

# BAKI NOKTASINDA OBSTETRİK ACİL USG

# 19

**Dr. Ömer SALT**  
**Dr. Polat DURUKAN**  
**Dr. Daniel Jude O'BRIEN**

*Trakya Üniversitesi Acil Tıp AD*  
*Erciyes Üniversitesi Acil Tıp AD*  
*Louisville Üniversitesi Acil Tıp AD*

Ultrasonografi obstetrik değerlendirmede en yaygın ve en geniş kullanım alanına sahip görüntüleme metodudur. Gelişmiş ülkelerde, ülkemizde olduğu gibi gebeliğin başlangıcından doğuma kadar geçen sürede bebek ve annenin sağlık durumunun izlem ve tanıda standart prosedürler arasında yerini almıştır<sup>(1)</sup>. Bir Acil Tıpçı ultrason yardımıyla intrauterin gebelik kesin tanısını koyabilme yeteneğine sahip olmalıdır. İlave olarak gebelik kaybı ve servikal ektopik gebelik gibi patolojik durumların ultrason bulgularını da bilmelidir. Fertilizasyondan yaklaşık bir hafta sonra gebelik kesesi ve embriyo uterusu implante olur. Korpus luteumdan salınan hormonların etkisiyle endometriyum kalınlığı artar ve gebelik kesesi gelişimi hızlanır. Gebelik oluştuktan sonra anne kanında ve idrarında beta- human chorionic gonadotropin ( $\beta$ - hCG) tespit edilebilir. Bu dönem gebeliğin yaklaşık dördüncü haftasına denk düşer<sup>(2)</sup>.

*\*Gebelik kesesi transvajinal ultrason kullanılarak ilk olarak gebeliğin beşinci haftası civarında görülebilir.*

*\*Gebelik kesesi ve yolk kesesinin transabdominal ultrason ile görülmesi transvajinal yolla görülmesinden yaklaşık bir buçuk hafta sonra olur.*

## Kaynaklar

1. Benson CB, Doubilet PM. Fetal measurements, normal and abnormal fetal growth. In: Rumack C, Charbonneau W, Wilson S, eds. Diagnostic ultrasound, 2nd ed. St. Louis: Yearbook Medical Publishers, 1998:1013-1031
2. Doubilet PM, Benson CB. Embryonic heart rate in the early first trimester: what rate is normal? *J Ultrasound Med* 1995;14:431-434.
3. Fleischer AC, Kepple DM. Transvaginal sonography of early intrauterine pregnancy. In: Fleischer AC, Manning FA, Jeanty P, et al., eds. Sonography in obstetrics & gynecology: principles and practice, 6th ed. New York: McGraw-Hill, 2001:61-88.
4. Hertzberg BS, Mahony BS, Bowie JD. First trimester fetal cardiac activity: sonographic documentation of a progressive early rise in heart rate. *J Ultrasound Med* 1988;7:573-575.
5. Filly RA, Feldstein VA. Ultrasound evaluation of normal fetal anatomy. In: Callen PW, ed. Ultrasonography in obstetrics and gynecology, 4th ed. Philadelphia: WB Saunders, 2000:221-276.
6. Laing FC, Frates MC, Brown DL, et al. Sonography of the fetal posterior fossa: false appearance of mega cisterna magna and Dandy Walker variant. *Radiology* 1994;192:247-251.
7. Benson CB. Ruling out fetal anomalies. In: Benson CB, Arger P, Bluth EI, eds. Ultrasound in obstetrics and gynecology, a practical approach. New York: Thieme Medical and Scientific Publishers, 2000: 145-154.
8. Jeanty P, Rodesch F, Delbeke D, et al. Estimation of gestational age from measurements of fetal long bones. *J Ultrasound Med* 1984;3:75-79.
9. Burnet LS. Gynecologic causes of the acute abdomen. *Surg Clin North Am* 1988;68:385-98.
10. American College of Emergency Physicians. Emergency ultrasound guidelines. *Ann Emerg Med* 2009;53:550-570
11. Evans MI. Amniotic bands. *Ultrasound Obstet Gynecol* 1997;10:307-308.
12. Athey PA, Lamki N, Matyas MA, et al. Comparison of transvaginal and transabdominal ultrasonography in ectopic pregnancy. *Can Assoc Radiol J*. 1991;42:349-352
13. Veronica L. Matthew W. Obstetrics and Gynecology Topics in Emergency Medicine Resident Training. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*. 2014;8:35-43.
14. Barkin RM. Pediatric emergency medicine: concepts and clinical practice. 2nd ed. St. Louis: Mosby, 1997.
15. Filly KA. Ectopic pregnancy: the role of sonography. *Radiology* 1987;162:661-8.
16. Cosby KS, Kendall JL. Practice Guide to Emergency Ultrasound. 16. Vandermeer FQ, Wong-You-Cheong JJ. Imaging of acute pelvic Philadelphia, PA: Lippincott Williams and Wilkins; 2006.
17. Hahn SA, Lavonas EJ, Mace SE, Napoli AM, Fesmire FM. 17. Webb EM, Green GE, Scoutt LM Clinical policy: Critical issues in the initial evaluation and management of patients presenting to the emergency department *Ann Emerg Med* 2012;60:381-390.

18. Cicchiello LA, Hamper UM, Scoutt LM. Ultrasound evaluation of gynecologic causes of pelvic pain. *Obstet Gynecol Clin North Am* 2011;38:85-114.
19. Lin EP, Bhatt S, Dogra VS. Diagnostic clues to ectopic pregnancy. *Radiographics* 2008;28:1661-1671.
20. Veronica L, Matthew W. Obstetrics and Gynecology Ultrasound Topics in Emergency Medicine Resident Training. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*, January-March 2014;8:35-43.
21. Hahn SA, Lavonas EJ, Mace SE, Napoli AM, Fesmire FM, American College of Emergency Physicians Clinical Policies of the emergency medicine milestones. Academic Emergency Subcommittee on Early Clinical policy: Critical issues in the Medicine 2013;20:724-729.
22. Paspulati RM, Bhatt S, Nour S. Sonographic evaluation of first-in early pregnancy. *Ann Emerg Med* 2012;60:381-390.
23. Braffman BH, Coleman BG, Ranchandani P, Arger PH, NodineVG, Dinsmore BJ, et al. Emergency department screening for ectopic pregnancy: a prospective ultrasound study. *Radiology* 1994;190:797-802.
24. Rizk B, Tan SL, Morcos S, et al. Heterotopic pregnancies in invitro fertilization and embryo transfer. *Am J Obstet Gynecol* 1991;164:161-164.
25. Nyberg DA, Mack LA, Jeffrey RB Jr, Lain FC. Endovaginal sonographic evaluation of ectopic pregnancy: a prospective study. *AJR Am J Roentgenol* 1987;149:1181-6.
26. Abu-YousefMM, Bleicher JJ, Williamson RA, et al. Subchorionic hemorrhage: sonographic diagnosis and clinical significance. *AJR Am J Roentgenol* 1987;149:737-40.
27. Boniua-Musoles FM, Ballester MJ, Tarin JJ, Raga F, Osborne NG, Pellicer A. Does transvaginal color Doppler sonography differentiate between developing and involuting ectopic pregnancies? *J Ultrasound Med* 1995;14:175-81.
28. Bennett GL, Bromley B, Leiberman E, Benacerraf BR. Subchorionic hemorrhage in first-trimester pregnancies: prediction of pregnancy outcome with sonography. *Radiology* 1996;200:803-6.
29. Goldstein SR, Subramanyam BR, Raghavendra BN, et al. Subchorionic bleeding in threatened abortion: sonographic findings and significance. *AJR Am J Roentgenol* 1983;141:975-8.
30. Ball RH, SchoenbornJA. Clinical significance ofultrasonographically detected subchorionic hemorrhages. *Am J Obstet Gynecol* 1996; 174:996-1002.
31. Burrows PE, Lyons EA, Phillips HJ, Oates I. Intrauterine membranes: sonographic findings and clinical significance. *JCUJ Clin Ultrasound* 1982;10:1-8.
32. Paspulati RM, Bhatt S, Nour S. Sonographic evaluation of first-in early pregnancy. *Ann Emerg Med* 2012;60:381-390.
33. Ma OJ, Mateer J, Blaivas M. *Emergency Ultrasound*. Second Edition ed. China: The McGraw-Hill Companies, Inc. 2008.
34. Greer VL, Brosseit MW. Obstetrics and Gynecology Ultrasound Topics in Emergency Medicine Resident Training. *Donald School Journal of Ultrasound in Obstetrics and Gynecology*, January-March 2014;8:35-43.
35. Estroff JA. *Emergency obstetric and gynecologic ultrasound*. *Radiol Clin North Am* 1997;35:921.

36. Dart RG. Role of pelvic ultrasonography in evaluation of symptomatic first-trimester pregnancy. *Ann Emerg Med* 1999;33:310.
37. Kaakaji Y, Nghiem HV, Nodell C, et al. Sonography of obstetric and gynecologic emergencies. Part I, obstetric emergencies. *AJR Am J Roentgenol* 2000;174:641.
38. Iams JD, Goldenberg RL, Meis PJ, et al. The length of the cervix and the risk of spontaneous premature delivery. *N Eng J Med* 1996;334:567-572.
39. Wong G, Levine D, Ludmir J. Maternal postural challenge as a functional test for cervical incompetence. *J Ultrasound Med* 1997;16:169-175.
40. Moore L, Wilson SR. Ultrasonography in obstetric and gynecologic emergencies. *Radiol Clin North Am* 1994;32:1005.
41. Kaakaji Y, Nghiem HV, Nodell CT, Winter C. Sonography of Obstetric and Gynecologic Emergencies: Part I, Obstetric Emergencies *AJR* 2000;174:641-649.
42. Nyberg DA, Cyr DR, Mack LA. Sonographic spectrum of placental abruption. *AJR* 1987;148:161-164.
43. Shrout AB, Kipelman JN. Ultrasonographic diagnosis of uterine dehiscence during pregnancy. *J Ultrasound Med* 1995;14:399-402.
44. Bedi DG, Salmon A, Winsett MZ. Ruptured uterus: sonographic diagnosis. *J Clin Ultrasound* 1986;14:429-433.
45. Zuckerman J, Levine D, Michelle MJ, et al. Imaging of pelvic postpartum complications: pictorial essay. *AJR Am J Roentgenol* 1997; 168:663-8.
46. Rooholamini SA, Au AH, Hansen GC, et al. Imaging of pregnancy-related complications. *Radiographics* 1993;13:753-70.
47. Lev-Toaff AS, Baka JJ, Toaff ME, Friedman A C, Radeclid P D, Caroline DE Diagnostic imaging in puerperal febrile morbidity. *Obstet Gynecol* 1991;78:50-5.
48. Wachsberg RH, Kurtz AB. Gas within the endometrial cavity at postpartum US: a normal finding after spontaneous vaginal delivery. *Radiology* 1992; 183:431-3.
49. Wilson PC, Lerner RM. Diagnosis of ovarian vein thrombophlebitis by ultrasonography. *J Ultrasound Med*. 1983;2:187-90.
50. Achiron R, Goldenberg M, Lipitz S, Mashiach S. Transvaginal duplex Doppler ultrasonography in bleeding patients suspected of having residual trophoblastic tissue. *Obstet Gynecol* 1993;81:507-11.
51. Hertzberg BS, Bowie JD. Ultrasound of the postpartum uterus: prediction of retained placental tissue. *J Ultrasound Med* 1991;10:451--6.
52. Wiener MD, Bowie fD, Baker ME, Kay HH. Sonography of subfascial hematoma after cesarean delivery. *AJR Am J Roentgenol* 1987;148:907-10.