6. BÖLÜM

HİPEREMEZİS GRAVİDARUM

Şirin AYDIN[1]

GİRİŞ

Gebelikte bulantı ve kusma, 2000 yılı aşkın bir süredir erken gebeliğin bir özelliği olarak kabul edilmektedir. M.Ö. 460 ile 370 yılları arasında yaşamış olan Hipokrat, "Amenore geliştiren, kasılma ve ateşten muzdarip olmadığı halde mide bulantısına yatkın olan bir kadın, hamiledir" yazmıştır (1). Gebelikte bulantı ve kusma, hamile bir kadının ve fetüsün sağlığını etkileyen yaygın bir durumdur; mide bulantısı % 50-80 oranında görülürken, öğürme ve kusma prevalansı % 50'dir (2). Gebe kadınların yaklaşık % 1'ini etkileyen hiperemezis gravidarum (HG) ise spektrumun en uç noktasını temsil eder; tıbbi müdahale gerektiren aşırı kusma durumudur. Gebelik öncesi kilonun % 5'inden fazlasının kaybı, dehidratasyon, asit-baz ve elektrolit dengesizlikleri ile ilişkilidir. Bulantı ve kusmaların şiddeti hafiften ciddi düzeye kadar değişebilse de, etkilenen gebelerin çoğunda yeterli oral beslenme ve hidrasyon sağlanabilmektedir.

Bulantı ve kusmanın başlangıç zamanlaması önemlidir. Gebelikte bulantı ve kusma semptomları, hemen hemen tüm etkilenen kadınlarda 9. gebelik haftasından önce ortaya çıkar. Tipik olarak 4. ve 7. gebelik haftası arasında hamile kadınları etkiler ve genellikle 20. haftada düzelir (3). Eğer bulantı kusma kay-

[1] Uzm. Dr., Başkent Üniversitesi Adana Dr. Turgut Noyan Uygulama ve Araştırma Merkezi, dr.sirinaydinn@gmail.com

KAYNAKLAR

1. Chadwick J, Mann W. The medical works of Hippocrates. Oxford: Blackwell Scientific Publications; 1950. Later ed. pub. under title: Hippocratic writings.
2. Matthews A, Haas DM, O'Mathúna DP. Interventions for nausea and vomiting in early pregnancy. Cochrane Database of Systematic Reviews 2015, Issue 9. Art. No.: CD007575. DOI: 10.1002/14651858. CD007575.pub4. (Systematic Review)
3. Gadsby R, Barnie-Adshead AM, Jagger C. A prospective study of nausea and vomiting during pregnancy. Br J Gen Pract. 1993;43: 245–248.
4. Di Gangi S, Gizzo S, Patrelli TS, et al. Wernicke's encephalopathy complicating hyperemesis gravidarum: from the background to the present. J Matern Fetal Neonatal Med. 2012;25:1499–1504.
5. Mitchell-JonesN,Gallos I, Farren J, et al. Psychologicalmorbidity associated with hyperemesis gravidarum: a systematic review and meta-analysis. BJOG. 2017;124:20–30.
6. Hinkle SN, Mumford SL, Grantz KL, et al. Association of nausea and vomiting during pregnancy with pregnancy loss: a secondary analysis of a randomized clinical trial. JAMA Intern Med. 2016;176: 1621–1627.
7. Veenendaal MV, van Abeelen AF, Painter RC, et al. Consequences of hyperemesis gravidarum for offspring: a systematic review and meta-analysis. BJOG. 2011;118:1302–1313.
8. Fejzo MS, Sazonova OV, Sathirapongsasuti JF et al (2018) Placenta and appetite genes GDF15 and IGFBP7 are associated with hyperemesis gravidarum. Nat Commun 9(1):1178
9. Fejzo MS, Myhre R, Colodro-Conde L, vd. Hiperemezis gravidarum'un genetik analizi, hücre içi kalsiyum salım kanalı (RYR2) ile ilişkiyi ortaya koymaktadır. Mol Cell Endocrinol 2017; 439: 308.
10. O'Donnell A, McParlin C, Robson SC (2016) Treatments for hyperemesis gravidarum and nausea and vomiting in pregnancy: a systematic review and economic assessment. Health Technology Assessment 20, 1–268.
11. Yoshimura M, Hershman JM. Thyrotropic action of human chorionic gonadotropin. Thyroid 1995;5:425–34.
12. Bernstein L, Pike MC, Lobo RA. Cigarette smoking in pregnancy results in marked decrease in maternal hCG and oestradiol levels. Br J Obstet Gynaecol 1989;96:92–6.
13. Depue RH, Bernstein L, Ross RK. Hyperemesis gravidarum in relation to estradiol levels, pregnancy outcome, and other maternal factors: a seroepidemiologic study. Am J Obstet Gynecol 1987;156:1137–41.
14. Goldzieher JW, Moses LE, Averkin E. A placebo-controlled double-blind crossover investigation of the side effects attributed to oral contraceptives. Fertil Steril 1971;22:609–23.
15. Whitehead SA, Andrews PL, Chamberlain GV. Characterisation of nausea and vomiting in early pregnancy: a survey of 1000 women. J Obstet Gynaecol 1992;12:364–9.
16. Verberg MFG, Gillott DJ, Al-Fardan N, et al. Hyperemesis gravidarum, a literature review. Hum Reprod Update. 2005;11(5):527-539.

17. Sandven I, Abdelnoor M, Wethe M, et al. Helicobacter pylori infection and hyperemesis gravidarum. An institution-based case–control study. Eur J Epidemiol. 2008;23(7):491-498.
18. Cardaropoli S. Helicobacter pylori and pregnancy-related disorders. World J Gastroenterol. 2014;20:654.
19. Jacoby EB, Porter KB. Helicobacter pylori infection and persistent hyperemesis gravidarum. Am J Perinatol. 1999;16:85-88.
20. Lacroix R, Eason E, Melzack R. Nausea and vomiting during pregnancy: a prospective study of its frequency, intensity, and patterns of change. Am J Obstet Gynecol. 2000;182(4):931-937.
21. Koren G, Boskovic R, Hard M, et al. Motherisk—PUQE (pregnancyunique quantification of emesis and nausea) scoring system for nausea and vomiting of pregnancy. Am J Obstet Gynecol 2002;186(Suppl 2):S228–31.
22. Ebrahimi N, Maltepe C, Garcia Bournissen F, et al. Nausea and vomiting of pregnancy: using the 24-hour Pregnancy-Unique Quantification of Emesis (PUQE-24) scale. J Obstet Gynaecol Can 2009;31:803–7.
23. Goodwin TM, Montoro M, Mestman JH. Transient hyperthyroidism and hyperemesis gravidarum: clinical aspects. Am J Obstet Gynecol 1992;167:648–52.
24. Rotman P, Hassin D, Mouallem M. Wernicke's encephalopathy in hyperemesis gravidarum: association with abnormal liver function. Isr J Med Sci 1994;30:225–8.
25. Koch KL, Frissora CL. Nausea and vomiting during pregnancy. Gastroenterol Clin North Am. 2003;32:201-234, vi.
26. Niebyl JR. Nausea and vomiting in pregnancy. N Engl J Med. 2010;363:1544-1550.
27. Birkeland E, Stokke G, Tangvik RJ, vd. Norveç PUQE (Gebelik-Eşsiz Kusma ve mide bulantısı ölçümü), hiperemezis gravidarum ve yetersiz beslenme alımı olan hastaları tanımlar: ileriye dönük bir kohort doğrulama çalışması. PLoS One 2015; 10: e0119962.
28. Dochez V, Dimet J, David-Gruselle A, vd. Bir Fransız popülasyonunda gebeliğin mide bulantısı ve kusmasını değerlendirmek için özel anketlerin doğrulanması. Int J Gynaecol Obstet 2016; 134: 294.
29. Koot MH, Grooten IJ, van der Post JAM, vd. Hiperemezis gravidarumda hastalık seyrinin ve ciddiyetinin belirleyicileri. Eur J Obstet Gynecol Reprod Biol 2020; 245: 162.
30. Committee on Practice Bulletins-Obstetrics. ACOG Practice Bulletin No. 189: Nausea And Vomiting Of Pregnancy. Obstet Gynecol 2018; 131:e15. Reaffirmed 2020.
31. Czeizel AE, Dudas I, Fritz G. The effect of periconceptional multivitaminmineral supplementation on vertigo, nausea and vomiting in the first trimester of pregnancy. Arch Gynecol Obstet 1992;251:181–5.
32. Emelianova S, Mazzotta P, Einarson A. Prevalence and severity of nausea and vomiting of preg- nancy and effect of vitamin supplementation. Clin Invest Med 1999;22:106–10.
33. Neural tube defects. ACOG Practice Bulletin No. 187. American College of Obstetricians and Gynecologists. Obstet Gynecol 2017;130:e279–90.
34. Bischoff SC, Renzer C. Nausea and nutrition. Auton Neurosci. 2006;129:22–27.

35. Jednak MA, Shadigian EM, Kim MS, et al. Protein meals reduce nausea and gastric slow wave dysrhythmic activity in first trimester pregnancy. Am J Physiol. 1999;277:G855–G861.
36. Gill SK, Maltepe C, Koren G. The effectiveness of discontinuing iron-containing prenatal multivitamins on reducing the severity of nausea and vomiting of pregnancy. J Obstet Gynaecol. 2009;29:13–16.
37. Ali BH, Blunden G, Tanira MO, et al. Some phytochemical, pharmacological and toxicological properties of ginger (Zingiber officinale Roscoe): A review of recent research, Food and Chemical Toxicology. 2008;46;409-420.
38. Royal College of Obstetricians & Gynaecologists. The management of nausea and vomiting of pregnancy and hyperemesis gravidarum. Green-Top Guideline No. 69. 2016.
39. Campbell K, Rowe H, AzzamH, et al. The management of nausea and vomiting of pregnancy. J Obstet Gynaecol Can. 2016;38: 1127–1137.
40. DingM, Leach M, Bradley H. The effectiveness and safety of ginger for pregnancy-induced nausea and vomiting: a systematic review. Women Birth. 2013;26:e26–e30.
41. Thomson M, Corbin R, Leung L. Effects of ginger for nausea and vomiting in early pregnancy: a meta-analysis. J Am Board Fam Med. 2014;27:115–122.
42. Dante G, Pedrielli G, Annessi E, et al. Herb remedies during pregnancy: a systematic review of controlled clinical trials. J Matern Fetal Neonatal Med. 2013;26:306–312.
43. Tiran D. Ginger to reduce nausea and vomiting during pregnancy: evidence of effectiveness is not the same as proof of safety. Complement Ther Clin Pract. 2012;18:22–25.
44. Helmreich RJ, Shiao SY, Dune LS. Meta-analysis of acustimulation effects on nausea and vomiting in pregnant women. Explore (NY). 2006;2:412–421.
45. McCormack D. Hypnosis for hyperemesis gravidarum. J Obstet Gynaecol 2010;30:647–53.
46. Maltepe C, Koren G. Preemptive treatment of nausea and vomiting of pregnancy: results of a randomized controlled trial. Obstet Gynecol Int 2013;2013:809787.
47. Etwel F, Faught LH, Rieder MJ. The Risk of Adverse Pregnancy Outcome After First Trimester Exposure to H1 Antihistamines: A Systematic Review and Meta-Analysis. Drug Saf. 2017 Feb;40(2):121-132. doi: 10.1007/s40264-016-0479-9.
48. Magee LA, Mazzotta P, Koren G. Evidence-based view of safety and effectiveness of pharmacologic therapy for nausea and vomiting of pregnancy (NVP). Am J Obstet Gynecol 2002;186:S256–61.
49. Tan PC, Khine PP, Vallikkannu N. Promethazine compared with metoclopramide for hyperemesis gravidarum: a randomized controlled trial. Obstet Gynecol 2010;115:975–81.
50. Rumeau-Rouquette C, Goujard J, Huel G. Possible teratogenic effect of phenothiazines in human beings. Teratology 1977;15:57–64.
51. Oliveira LG, Capp SM, You WB, et al. Ondansetron compared with doxylamine and pyridoxine for treatment of nausea in pregnancy: a randomized controlled trial. Obstet Gynecol 2014; 124:735.
52. Kashifard M, Basirat Z, Kashifard M, et al. Ondansetrone or metoclopromide? Which is more effective in severe nausea and vomiting of pregnancy? A randomized trial double-blind study. Clin Exp Obstet Gynecol 2013; 40:127.

53. Anderka M, Mitchell AA, Louik C. Medications used to treat nausea and vomiting of pregnancy and the risk of selected birth defects. National Birth Defects Prevention Study. Birth Defects Res A Clin Mol Teratol 2012;94:22–30.
54. Carstairs SD. Ondansetron use in pregnancy and birth defects: a systematic review. Obstet Gynecol 2016;127: 878–83.
55. Kris MG, Tonato M, Bria E, et al. Consensus recommendations for the prevention of vomiting and nausea following high-emetic-risk chemotherapy. Support Care Cancer. 2011;19(suppl 1):25-32.
56. Ziaei S, Hosseiney FS, Faghihzadeh S. The efficacy low dose of prednisolone in the treatment of hyperemesis gravidarum. Acta Obstet Gynecol Scand. 2004;83:272-275.
57. Safari HR, Fassett MJ, Souter IC, et al. The efficacy of methylprednisolone in the treatment of hyperemesis gravidarum: a randomized, double-blind, controlled study. AmJ Obstet Gynecol. 1998;179(4):921- 924.
58. Bondok RS, El Sharnouby NM, Eid HE, et al. Pulsed steroid therapy is an effective treatment for intractable hyperemesis gravidarum. Crit Care Med. 2006;34(11):2781-2783.
59. Boelig RC, Barton SJ, Saccone G, et al. Interventions for treating hyperemesis gravidarum. Cochrane Database Syst Rev. 2016;5:1- 147.
60. Maina A, Arrotta M, Cicogna L, et al. Transdermal clonidine in the treatment of severe hyperemesis: a pilot randomised control trial: CLONEMESI. BJOG. 2014;121(12):1556-1562.
61. Guttuso T Jr, Robinson LK, Amankwah KS. Gabapentin use in hyperemesis gravidarum: a pilot study. Early Hum Dev. 2010 Jan;86(1):65-6. doi: 10.1016/j.earlhumdev.2009.11.003.
62. McCarthy FP, Murphy A, Khashan AS et al. Day care compared with inpatient management of nausea and vomiting of pregnancy: a randomized controlled trial.
63. Tan PC, Jacob R, Quek KF, et al. Pregnancy outcome in hyperemesis gravidarum and the effect of laboratory clinical indicators of hyperemesis severity. J Obstet Gynaecol. 2007;33(4):457-464.
64. Van Stuijvenberg ME, Schabort I, Labadarios D, et al. The nutrition status and treatment of patients with hyperemesis gravidarum. Am J Obstet Gynecol. 1995;172(5):1585-1591.
65. Siega-RizAM, ViswanathanM, Moos M-K, et al.Asystematic review of outcomes of maternal weight gain according to the Institute of Medicine recommendations: birthweight, fetal growth, and postpartum weight retention. Am J Obstet Gynecol. 2009;201:339.e1-e14.
66. Vaisman N, Kaidar R, Levin I. Nasojejunal feeding in hyperemesis gravidarum--a preliminary study. Clin Nutr. 2004 Feb;23(1):53-7. doi: 10.1016/s0261-5614(03)00088-8.
67. Stokke G, Gjelsvik BL, Flaatten KT. Hyperemesis gravidarum, nutritional treatment by nasogastric tube feeding: a 10-year retrospective cohort study. Acta Obstet Gynecol Scand. 2015 Apr;94(4):359-67. doi: 10.1111/aogs.12578. Epub 2015 Feb 17.