of naloxone infusion on analgesia and respiratory depression following epidural morphine. *Anesthesiology*. 1986;64(2):194.
20. Smarkusky L, DeCarvalho H, Bermudez A, et al. Acute onset headache complicating labor epidural caused by intrapartum pneumocephalus. *Obstet Gynecol*. 2006;108(3 Pt 2):795.
21. American College of Obstetricians and Gynecologists. *ACOG Practice Bulletin No. 36: Obstetric Analgesia and Anesthesia*. Washington, DC: American College of Obstetricians and Gynecologists, 2002.
22. Jespersen, K., Mele, M. 2017. Analgesia and anesthesia. Vincenzo Berghella, *Obstetric Evidence Based Guidelines* (125-136) New York: CRC Press
23. Kinsella SM, Winton AL, Mushambi MC, et al: Failed tracheal intubation during obstetric general anaesthesia: a literature review. *Int J Obstet Anesth* 24(4):356, 2015
24. UPTODATE (2021). Airway management for the pregnant patient (12/03/2021 tarihinde https://www.uptodate.com/contents/airway-management-for-the-pregnant-patient?search=General%20anesthesia%20for%20obstetrics&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4 adresinden ulaşılmıştır.)
25. Izci B, Vennelle M, Liston WA, et al. Sleep-disordered breathing and upper airway size in pregnancy and post-partum. *Eur Respir J* 2006; 27:321.
26. Boutonnet M, Faitot V, Katz A, et al. Mallampati class changes during pregnancy, labour, and after delivery: can these be predicted? *Br J Anaesth*. 2010;104(1):67.
27. Brock-Utne JG, Dow TG, Dimopoulos GE, et al. Gastric and lower oesophageal sphincter (LOS) pressures in early pregnancy. *Br J Anaesth*. 1981;53(4):381.
28. Davison JS, Davison MC, Hay DM. Gastric emptying time in late pregnancy and labour. *J Obstet Gynaecol Br Commonw*. 1970;77(1):37.
29. Committee on Obstetric Practice, American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 441: Oral intake during labor. *Obstet Gynecol*. 2009;114(3):714.

30. Littleford J. Effects on the fetus and newborn of maternal analgesia and anesthesia: A review. *Can J Anesth.* 2004;51:585–609.
31. UPTODATE (2021). Anesthesia for the patient with peripartum hemorrhage (12/03/2021 tarihinde https://www.uptodate.com/contents/anesthesia-for-the-patient-with-peripartum-hemorrhage?search=Anesthesia%20%20Pregnancies&source=search_result&selectedTitle=5~150&usage_type=default&display_rank=5#H569768468 adresinden ulaşılmıştır.)
32. Bonnet MP, Deneux-Tharoux C, Bouvier-Colle MH. Critical care and transfusion management in maternal deaths from postpartum haemorrhage. *Eur J Obstet Gynecol Reprod Biol.* 2011 Oct;158(2):183-8. Epub 2011 May 31.
33. Tekelioglu M, Karataş S, Güralp O, et al. Incomplete healing of the uterine incision after elective second cesarean section. *J Matern Fetal Neonatal Med.* 2021 Mar;34(6):943-947.
34. UPTODATE (2021). Anesthesia for labor and delivery in high-risk heart disease: Specific lesions (12/03/2021 tarihinde https://www.uptodate.com/contents/anesthesia-for-labor-and-delivery-in-high-risk-heart-disease-specific-lesions?search=Anesthesia%20%20Pregnancies%20vaginal%20birth&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4 adresinden ulaşılmıştır.)
35. UPTODATE (2021). Anesthesia for the patient with preeclampsia (12/03/2021 tarihinde https://www.uptodate.com/contents/anesthesia-for-the-patient-with-preeclampsia?search=Anesthesia%20%20preeclampsia&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1 adresinden ulaşılmıştır.)
36. Estcourt LJ, Malouf R, Hopewell S, et al. Use of platelet transfusions prior to lumbar punctures or epidural anaesthesia for the prevention of complications in people with thrombocytopenia. *Cochrane Database Syst Rev* 2018; 4:CD011980.
37. Lee LO, Bateman BT, Kheterpal S, et al. Risk of Epidural Hematoma after Neuraxial Techniques in Thrombocytopenic Parturients: A Report from the Multicenter Perioperative Outcomes Group. *Anesthesiology* 2017; 126:1053.
38. LeFevre ML, U.S. Preventive Services Task Force. Low-dose aspirin use for the prevention of morbidity and mortality from preeclampsia: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2014; 161:819.
39. Liabsuetrakul T, Choobun T, Peeyananjarassri K, et al. Prophylactic use of ergot alkaloids in the third stage of labour. *Cochrane Database Syst Rev* 2018; 6:CD005456.
40. Podovei M, Bateman BT. The Consensus Bundle on Hypertension in Pregnancy and the Anesthesiologist: Doing All the Right Things for All the Patients All of the Time. *Anesth Analg* 2017; 125:383.
41. Gist RS, Stafford IP, Leibowitz AB, et al: Amniotic fluid embolism, *Anesth Analg* 108:1599, 2009.
42. Dean LS, Rogers RP, Harley RA, et al: Case scenario: amniotic fluid embolism, *Anesthesiology* 116:186, 2012.
43. UPTODATE (2021). Umbilical cord prolapse (12/03/2021 tarihinde https://www.uptodate.com/contents/umbilical-cord-prolapse?search=cord%20prolapse%20management&source=search_result&selectedTitle=1~25&usage_type=default&display_rank=1 adresinden ulaşılmıştır.)