

BÖLÜM 11

Febril Kanser Hastasında Ampirik Antibiyotik Tedavisi

Burçin ÇAKAN DEMİREL ¹

GİRİŞ

Kanser hastalarında mortalite ve morbiditenin ana nedenlerinden biri enfeksiyondur. Hematolojik malignitelerin yanı sıra solid organ tümörlü hastalarda yaklaşık %50'sinde mortalitenin birincil veya ilişkili nedenin bir enfeksiyona sekonder geliştiği tahmin edilmektedir(1). Kanser hastaları uzun süreli kullandıkları immunsupresif ajanlar, tekrarlayan nötropenileri nedeniyle tüm enfeksiyöz etkenlere açktır(2). Solid organ tümörlü hastalar, hematolojik maligniteye sahip hastalara göre daha az enfeksiyon riskine sahiptir. Nedensel olarak incelendiğinde, kullanılan standart kemoterapiler uzun süreli ve derin nötropeni gelişmesine daha az oranda sebep olabilmektedir. Akciğer küçük hücreli karsinomu, bazı sarkomlar ve genç erkeklerde görülen testis tümörlerine uygulanan kemoterapi ajanları bu gruba dahil edilmediğinde yaklaşık 1 hafta-10 günü bulan nötropeniler yaratmaktadır(3). Hastanın sistemik tedavisinin yanı sıra enfeksiyon yönetimine hakim olmak, uygun bir antibiyotik planı hem mortalite, hem morbiditeyi azaltmaya yönelik doğru bir adım olacaktır.

İmmun sistemi baskılanmış hasta grubunda potansiyel patojenlerin grubu daha genişir, doğru tanıla tedaviye ilerlemek enfeksiyonun ilerlemesi hızlıca olacağı için daha önemlidir(4). Bu nedenle hastanın başvuru halinde riskini belirlemek, buna yönelik ihtimal dahilindeki patojenleri kapsayabilecek doğru ampirik antibiyotik tedavi planı; hayatı öneme haizdir.

¹ Uzm. Dr., İstanbul Bağcılar Eğitim Araştırma Hastanesi, Onkoloji Kliniği, burcin.cakandemirel@gmail.com, ORCID iD: 0000-0003-0734-0692

KAYNAKLAR

1. Homsi J, Walsh D, Panta R, et al. Infectious complications of advanced cancer. *Support Care Cancer.* 2000;8(6):487-492. doi:10.1007/s005200000143
2. Bastug A, Kayaaslan B, Kazancioglu S, et al. Emergence of multidrug resistant isolates and mortality predictors in patients with solid tumors or hematological malignancies. *Journal of infection in developing countries.* 2015;9(10):1100-1107. doi:10.3855/jidc.6805
3. Zembower TR. Epidemiology of infections in cancer patients. *Cancer treatment and research.* 2014;161:43-89. doi:10.1007/978-3-319-04220-6_2
4. Marr KA. Delayed opportunistic infections in hematopoietic stem cell transplantation patients: a surmountable challenge. *Hematology. American Society of Hematology. Education Program.* 2012;2012:265-270. doi:10.1182/asheducation-2012.1.265.
5. Taplitz RA, Kennedy EB, Bow EJ, et al. Outpatient Management of Fever and Neutropenia in Adults Treated for Malignancy: American Society of Clinical Oncology and Infectious Diseases Society of America Clinical Practice Guideline Update. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology.* 2018;36(14):1443-1453. doi:10.1200/JCO.2017.77.6211
6. Dale DC, Cottle TE, Fier CJ, et al. Severe chronic neutropenia: treatment and follow-up of patients in the Severe Chronic Neutropenia International Registry. *American journal of hematology.* 2003;72(2):82-93. doi:10.1002/ajh.10255
7. Febril nötropeni çalışma gurubu. Febril nötropenik hastalarda tanı ve tedavi kılavuzu. *FLO-RA İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Dergisi.* 2004;9:5- 28.
8. Freifeld AG, Bow EJ, Sepkowitz KA, et al. Clinical practice guideline for the use of antimicrobial agents in neutropenic patients with cancer: 2010 update by the infectious diseases society of america. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America.* 2011;52(4):e56-e93. doi:10.1093/cid/cir07
9. de Naurois J, Novitzky-Basso I, Gill MJ, et al. Management of febrile neutropenia: ESMO Clinical Practice Guidelines. *Annals of oncology : official journal of the European Society for Medical Oncology.* 2010;21 Suppl 5:v252-v256. doi:10.1093/annonc/mdq196
10. Hughes WT, Armstrong D, Bodey GP, et al. guidelines for the use of antimicrobial agents in neutropenic patients with cancer. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America.* 2002;34(6):730-751. doi:10.1086/3392152002
11. Klastersky J, Paesmans M, Rubenstein EB, et al. The Multinational Association for Supportive Care in Cancer risk index: A multinational scoring system for identifying low-risk febrile neutropenic cancer patients. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology.* 2000;18(16):3038-3051. doi:10.1200/JCO.2000.18.16.3038
12. Talcott JA, Finberg R, Mayer RJ, Goldman L. The medical course of cancer patients with fever and neutropenia. Clinical identification of a low-risk subgroup at presentation. *Archives of internal medicine.* 1988;148(12):2561-2568.
13. Talcott JA, Siegel RD, Finberg R, Goldman L. Risk assessment in cancer patients with fever and neutropenia: a prospective, two-center validation of a prediction rule. *J Clin Oncol.* 1992;10(2):316-322. doi:10.1200/JCO.1992.10.2.316
14. Carmona-Bayonas A, Gómez J, González-Billalbeitia E, et al. Prognostic evaluation of febrile neutropenia in apparently stable adult cancer patients. *British journal of cancer.* 2011;105(5):612-617. doi:10.1038/bjc.2011.284
15. Carmona-Bayonas A, Jiménez-Fonseca P, Virizuela Echaburu J, et al. Prediction of serious complications in patients with seemingly stable febrile neutropenia: validation of the Clinical Index of Stable Febrile Neutropenia in a prospective cohort of patients from the FINITE study. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology.* 2015;33(5):465-471. doi:10.1200/JCO.2014.57.2347

16. Mermel LA, Farr BM, Sherertz RJ, et al. Guidelines for the management of intravascular catheter-related infections. *Clin Infect Dis.* 2001;32(9):1249-1272. doi:10.1086/320001
17. Rosa RG, Goldani LZ. Cohort study of the impact of time to antibiotic administration on mortality in patients with febrile neutropenia. *Antimicrobial agents and chemotherapy.* 2014;58(7):3799-3803. doi:10.1128/AAC.02561-14
18. Averbuch D, Orasch C, Cordonnier C, et al. European guidelines for empirical antibacterial therapy for febrile neutropenic patients in the era of growing resistance: summary of the 2011 4th European Conference on Infections in Leukemia [published correction appears in Haematologica. 2014 Feb;99(2):400]. *Haematologica.* 2013;98(12):1826-1835. doi:10.3324/haematol.2013.091025
19. Adcock KG, Akins RL, Farrington EA. Evaluation of empiric vancomycin therapy in children with fever and neutropenia. *Pharmacotherapy.* 1999;19(11):1315-1320. doi:10.1592/phco.19.16.1315.30867
20. Freifeld A, Marchigiani D, Walsh T, et al. A double-blind comparison of empirical oral and intravenous antibiotic therapy for low-risk febrile patients with neutropenia during cancer chemotherapy. *The New England journal of medicine.* 1999;341(5):305-311. doi:10.1056/NEJM199907293410501
21. Escrivuela-Vidal F, Laporte J, Albasanz-Puig A, Gudiol C. Update on the management of febrile neutropenia in hematologic patients. *Revista espanola de quimioterapia : publicacion oficial de la Sociedad Espanola de Quimioterapia.* 2019;32 Suppl 2(Suppl 2):55-58.
22. Harris PNA, Tambyah PA, Lye DC, et al. Effect of Piperacillin-Tazobactam vs Meropenem on 30-Day Mortality for Patients With *E. coli* or *Klebsiella pneumoniae* Bloodstream Infection and Ceftriaxone Resistance: A Randomized Clinical Trial [published correction appears in *JAMA.* 2019 Jun 18;321(23):2370]. *JAMA.* 2018;320(10):984-994. doi:10.1001/jama.2018.12163
23. Bucaneve G, Micozzi A, Picardi M, et al. Results of a multicenter, controlled, randomized clinical trial evaluating the combination of piperacillin/tazobactam and tigecycline in high-risk hematologic patients with cancer with febrile neutropenia. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology.* 2014;32(14):1463-1471. doi:10.1200/JCO.2013.51.6963
24. Rolston KV, Besece D, Lamp KC, Yoon M, McConnell SA, White P. Daptomycin use in neutropenic patients with documented gram-positive infections. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer.* 2014;22(1):7-14. doi:10.1007/s00520-013-1947-8