Bölüm
25

KARACİĞERİN METASTATİK TÜMÖRLERİNDE CERRAHİNİN YERİ

İbrahim Burak BAHÇECİOĞLU[1]

KOLOREKTAL KANSER KARACİĞER METASTAZLARI

Kolorektal kanser tüm dünyada insidans bakımından üçüncü, kanser mortalitesi bakımından dördüncü sıradadır. (1) Kolorektal kanser teşhisi esnasında hastaların %20-25'i evre IV hastalığa sahiptir; (2,3)%15-20'si senkron karaciğer metastazına sahiptir ki bunların %70-80'inde metastazlar karaciğere sınırlıdır.(4,5) Cerrahi rezeksiyon kolorektal kanser karaciğer metastazları için en etkili tedavi yaklaşımıdır ancak az sayıda hasta cerrahiye uygundur.(6) Sınırlı karaciğer hastalığı olan kolorektal kanserli hastaların metastazlarının rezeksiyonu kemoterapi, radyoterapi, radyofrekans ablasyon ile karşılaştırıldığında önemli bir sağkalım faydası sunduğu gösterilmiştir.(7) Cerrahi kolorektal kanser karaciğer metastazlarının tek potansiyel küratif tedavi metodudur.(8) Bu bilgiler kolorektal kanser karaciğer metastazlarına olan cerrahi yaklaşımı diğer metastatik karaciğer tümörlerine yaklaşımdan farklı kılar.Cerrahiye bağlı ölümün major nedenlerinden biri olan yetersiz remnant karaciğer hacmi kalmasından kaçınabilmek için karaciğer rezeksiyon kriterlerine uyulması temeldir. Normalde insanlar sağlıklı karaciğerin %20'sinin kalması durumunda da yaşayabilmektedir. Bununla birlikte kemoterapi almış veya postoperatif dönemde kemoterapi alması planlanan hastaların karaciğer hacimlerinin %30-40' ı korunmalıdır.(9) Tahmini kalacak karaciğer hacmine (TKKH) karar verme karaciğerin ameliyat öncesi durumuna bağlıdır. Örneğin sağlıklı bir karacğerin %75'i rezeke edilebilirken, kronik karaciğer hastalığı olan fakat sirozu bulunmayan hastada en az %30, sirozu olan fakat portal hipertansiyonu olmayan hastada en az %40 TKKH planlanmalıdır.(10-11)

[1] Uzm.Dr, Kayseri Şehir Hastanesi, dr.ibb@hotmail.com

KAYNAKÇA

1. World Health Organization: International Agency for Research on Cancer. GLOBOCAN 2012: Estimated cancer incidence, mortality and prevalence worldwide in 2012. http://globocan.iarc.fr/Pages/fact_sheets_population.aspx. Accessed 17 November 2014.
2. Lykoudis PM, O'Reilly D, Nastos K. Systematic review of surgical management of synchronous colorectal liver metastases. Br J Surg 2014;101:605-612.
3. Nordlinger B, Van Cutsem E, Rougier P, et al. Does chemotherapy prior to liver resection increase the potential for cure in patients with metastatic colorectal cancer? A report from the European Colorectal Metastases Treatment Group. Eur J Cancer 2007;43:2037-2045.
4. Borner MM. Neoadjuvant chemotherapy for unresectable liver metastases of colorectal cancer--too good to be true? Ann Oncol 1999;10:623-626.
5. Manfredi S, Lepage C, Hatem C. Epidemiology and management of liver metastases from colorectal cancer. Ann Surg 2006;244:254-259.
6. Cummings LC, Payes JD, Cooper GS. Survival after hepatic resection in metastatic colorectal cancer: a population-based study. Cancer 2007;109:718- 726.
7. Leporrier J, Maurel J, Chiche L, et al. A population-based study of the incidence, management and prognosis of hepatic metastases from colorectal cancer. Br J Surg 2006;93: 465–474.
8. Bramhall SR, Gur U, Coldham C, et al: Liver resection for colorectal metastases. Ann R Coll Surg Engl 85: 334-339, 2003
9. Mattar RE, Al-Alem F, Simoneau E: Preoperative selection of patients with colorectal cancer liver metastasis for hepatic resection. World J Gastroenterol 22: 567-581, 2016.
10. Clavien PA, Petrowsky H, DeOliveira ML and Graf R: Strategies for safer liver surgery and partial liver transplantation. N Engl J Med 356: 1545-1559, 2007
11. Hou W and Zhu X: Extra vascular interventional treatment of liver cancer, present and future. Drug Discov Ther 9: 335-341,2015
12. Al Bandar MH, Kim NK. Current status and future perspectives on treatment of liver metastasis in colorectal cancer. Oncology Reports 37: 2553-2564, 2017
13. Watanabe T, Itabashi M, Shimada Y Japanese Society for Cancer of the Colon and Rectum (JSCCR) guidelines 2010 for the treatment of colorectal cancer. *Int J Clin Oncol* 2012; 17: 1-29
14. Sugihara K, Uetake H. Therapeutic strategies for hepatic metastasis of colorectal cancer: overview. *J Hepatobiliary Pancreat Sci* 2012; 19: 523-527
15. Spelt L, Andersson B, Nilsson J, Andersson R. Prognostic models for outcome following liver resection for colorectal cancer metastases: A systematic review. *Eur J Surg Oncol* 2012; 38: 16-24
16. Manfredi S, Lepage C, Hatem C, Coatmeur O, Faivre J, Bouvier AM. Epidemiology and management of liver metastases from colorectal cancer. Ann Surg 2006;244:254-259.
17. Wang X, Hershman DL, Abrams JA,et al. Predictors of survival after hepatic resection among patients with colorectal liver metastasis. Br J Cancer 2007;97:1606-1612.
18. Conrad C, You N, Vauthey JN. In patients with colorectal liver metastases, can we still rely on number to define treatment and outcome? Oncology (Williston Park) 2013;27:1078, 1083-4, 1086.
19. Adam R, Gramont A et al. Managing synchronous liver metastases from colorectal cancer: A multidisciplinary international consensus. Cancer Treatment Reviews Cancer Treatment Reviews 2015.06.006
20. Rojas Llimpe FL, Di Fabio F, Ercolani G,et al. Imaging in resectable colorectal liver metastasis patients with or without preoperative chemotherapy: results of the PROMETEO-01 study. Br J Cancer 2014;111:667-673.
21. Scharitzer M, Ba-Ssalamah A, Ringl H, et al. Preoperative evaluation of colorectal liver metastases: comparison between gadoxetic acid-enhanced 3.0-T MRI and contrastenhanced MDCT with histopathological correlation. Eur Radiol 2013;23:2187-2196
22. Ebell MH, Siwek J, Weiss BD, et al.Strength of recommendation taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature. Am Fam Physician 2004;69:548-556.

23. Vauthey JN, Pawlik TM, Ribero D, et al.Chemotherapy regimen predicts steatohepatitis and an increase in 90-day mortality after surgery for hepatic colorectal metastases. J Clin Oncol 2006;24:2065-2072.
24. Maru DM, Kopetz S, Boonsirikamchai P,et al. Tumor thickness at the tumor-normal interface: a novel pathologic indicator of chemotherapy response in hepatic colorectal metastases. Am J Surg Pathol 2010;34:1287-1294.
25. Blazer DG, Kishi Y, Maru DM, et al. Pathologic response to preoperative chemotherapy: a new outcome end point after resection of hepatic colorectal metastases. J Clin Oncol 2008;26:5344-5351.
26. Hamady ZZ, Lodge JP, Welsh FK, et al.One-millimeter cancer-free margin is curative for colorectal liver metastases: a propensity score case-match approach. Ann Surg 2014;259:543-548.
27. Wakai T, Shirai Y, Sakata J,et al. Histologic evaluation of intrahepatic micrometastases in patients treated with or without neoadjuvant chemotherapy for colorectal carcinoma liver metastasis. Int J Clin Exp Pathol 2012;5:308-314
28. Feng Q, Wei Y, Zhu D, et al. Timing of hepatectomy for resectable synchronous colorectal liver metastases: for whom simultaneous resection is more suitable--a meta-analysis. PLoS One 2014;9:e104348.
29. Reddy SK, Pawlik TM, Zorzi D,et al. Simultaneous resections of colorectal cancer and synchronous liver metastases: a multi-institutional analysis. Ann Surg Oncol 2007;14:3481-3491
30. Lambert LA, Colacchio TA, Barth RJ, Jr. Interval hepatic resection of colorectal metastases improves patient selection. Arch Surg 2000;135:473-479.
31. Mentha G, Majno PE, Andres A.Neoadjuvant chemotherapy and resection of advanced synchronous liver metastases before treatment of the colorectal primary. Br J Surg 2006;93:872-878.
32. Nordlinger B, Vauthey JN, Poston G. The timing of chemotherapy and surgery for the treatment of colorectal liver metastases. Clin Colorectal Cancer 2010;9:212-218.
33. Karoui M, Penna C, Amin-Hashem M,et al.Influence of preoperative chemotherapy on the risk of major hepatectomy for colorectal liver metastases. Ann Surg 2006;243:1-7.
34. Avritscher R, De Baere T, Murthy R.Percutaneous transhepatic portal vein embolization: rationale, technique, and outcomes. Semin Intervent Radiol 2008;25:132-145.
35. Zhang GQ, Zhang ZW, Lau WY. Associating liver partition and portal vein ligation for staged hepatectomy (ALPPS): a new strategy to increase resectability in liver surgery. Int J Surg 2014;12:437-441.
36. de Jong MC, Pulitano C, Ribero D, et al. Rates and patterns of recurrence following curative intent surgery for colorectal liver metastasis: an international multi-institutional analysis of 1669 patients. Ann Surg 2009;250(3):440–448.
37. House MG, Ito H, Go¨nen M, et al. Survival after hepatic resection for metastatic colorectal cancer: trends in outcomes for 1,600 patients during two decades at a single institution. J Am Coll Surg 2010;210(5):744–52, 752–755.
38. Memeo R, de Blasi V, Adam R, et al. Parenchymal-sparing hepatectomies (PSH) for bilobar colorectal liver metastases are associated with a lower morbidity and similar oncological results: a propensity score matching analysis. HPB (Oxford) 2016;18(9):781–790
39. Mise Y, Aloia TA, Brudvik KW, et al. Parenchymal-sparing hepatectomy in colorectal liver metastasis improves salvageability and survival. Ann Surg 2016;263(1):146–152.
40. Reddy SK, Pawlik TM, Zorzi D, et al. Simultaneous resections of colorectal cancer and synchronous liver metastases: a multi-institutional analysis. Ann Surg Oncol 2007;14(12):3481–3491
41. Clavien PA, Petrowsky H, DeOliveira ML, et al. Strategies for safer liver surgery and partial liver transplantation. N Engl J Med 2007;356(15):1545–1559.
42. Shindoh J, Truty MJ, Aloia TA, et al. Kinetic growth rate after portal vein embolization predicts posthepatectomy outcomes: toward zero liver-related mortality in patients with colorectal liver metastases and small future liver remnant. J Am Coll Surg 2013;216(2):201–209.
43. Lam VW, Laurence JM, Johnston E, et al. A systematic review of two-stage hepatectomy in patients with initially unresectable colorectal liver metastases. HPB (Oxford) 2013;15(7):483–491.

44. Brouquet A, Abdalla EK, Kopetz S, et al. High survival rate after two-stage resection of advanced colorectal liver metastases: response-based selection and complete resection define outcome. J Clin Oncol 2011;29(8):1083–1090.
45. Frilling A, Clift AK. Therapeutic strategies for neuroendocrine liver metastases.Cancer 2015;121.
46. Uptodate CME 3.5. 2020. Uptodate.com
47. Frilling A, Li J, Malamutmann E, et al. Treatment of liver metastases from neuroendocrine tumours in relation to the extent of hepatic disease. Br J Surg 2009;96:175–184
48. Kianmanesh R, Sauvanet A, Hentic O, et al. Two-step surgery for synchronous bilobar liver metastases from digestive endocrine tumors: a safe approach for radical resection. Ann Surg 2008;247:659–665.
49. de Jong MC, Mayo SC, Pulitano C, et al. Repeat curative intent liver surgery is safe and effective for recurrent colorectal liver metastasis: results from an international multi-institutional analysis. J Gastrointest Surg 2009;13:2141–2151
50. Zacherl M, et al. Surgery for non-colorectal and non-neuroendocrine liver metastases Wien Klin Wochenschr.2001