

Bölüm 31

GEBELİKTE NEOPLASTİK HASTALIKLAR



Suna YILDIRIM KARACA¹

|GİRİŞ

Gebelik süreci bir çok aile için hayatlarının en mutlu dönemidir. Maalesef ki bu dönem her zaman arzu edildiği gibi sorunsuz geçmez. Doğurganlık çağındaki kadınlarda nadir görülen neoplaziler gebelik sürecini de sekteye uğratabilirler. Her yıl 1:1000 gebede yeni malignite teşhis edilmektedir (1). 25-44 yaş arası doğurganlık çağındaki kadınlar arasında malignite en sık ikinci ölüm nedenidir (2).

Günümüzde çalışan ve kariyer yapan kadınlarda gebeliği daha ileri yaşlara erteleme ve daha geç yaşlarda anne olma fırsatı bulabilme nedeniyle, gebelikte kanser insidansının her geçen yıllarda daha da artması beklenmektedir. Gebelik sürecinde en sık tanı konan kanser çeşidi 1:350 insidansla malign melanomdur. Bu sıralamayı 1:2250 insidansla serviks kanseri, 1:3000 insidansla Hodgkin lenfoma, 1:7500 insidansla meme kanseri, 1:18000 insidans over kanseri ve 1:75000 insidansla lösemi izlemektedir (3).

Gestasyonel dönem kanseri; gebelik sürecinde veya postpartum ilk yılda yeni teşhis edilen kanser olarak tanımlanır. Gestasyonel dönem kanserlerinin yaklaşık %50'si doğumu izleyen postpartum ilk yıl içerisinde tanı almaktadır (4). Gebelik sürecinde neoplazm teşhis edildiğinde anne ve fetüsün sağlığı aynı anda göz önünde bulundurulmalıdır. Gebelikte kanser tanı ve tedavi süreci sadece tıbbi

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KAYNAKLAR

1. Siegel R, Ward E, Brawley O, et al: Cancer statistics, 2011, *CA Cancer J Clin* 61:212–236, 2011.
2. Antonelli NM, Dotters DJ, Katz VL, et al: Cancer in pregnancy: a review of the literature. Part I, *Obstet Gynecol Surv* 51:125–134, 1996.
3. Robert k. Creasy MD, Robert Resnik MD, 2014. *Creasy and Resnik's Maternal-fetal Medicine Principle and Practice Expert (7.baskı)*, Philadelphia, Elsevier.
4. Smith LH, Danielsen B, Allen ME, et al. Cancer associated with obstetric delivery: results of linkage with the California cancer registry. *Am J Obstet Gynecol* 2003; 189: 1128 – 1135.
5. Briggs GG, Freeman RK, Yaffe SJ: *Drugs in pregnancy and lactation: a reference guide to fetal and neonatal risk*, 8th ed. Philadelphia, Lippincott, Williams & Wilkins, 2008.
6. ACOG committee on Obstetric Practice. ACOG Committee Opinion Number 299, september 2004. guidelines for diagnostic imaging during pregnancy. *Obstet Gynecol* 2004; 104(3):647-51
7. Groen RS, Bae JY, Lim KJ: Fear of the unknown: ionizing radiation exposure during pregnancy. *Am J Obstet Gynecol* 206(6):456, 2012
8. Doll DC, Ringenberg S, Yarbo JW. Antineoplastic agents and pregnancy. *Semin Oncol* 1989; 16: 337.
9. Mazze RI, Kallen B: Reproductive outcome after anesthesia and operation during pregnancy: a registry study of 5405 cases. *Am J Obstet Gynecol* 161:1178, 1989
10. Kort B, Katz VL, Watson WJ: The effect of non-obstetric operation during pregnancy, *Surg Gynecol Obstet* 177:371–376, 1993
11. Guerra B, De Simone P, Gabrielli S et al. Combined cytology and colposcopy to screen for cervical cancer in pregnancy. *J Reprod Med* 1998; 43: 647–53.
12. Champion MJ, Sedlacek TV: Colposcopy in pregnancy, *Obstet Gynecol Clin North Am* 20:153–163, 1993.
13. Ackermann S, Gehrsitz C, Mehihorn G, et al: Management and course of histologically verified cervical carcinoma in situ during pregnancy. *Acta Obstet Gynecol Scand* 85: 1134, 2006
14. Yost NP, Santoso JT, McIntire DD, et al: Postpartum regression rates of antepartum cervical intraepithelial neoplasia II and III lesions. *Obstet Gynecol* 93:359, 1999
15. Dunton CJ: Management of atypical glandular cells and adenocarcinoma in situ. *Obstet Gynecol Clin North Am* 35(4):623, 2008
16. Weinmann S, Naleway A, Swamy G, et al: Pregnancy outcomes after treatment for cervical cancer precursor lesions: an observational study. *PLoS One* 12(1):e0165276, 2017
17. Massad LS, Einstein MH, Huh K, et al: 2012 updated consensus guidelines for the management of abnormal cervical cancer screening tests and cancer precursors. *Obstet Gynecol* 121(4):829, 2013
18. Bigelow CA, Horowitz NS, Goodman A, et al: Management and outcome of cervical cancer diagnosed in pregnancy. *Am J Obstet Gynecol* 216(3):276.e1-276.e6, 2017
19. Hopkins MP, Morley GW. The prognosis and management of cervical cancer associated with pregnancy. *Obstet Gynecol* 1992; 80: 9 – 13.
20. FIGO Committee on Gynecologic Oncology: Revised FIGO staging for carcinoma of the vulva, cervix, and endometrium. *Int J Gynaecol Obstet* 105:103, 2019
21. akushi M, Moromizato H, Sakumoto K, Kanazawa K. Management of invasive carcinoma of the uterine cervix associated with pregnancy: outcome of intentional delay in treatment. *Gynecol Oncol* 2002; 87: 185 – 189.
22. Duggan B, Muderspach LI, Roman LD, et al. Cervical cancer in pregnancy: reporting on planned delay in therapy. *Obstet Gynecol* 1993; 82: 598 – 602
23. Ishioka S, Endo T, Baba T, et al. Successful delivery after transabdominal cerclage of uterine cervix for cervical incompetence after radical trachelectomy. *J Obstet Gynaecol Res* 2015; 41(8):1295-9

24. Goldman NA , Goldberg GL . Late recurrences of squamous cell cervical cancer in an episiotomy site after vaginal delivery . *Obstet Gynecol* 2003 ; 101 : 1127 – 1129 .
25. Bader AA , Petru E , Winter R . Long - term follow - up after neoadjuvant chemotherapy for high - risk cervical cancer during pregnancy . *Gynecol Oncol* 2007 ; 105 (1) : 269 – 272 .
26. Cardonick E, Bhat A, Gilmandyar D, et al. Maternal and fetal outcomes of taxane chemotherapy in breast and ovarian cancer during pregnancy: case series and review of the literature. *Ann Oncol* 2012;23(12):3016–23.
27. Karam A, Feldman N, Holschneider CH. Neoadjuvant cisplatin and radical cesarean hysterectomy for cervical cancer in pregnancy. *Nat Clin Pract Oncol* 2007; 4(6):375–80
28. Zagouri F, Sergentanis TN, Chrysikos D, et al: Trastuzumab administration during pregnancy: a systematic review and meta-analysis. *Breast Cancer Res Treat* 13 (2):349, 201 3b
29. Jacob JH, Stringer CA: Diagnosis and management of cancer during pregnancy, *Semin Perinatol* 14:79–87, 1990.
30. Whitecar MP, Turner S, Higby MK: Adnexal masses in pregnancy: a review of 130 cases undergoing surgical management, *Am J Obstet Gynecol* 181:19–24, 1999.
31. Leiserowitz GS, Xing G, Cress R, et al: Adnexal masses in pregnancy: how often are they malignant? *Gynecol Oncol* 101:315–321, 2006
32. Schmeler KM, Mayo-Smith WW, Peipert JF, et al: Adnexal masses in pregnancy: surgery compared with observation, *Obstet Gynecol* 105(Pt 1):1098–1103, 2005.
33. American College of Obstetricians and Gynecologists: Management of adnexal masses: Practice bulletin, *Obstet Gynecol* 110:201–214, 2007
34. Agarwal N, Parul, Kriplani A, et al: Management and outcome of pregnancies complicated with adnexal masses, *Arch Gynecol Obstet* 267:148–152, 2003.
35. Latimer J: Gynaecological malignancies in pregnancy. *Curr Opin Obstet Gynecol* 19:140, 2007.
36. Bakour SH, Jaleel H, Weaver JB, et al: Vulvar carcinoma presenting during pregnancy, associated with recurrent bone marrow hypoplasia: a case report and literature review. *Gynecol Oncol* 87:207, 2002
37. Yael HK, Lorenza P, Evelina S, et al: Incidental endometrial adenocarcinoma in early pregnancy: a case report and review of the literature. *Int J Gynecol Cancer* 19:1580, 2009.
38. Wallack MK, Wolf JA Jr, Bedwinek J, et al: Gestational carcinoma of the female breast, *Curr Probl Cancer* 7:1–58, 1983.
39. Anderson BO, Petrek JA, Byrd DR, et al. Pregnancy influences breast cancer stage at diagnosis in women 30 years of age and younger. *Ann Surg Oncol* 1996;3(2):204–11
40. Nettleton J, Long J, Kuban D, et al: Breast cancer during pregnancy: quantifying the risk of treatment delay, *Obstet Gynecol* 87:414–418, 1996
41. Liberman L, Giess CS, Dershaw DD, et al: Imaging of pregnancy-associated breast cancer, *Radiology* 191:245–248, 1994.
42. Ahn BY, Kim HH, Moon WK, et al: Pregnancy and lactation-associated breast cancer: mammographic and sonographic findings, *J Ultrasound Med* 22:491–499, 2003
43. Reed W, Hannisdal E, Skovlund E, et al: Pregnancy and breast cancer: a population-based study, *Virchows Arch* 443:44–50, 2003.
44. Ibrahim EM, Ezzat AA, Baloush A, et al: Pregnancy-associated breast cancer: a case control study in a young population with a high-fertility rate, *Med Oncol* 17:293–300, 2000. 134. *Bonnier*
45. Giacalone PL, Laffargue F, Benos P. Chemotherapy for breast carcinoma during pregnancy: a French national survey. *Cancer* 1999;86(11):2266–72.
46. Ring AE, Smith IE, Jones A, et al. Chemotherapy for breast cancer during pregnancy: an 18-year experience from five London teaching hospitals. *J Clin Oncol* 2005;23(18):4192–7
47. Isaacs RJ, Hunter W, Clark K. Tamoxifen as systemic treatment of advanced breast cancer during pregnancy—case report and literature review. *Gynecol Oncol* 2001;80(3):405

48. Tewari K, Bonebrake RG, Asrat T, et al. Ambiguous genitalia in infant exposed to tamoxifen in utero. *Lancet* 1997;350(9072):183
49. Lee GE, Mayer EL, Partridge A. Prognosis of pregnancy-associated breast cancer. *Breast Cancer Res Treat* 2017;163(3):417–21.
50. Yu 5S, Bischof A: Thyroid cancer in pregnancy. *Semin Reprod Med* 34(6):35 1 , 2016
51. Yazbeck CF, Sullivan SD. Thyroid disorders during pregnancy. *Med Clin No America* 96:235, 2012
52. Traulle C, Coiffier B: Lymphoma and pregnancy. In Canellos G, Lister T, Young B, editors: *The lymphomas*, ed 2, Philadelphia, 2006, Saunders Elsevier, pp 536–541.
53. Evens A, Advani R, Lossos IS, et al: Lymphoma in pregnancy: excellent fetal outcomes and maternal survival in a large multicenter analysis (abstract), *Blood* 118:623, 2011.
54. Aviles A, Diaz-Maqueo JC, Talavera A, et al: Growth and development of children of mothers treated with chemotherapy during pregnancy: current status of 43 children, *Am J Hematol* 36:243–248, 1991.
55. Chelghoum Y, Vey N, Raffoux E, et al: Acute leukemia during pregnancy, *Cancer* 104:110–117, 2005.
56. Reynoso E, Shepherd F, Messner H, et al: Acute leukemia during pregnancy: the Toronto Leukemia Study Group experience with long-term follow-up of children exposed in utero to chemotherapeutic agents, *J Clin Oncol* 5:1098– 1106, 1987.
57. Katz VL , Farmer RM , Dotters D . Focus on primary care: from nevus to neoplasm. Myths of melanoma in pregnancy . *Obstet Gynecol Surv* 2002 ; 57 : 112 – 119 .
58. Kjems E , Krag C . Melanoma and pregnancy. A review . *Acta Oncol* 1993 ; 32 : 371 – 378 .
59. Bernstein MA, Madoff RD, Caushaj PF: Colon and rectal cancer in pregnancy, *Dis Colon Rectum* 36:172–178, 1993
60. Heise RH, Van Winter JT, Wilson TO, et al: Colonic cancer during pregnancy: case report and review of the literature, *Mayo Clin Proc* 67:1180–1184, 1992.
61. Blumenthal DT, Parreno MG, Batten J, et al: Management of malignant gliomas during pregnancy: a case series. *Cancer* 113:3349, 2008.
62. Bandy LC, Clarke-Pearson DL, Hammond CB: Malignant potential of gestational trophoblastic disease at the extreme age of reproductive life. *Obstet Gynecol* 64:395, 1984.
63. Rothman LA, Cohen CJ, Astarola J: Placental and fetal involvement by maternal malignancy: a report of rectal carcinoma and a review of the literature. *Am J Obstet Gynecol* 116:1023, 1973.