

# Bölüm 5

## OBSTETRİ (GEBELİK ANTENATAL İZLEM)

Cuma TAŞIN<sup>1</sup>

### GİRİŞ

Antenatal ve perinatal takip yeni gelişmeler ile devamlı bir değişim içerisinde. Antenatal takibin temel amacı maternal, fetal ve neonatal morbidite ve mortalitenin azaltılmasıdır. Bu amaca ulaşma ise tüm hekimlerin güncel olan bilgilere, yaklaşımlara ve yönetim protokollerine ulaşabilmesi ile sağlanabilir.

### ANTENATAL YAKLAŞIM

Çoğu hastanın antenatal takibinde herhangi bir komplikasyon gelişmez. Ancak bazı hastaların gebelikten önceki rahatsızlıkları gebelikte ağırlaşabilir. Bazı çiftlerin kalıtsal hastalıklara eğilimi artabilir. Anne ve babanın işi, sosyoekonomik durumu, sigara-alkol gibi kötü alışkanlıklarının da gebeliğe olası etkileri bu dönemde değerlendirilmelidir. Gebenin fiziksel özellikleri, önceki gebeliklerinde meydana gelen rahatsızlıklar ve gebelikten önce var olan hastalıkları da gebe kalımdan sonra önem taşımaktadır.<sup>(1,2)</sup>

#### Annenin Yaşı

Son yıllarda sosyokültürel ve ekonomik koşullar değişimlerin sonucunda ileri yaşlarda hamilelikler artmakta, artan anne yaşı beraberinde daha ciddi problemlerin ortaya çıkmasına sebep olmaktadır. Aynı şekilde genç yaşta gebe kalanlarda ise preeklampsi ve zor doğum oranları artmaktadır. Anne yaşının 35 ve üstünde olması anomalili bebek, gebeliğin indüklediği HT, preeklampsi, ges-

tasyonel diyabetis mellitus, plasenta previa, ölü doğum ve müdahaleli doğum oranı artar.<sup>(3)</sup>

Genç yaşta gebe kalanlarda hastalarda prematür doğum riski de artar.<sup>(4)</sup> Bunun yanında adölesan gebeliklerde depresyon, madde kullanımını riskinde de artış izlenir.<sup>(5)</sup>

#### Annenin Kilosu Beslenmesi

Gebe kalmadan önce vücut kitle indeksi (VKİ) az olan ve gebeliği sırasında az kilo alan gebelerde düşük doğum ağırlığı ve erken doğum riski artar.<sup>(6,7)</sup> Buna karşılık obez gebelerde (VKİ > 30) ölü doğum ve erken doğum risklerinin VKİ arttıkça artış göstermektedir.<sup>(6)</sup> Obez gebelerde preeklampsi, gestasyonel diyabet, müdahaleli doğum ve doğum sonrası enfeksiyon riski artar.<sup>(8)</sup> Obez annelerin bebeklerin de spina bifida, doğum travması ve geç neonatal dönemde ölüm riski de artmıştır.<sup>(9)</sup>

Gebelikte önemli olan dengeli beslenmedir. Fazla gıda alımının faydadan çok zararları olur. Gebelikte günlük kalori ihtiyacı ilk trimesterde gebe olmayanlar ile aynı düzeyde iken 2. Trimester de günlük kalori ihtiyacına yaklaşık 350 Kcal artar, 3. trimesterde ise yaklaşık 450 Kcal artış gösterir.<sup>(10)</sup> Gebelikte ideal kilo alımı VKİ göre değişir. VKİ arttıkça alınması gereken kilo Tablo 5-1 gösterildiği gibi azalır.

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## KAYNAKÇA

1. Gabbe S.G, Niebyl J.R, Simpson J.L. Obstetrics: Normal and Problem Pregnancies. In "Prenatal Care". (eds) Johnson T.R.B, Gregory K.D, Niebyl J.R. 5th ed. Philadelphia, Elsevier. 2006;109-294.
2. National Collaborating Centre for Women's and Children's Health. Antenatal care: routine care for the healthy pregnant woman. Clinical Guideline 62, corrected June 2008. Accessed from <http://guidance.nice.org.uk/CG62/Guidance/pdf/English>, on 5/9/2012.
3. Jacobsson B. Advanced maternal age and adverse perinatal outcome. *Obstet Gynecol* 2004;104(4):727-733.
4. Lao TT, Ho LF. The obstetric implications of teenage pregnancy. *Hum Reprod*. 1997;12(10):2303-2305.
5. Hodgkinson S, Beers L, Southammakosane C, Lewin A. Addressing the mental health needs of pregnant and parenting adolescents. *Pediatrics*. 2014;133(1):114-122.
6. Neggess Y, Goldenberg RL. Some thoughts on body mass index, micronutrient intakes and pregnancy outcome. *Journal of Nutrition* 2003;133:1737S-1740S.
7. Schieve LA, Cogswell ME, Scanlon KS, Perry G, Ferre C, Blackmore-Prince C, et al. Prepregnancy body mass index and pregnancy weight gain: associations with preterm delivery. The NMIHS Collaborative Study Group. *Obstet Gynecol* 2000 Aug;96(2):194-200.
8. Davies GA, Maxwell C, McLeod L, Gagnon R, Basso M, Bos H, et al. Society of Obstetricians and Gynaecologists of Canada. Obesity in pregnancy. *J Obstet Gynaecol Can* 2010 Feb;32(2):165-173.
9. Cedergren MI. Maternal morbid obesity and the risk of adverse pregnancy outcome. *Obstet Gynecol* 2004 Feb;103(2):219-224.
10. IOM (Institute of Medicine) and NRC (National Research Council). 2009. Weight Gain During Pregnancy: Reexamining the Guidelines. Washington DC, The National Academies Press. 2009;241-328.
11. Lumbiganon P. Multiple-micronutrient supplementation for women during pregnancy: RHL commentary (last revised: 23 August 2007). The WHO Reproductive Health Library; Geneva: World Health Organization.
12. Ramakrishnan U, Grant F, Goldenberg T, Zongrone A, Martorell R. Effect of women's nutrition before and during early pregnancy on maternal and infant outcomes: a systematic review. *Paediatr Perinat Epidemiol* 2012 Jul;26 Suppl 1:285-301. doi: 10.1111/j.1365-3016.2012.01281.x.
13. ICSI Health Care Guideline: Routine Prenatal Care. Released in July 2010 for Fourteenth Edition. Minnesota, USA, 2010. Accessed from [http://www.icsi.org/prenatal\\_care\\_4/prenatal\\_care\\_\\_routine\\_\\_full\\_version\\_\\_2.html](http://www.icsi.org/prenatal_care_4/prenatal_care__routine__full_version__2.html), on 5/9/2012.
14. Wilson RD, Johnson JA, Wyatt P, Allen V, Gagnon A, Langlois S, et al. Genetics Committee of the Society of Obstetricians and Gynaecologists of Canada and The Motherisk Program. Pre-conceptional vitamin/folic acid supplementation 2007: the use of folic acid in combination with a multivitamin supplement for the prevention of neural tube defects and other congenital anomalies. *J Obstet Gynaecol Can* 2007 Dec;29(12):1003-1026.
15. Kappel B, Eriksen G, Hansen KB, Hvidman L, Krag-Olsen B, et al. Short stature in scandinavian women: An obstetrical risk factor. *Acta Obstet Gynecol Scand* 1987;66:153-158.
16. CDC. Notice to readers: revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. *MMWR* 2001; 50 (No. 49): 1117.
17. CDC. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2011;60(No.2):26-27.
18. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2007; 56 (No. RR-4): 16, 24-26, 29-32. UPDATED March 2008
19. Shepard TH. Catalog of Teratogenic Agents. 9th ed. Baltimore, MD: Johns Hopkins University Press. 1998;1309.
20. CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP) part 2: immunization of adults. *MMWR* 2006; 55 (No. RR16):13.
21. Banatvala J, Van Damme P, Van Hattum J. Boosters for hepatitis B. European Consensus Group on Hepatitis B Immunity. *Lancet* 2000 Jul 22;356(9226):337- 338.
22. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2006;55(No. RR-10):11-12.
23. CDC. FDA licensure of bivalent human papillomavirus vaccine (HPV2, Cervarix) for use in females and updated HPV vaccination recommendations from the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2010;59(No.20):629.
24. WHO. WHO Immunization, surveillance, assessment and monitoring. Accessed from [http://www.who.int/immunization\\_monitoring/diseases/MNTE\\_initiative/en/index.html](http://www.who.int/immunization_monitoring/diseases/MNTE_initiative/en/index.html), on 05/09/2012.
25. Carroli G, Villar J, Ba'aqeel H, Piaggio G, Khan-Neelofur D, Gulmezoglu M, et al; WHO Antenatal Care Trial Research Group. WHO systematic review of randomised trials of routine antenatal care. *Lancet*. 2001May19;357(9268):1551-1564.
26. T.C. Sağlık Bakanlığı. Ana Çocuk Sağlığı ve Aile Planlaması Genel Müdürlüğü. Doğum Öncesi Bakım Yönetim Rehberi. Ankara, Türkiye, 2009.
27. Nicolaidis KH. A model for a new pyramid of prenatal care based on the 11 to 13 weeks' assesment. *Prenat Diagn*. 2011 Jan;31(1):3-6. doi: 10.1002/pd.2685
28. Kirkham C, Harris S, Grzybowski S. Evidence-based prenatal care: Part I. General prenatal care and counseling issues. *Am Fam Physician* 2005 Apr 1;71(7):1307-1316.
29. Schroder BM; American College of Obstetricians and Gynecologists. ACOG practice bulletin on thyroid disease in pregnancy. *Am Fam Phycian* 2002 May 15;65(10):2158, 2161-2162.
30. ACOG practice bulletin. Perinatal viral and parasitic infections. Number 20, September 2000. American College of Obstetricians and Gynecologists. *Int J Gynaecol Obstet* 2002;76:95-107.
31. Al RA, Unlubilgin E, Kandemir O, et al. Intravenous versus oral iron for treatment of anemia in pregnancy: a randomized trial. *Obstet Gynecol* 2005;106:1335-1340
32. Casey BM, Dashe JS, Wells E, McIntire DD, Byrd W, Le-

- veno KJ, et al. Subclinical hypothyroidism and pregnancy outcomes. *Obstet Gynecol* 2005;105:239-245
33. Abalovich M, Amino N, Barbour LA et al. Management of thyroid dysfunction during pregnancy and postpartum: an Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab.* 2007; 92(8 Suppl):S1-47.
  34. U.S. Preventive Services Task Force. Chapter 38: Screening for D (Rh) incompatibility. In *Guide to Clinical Preventive Services*, 2nd ed. Baltimore, Williams and Wilkins, 1996b;425-432.
  35. Melzer K, Schutz Y, Boulvain M, Kayser B. Physical activity and pregnancy: cardiovascular adaptations, recommendations and pregnancy outcomes. *Sports Med* 2010 Jun 1;40(6):493-507.
  36. Sonek JD, Nicolaides KH, Janku P. Screening at 11-13+6 weeks' gestation. *Ceska Gynekol* 2012 Apr;77(2):92-104. Review
  37. Nicolaides KH. Screening for fetal aneuploidies at 11 to 13 weeks. *Prenat Diagn* 2011; 31: 7-15. Review.
  38. ACOG Committee on Practice Bulletins. Clinical management guidelines for obstetrician-gynecologists. Prenatal diagnosis of fetal chromosomal abnormalities. *Obstet Gynecol* 2001;97(5 pt 1):1-12.
  39. Lo YMD, Corbetta N, Chamberlain PF, Rai V, Sargent IL, Redman CWG, Wainscoat JS. Presence of fetal DNA in maternal plasma and serum. *Lancet* 1997;350:485-487
  40. Wald NJ, Huttly WJ, Hackshaw AK. Antenatal screening for Down's syndrome with the quadruple test. *Lancet* 2003;361:835-836.
  41. Wald NJ, Rodeck C, Hackshaw AK, et al. SURUSS Research Group. First and second trimester antenatal screening for Down's syndrome: the results of the Serum, Urine and Ultrasound Screening Study (SURUSS). *Health Technol Assess* 2003;7:1-88.
  42. Kooper AJA, de Bruijn D, van Ravenwaaij-Arts CMA, et al. Fetal anomaly scan potentially will replace routine AFAFP assays for the detection of neural tube defects. *Prenat Diagn* 2007;27:29-33.
  43. Rizzo G, Pietrolucci M, Aiello E, Mammarella S, Bosi C, Arduini D. The role of three-dimensional ultrasound in the diagnosis of fetal congenital anomalies: a review. *Minerva Ginecol* 2011 Oct;63(5):401-410.
  44. Moroz LA, Simhan HN. Rate of sonographic cervical shortening and the risk of spontaneous preterm birth. *Am J Obstet Gynecol* 2012 Mar, 206(3):234. e1-5. *Epub* 2011 Dec 1.
  45. National Institute for Health and Clinical Excellence: Hypertension in pregnancy: the management of hypertensive disorders during pregnancy. Clinical Guideline 107, 2011. Accessed from <http://guidance.nice.org.uk/CG107/Guidance/pdf/English>, on 5/9/2012.
  46. American Diabetes Association. Diagnosis and classification of diabetes mellitus (Position Statement). *Diabetes Care* 2009;32(Suppl. 1):S62-S67.
  47. Lawrence JM, Contreras R, Chen W, Sacks DA: Trends in the prevalence of preexisting diabetes and gestational diabetes mellitus among a racially/ethnically diverse population of pregnant women, 1999-2005. *Diabetes Care* 2008;31:899-904.
  48. HAPO Study Cooperative Research Group. Hyperglycemia and Adverse Pregnancy Outcome (HAPO) Study: associations with neonatal anthropometrics. *Diabetes* 2009;58:453-459.
  49. Metzger BE, Gabbe SG, Persson B, Buchanan TA, Catalano PA, Damm P, et al. International Association of Diabetes and Pregnancy Study Groups Consensus Panel, International association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy. *Diabetes Care* 2010 Mar;33(3):676-682.
  50. National Institute for Health and Clinical Excellence: Diabetes in pregnancy: management of diabetes and its complications from pre-conception to the postnatal period. Clinical guideline 63, 2008. Accessed from [www.nice.org.uk/CG063fullguideline](http://www.nice.org.uk/CG063fullguideline), on 5/9/2012.
  51. Moore TR, Piacquadio K: A Prospective Evaluation of Fetal Movement Screening to Reduce the Incidence of Antepartum Fetal Death. *Am J Obstet Gynecol* 1989, 160:1075-1080.
  52. Patrick J, Campbell K, Carmichael L, et al. Patterns of gross fetal body movements over 24 hour observation intervals during the last 10 weeks of pregnancy. *Am J Obstet Gynecol.* 1982;142:363
  53. Signore C, Freeman RK, Spong CY. Antenatal tseting: a reevaluation. Executive Summary of a Eunice Kennedy Shriver National Instiyute of Child Helath and Human Development Workhop. *Obstet Gynecol.* 2009;113:687
  54. Liston R, Sawchuck D, Young D. Methods of Antenatal Fetal Surveillance: NST. SOGC Fetal health Surveillance: antepartum and intrapartum Consensus Guideline No. 197, Sept 2007 *J Obstet Gynaecol Can* 2007;27:(Suppl 4)15-17.
  55. Keegan K, Paul R, Broussard P, et al. Antepartum fetal heart rate tetsting. V. The nonstress test: an outpatient Approach. *Am J Obstet Gynecol.* 1980;136:81
  56. Druzin ML. Fetal bradycardia during antepartum testing, further observations. *J Reprod Med.* 1989;34:47
  57. Gabbe S.G, Niebyl J.R, Simpson J.L. *Obstetrics: Normal and Problem Pregnancies.* In "Intrauterin Growth Restriction". (eds) Baschat A.A, Galan H.L, Ross M.G, Gabbe S.G. 5th ed. Philadelphia, Elsevier. 2006; 794-795.
  58. Nageotte MP, Towers CV, Asrat T, Freeman RK. Perinatal outcome with the modified biophysical profile. *Am J Obstet Gynecol* 1994;170(6):1672-1676.
  59. Vlemmix F, Rosman AN, Fleuren MA, Rijnders ME, Beuckens A, Haak MC, et al. Implementation of the external cephalic version in breech delivery. Dutch national implementation study of external cephalic version. *BMC Pregnancy Childbirth* 2010 May 10;10:20.
  60. Manning FA. Dynamic ultrasound-based fetal assessment: the fetal biophysical profile score. *Clin Obstet Gynecol* 1995;38(1):26-44.