8.
BÖLÜM

GESTASYONEL HİPERTANSİF HASTALIKLAR- I

Alihan TIĞLI[1]

GİRİŞ

Gebelikte hipertansif bozukluklar yıllardır yapılan yoğun çalışmalara rağmen hala tam olarak etyogenezi anlaşılamamıştır. Gebeliğin hipertansiyonu nasıl provake ettiği bazı teoriler dışında netliğe kavuşamamıştır. Bununla birlikte bu ciddi hastalık halen tüm dünyada önlenebilir maternal mortalite ve morbidite oranlarında ilk sıralarda bulunmaktadır.

Gebeliğe bağlı gelişen hipertansif bozukluklar ırk, bölge ve ülkelere göre değişmekle beraber, gebeliklerin yaklaşık %5 ile 10'unda görülür (1).

Dünyada gebeliğin hipertansif hastalıklarına bağlı ölümlerin %99'u az gelişmiş ve gelişmekte olan ülkelerde meydana gelmektedir(2). Dünya sağlık örgütünün 2006 Khan verilerine göre gelişmiş ülkelerdeki anne ölümlerinin %16'sı hipertansif hastalıklara bağlıdır.

TANI VE SINIFLAMA

Uygun koşullarda yarım saat ara ile ölçülen 2 tansiyon değerinin 140/90 üzerinde olması gebelikte hipertansif bozukluk için yeterlidir. Ciddi tansiyon yüksekliği olan hastalarda 1 kez 160/110 üstünde (şiddetli HT) ölçülen değerler de tanı için yeterlidir.

[1] Op. Dr. Kadın Hastalıkları ve Doğum Uzmanı Bandırma Eğitim ve Araştırma Hastanesi, dr.alihan@yahoo.com

34 haftalık arası gebelere maternal ve fetal duruma göre sık laboratuvar ve klinik takiple mümkünse 3.basamak sağlık kuruluşunda izlem tedavisi uygulanabilir. Bu haftalarda betametazon uygulanmalıdır. Şiddetli hipertansiyon tedavi edilmeli tüm preeklemptik gebelerde kontraendikasyon yoksa $MgSO_4$ (IV) yükleme ve idame tedavisi 24-48 saat verilmelidir. Preeklempsi kesin sezaryen endikasyonu değildir. Uygun servikal olgunluğu olan hastalarda vajinal doğum denebilir. Fakat özellikle 32-34 haftadan küçük gebeliklerde yetersiz servikal olgunluk nedeniyle sezaryen yapılabilir. Uygun antenatal izlem ve takip ile preeklempsi tespit edilebileceği ve komplikasyonların önüne geçilebileceği unutulmamalıdır.

KAYNAKLAR

1. Lyall F, Belfort M. Pre-eclampsia Etiology and Clinical Practice. 1st edition, New York: Cambridge University Pres, 2007; 84-98
2. Vigil-De Gracia P. Maternal deaths due to eclampsia and HELLP syndrome. Int J Gynecol Obstet 2009; 104: 90-4
3. Abalos E, Cuesta C, Grosso AL, et al. Global and regional estimates of preeclampsia and eclampsia: a systematic review. Eur J Obstet Gynecol Reprod Biol 2013; 170:1
4. Bartsch E, Medcalf KE, Park AL, et al. Clinical risk factors for pre-eclampsia determined in early pregnancy: systematic review and meta-analysis of large cohort studies. BMJ 2016; 353:i1753
5. Sibai BM, el-Nazer A, Gonzalez-Ruiz A. Severe preeclampsia-eclampsia in young primigravid women: subsequent pregnancy outcome and remote prognosis. Am J Obstet Gynecol 1986; 155:1011.
6. van Rijn BB, Hoeks LB, Bots ML, et al. Outcomes of subsequent pregnancy after first pregnancy with early-onset preeclampsia. Am J Obstet Gynecol 2006; 195:723.
7. Sibai BM, Mercer B, Sarinoglu C. Severe preeclampsia in the second trimester: recurrence risk and long-term prognosis. Am J Obstet Gynecol 1991; 165:1408.
8. Gaugler-Senden IP, Berends AL, de Groot CJ, Steegers EA. Severe, very early onset preeclampsia: subsequent pregnancies and future parental cardiovascular health. Eur J Obstet Gynecol Reprod Biol 2008; 140:171.
9. Duckitt K, Harrington D. Risk factors for pre-eclampsia at antenatal booking: systematic review of controlled studies. BMJ 2005; 330:565
10. Roberts JM, Redman CWG, Global Pregnancy Collaboration. Global Pregnancy Collaboration symposium: Prepregnancy and very early pregnancy antecedents of adverse pregnancy outcomes: Overview and recommendations. Placenta 2017; 60:103.
11. Persson M, Norman M, Hanson U. Obstetric and perinatal outcomes in type 1 diabetic pregnancies: a large, population-based study. Diabetes Care. 2009;32(11):2005–9. doi:10.2337/dc09-0656
12. Nevis IF, Reitsma A, Dominic A, et al. Pregnancy outcomes in women with chronic kidney disease: a systematic review. Clin J Am Soc Nephrol 2011; 6:2587

13. Luke B, Brown MB. Maternal morbidity and infant death in twin vs triplet and quadruplet pregnancies. Am J Obstet Gynecol 2008; 198:401.e1.
14. Rich-Edwards JW, Ness RB, Roberts JM. Epidemiology of pregnancy-induced hypertension. In: Chesley's Hypertensive Disorders in Pregnancy, Taylor R, Roberts J, Cunningham F, Lindheimer M (Eds), Academic Press/Elsevier, 2014. p.37
15. SA Bainbridge, EH Sidle, GN Smith: Direct placental effects of cigarette smoke protect women from pre-eclampsia: the specific roles of carbon monoxide and antioxidant systems in the placenta. Medical hypotheses 64:17, 2005
16. Moore-Maxwell CA, Robboy SJ. Placental site trophoblastic tumor arising from antecedent molar pregnancy. Gynecol Oncol 2004; 92:708
17. Huppertz B. Placental origins of preeclampsia: challenging the current hypothesis. Hypertension 2008; 51:970
18. Palmer SK, Moore LG, Young D, et al. Altered blood pressure course during normal pregnancy and increased preeclampsia at high altitude (3100 meters) in Colorado. Am J Obstet Gynecol 1999; 180:1161
19. Makris A, Thornton C, Thompson J, et al. Uteroplacental ischemia results in proteinuric hypertension and elevated sFLT-1. Kidney Int 2007; 71:977.
20. Erlebacher A Immunology of the maternal-fetal interface Annual review of immunology, 31:387. 2013
21. Granger JP, Alexander BT, Bennett WA, Khalil RA. Pathophysiology of pregnancy-induced hypertension. Am J Hypertens 2001; 14:178S.
22. Wenzel K, Rajakumar A, Haase H, et al. Angiotensin II type 1 receptor antibodies and increased angiotensin II sensitivity in pregnant rats. Hypertension 2011; 58:77.
23. Redman CW, Sacks GP, Sargent IL. Preeclampsia: an excessive maternal inflammatory response to pregnancy. Am J Obstet Gynecol 1999; 180:499.
24. Maynard SE, Min JY, Merchan J, et al. Excess placental soluble fms-like tyrosine kinase 1 (sFlt1) may contribute to endothelial dysfunction, hypertension, and proteinuria in preeclampsia. J Clin Invest 2003; 111:649
25. Chaiworapongsa T, Romero R, Espinoza J, et al. Evidence supporting a role for blockade of the vascular endothelial growth factor system in the pathophysiology of preeclampsia. Young Investigator Award. Am J Obstet Gynecol 2004; 190:1541
26. Levine,Richard J., et al. Soluble endoglin and other circulating antiangiogenic factors in preeclampsia. New England Journal of Medicine, 2006, 355.10: 992-1005.
27. ZEEMAN, Gerda G.; CUNNINGHAM, F. Gary; PRITCHARD, Jack A. The magnitude of hemoconcentration with eclampsia. Hypertension in pregnancy, 2009, 28.2: 127-137
28. LEDUC, L. I. N. E., et al. Coagulation profile in severe preeclampsia. Obstetrics and gynecology, 1992, 79.1: 14-18
29. Walters,BarryNJ.Preeclamptic angina–a pathognomonic symptom of preeclampsia. Hypertension in pregnancy, 2011, 30.2: 117-124
30. Shah AK, Rajamani K, Whitty JE. Eclampsia: a neurological perspective. J Neurol Sci 2008; 271:158
31. Dinn RB, Harris A, Marcus PS. Ocular changes in pregnancy. Obstet Gynecol Surv 2003; 58:137.

32. Roos NM, Wiegman MJ, Jansonius NM, Zeeman GG. Visual disturbances in (pre) eclampsia. Obstet Gynecol Surv 2012; 67:242.
33. ERRERA, Marie-Hélène; KOHLY, Radha P.; DA CRUZ, Lyndon. Pregnancy-associated retinal diseases and their management. Survey of ophthalmology, 2013, 58.2: 127-142.
34. CROVETTO, Francesca, et al. Stroke during pregnancy and pre-eclampsia. Current Opinion in Obstetrics and Gynecology, 2013, 25.6: 425-432
35. CONRAD, Kirk P.; DAVISON, John M. The renal circulation in normal pregnancy and preeclampsia: is there a place for relaxin?. American Journal of Physiology-Renal Physiology, 2014
36. VAUGHT, Arthur Jason, et al. Acute cardiac effects of severe pre-eclampsia. Journal of the American College of Cardiology, 2018,72.1:1-11
37. Pecoraro V, Trenti T. Predictive value of serum uric acid levels for adverse maternal and perinatal outcomes in pregnant women with high blood pressure. A systematic review and meta-analysis. Eur J Obstet Gynecol Reprod Biol 2020; 252:447.
38. KOOPMANS, Corine M., et al. Induction of labour versus expectant monitoring for gestational hypertension or mild pre-eclampsia after 36 weeks' gestation (HYPITAT): a multicentre, open-label randomised controlled trial. *The Lancet*, 2009, 374.9694: 979-988
39. Barton JR, Istwan NB, Rhea D, et al. Cost-savings analysis of an outpatient management program for women with pregnancy-related hypertensive conditions. Dis Manag 2006; 9:236.
40. Dowswell T, Middleton P, Weeks A. Antenatal day care units versus hospital admission for women with complicated pregnancy. Cochrane Database Syst Rev 2009; :CD001803
41. Lindheimer MD, Kanter D. Interpreting abnormal proteinuria in pregnancy: the need for a more pathophysiological approach. Obstet Gynecol 2010; 115:365.
42. Alfirevic Z, Stampalija T, Gyte GM. Fetal and umbilical Doppler ultrasound in high-risk pregnancies. Cochrane Database Syst Rev 2010; :CD007529.
43. Langenveld J, Ravelli AC, van Kaam AH, et al. Neonatal outcome of pregnancies complicated by hypertensive disorders between 34 and 37 weeks of gestation: a 7 year retrospective analysis of a national registry. Am J Obstet Gynecol 2011; 205:540.e1.
44. Gestational Hypertension and Preeclampsia: ACOG Practice Bulletin, Number 222. Obstet Gynecol 2020; 135:e237.
45. National Collaborating Centre for Women's and Children's Health. Hypertension in Pregnancy: The Management of Hypertensive Disorders During Pregnancy, RCOG Press, London 2010
46. SIBAI, Baha M., et al. Aggressive versus expectant management of severe preeclampsia at 28 to 32 weeks' gestation: a randomized controlled trial. American journal of obstetrics and gynecology, 1994, 171.3: 818-822
47. VIGIL-DE GRACIA, Paulino, et al. Expectant management of severe preeclampsia remote from term: the MEXPRE Latin Study, a randomized, multicenter clinical trial. American journal of obstetrics and gynecology, 2013, 209.5: 425. e1-425. e8

48. Martin JN Jr, Thigpen BD, Moore RC, et al. Stroke and severe preeclampsia and eclampsia: a paradigm shift focusing on systolic blood pressure. Obstet Gynecol 2005; 105:246.
49. BERNSTEIN, Peter S., et al. Consensus bundle on severe hypertension during pregnancy and the postpartum period. Journal of Obstetric, Gynecologic & Neonatal Nursing, 2017, 46.5: 776-787.
50. American College of Obstetricians and Gynecologists Committee on Obstetric Practice. Committee Opinion No. 767: Emergent therapy for acute-onset, severe hypertension during pregnancy and the postpartum period. Obstet Gynecol 2019.
51. SEELY, Ellen W.; ECKER, Jeffrey. Chronic hypertension in pregnancy. New England Journal of Medicine, 2011, 365.5: 439-446