

BÖLÜM 7

Obez Hastalarda İlaç Kullanımı

Melda BAHAP¹

Aygin BAYRAKTAR EKİNCİOĞLU²

GİRİŞ

Obezite, dünyada önlenebilir ölümlerin önde gelen nedenlerinden biri olan ve yaygın gözlenen bir sağlık sorunudur. Obezite gözlenme sıklığı 1975 yılından bu yana yaklaşık 3 kat artmıştır (1). Dünya Sağlık Örgütü'ne (DSÖ) göre dünyada 1,9 milyar yetişkin aşırı kilolu olup, bunların 650 milyondan fazlası obezdir (1). Dünya genelinde 2025 yılında 2,7 milyar yetişkinin aşırı kilolu ve obez kategorisinde olacağı ve buna bağlı oluşacak sağlık harcamalarının da 1,2 trilyon Amerikan Doları olacağı tahmin edilmektedir (2). Türkiye İstatistik Kurumu (TÜİK) verilerine göre, Türkiye'de 2016 yılında 15 yaş ve üstü obez bireylerin oranı %19,9 iken 2019 yılında bu oran %21,1 olmuştur (3).

Obezite, beden kitle indeksi (BKİ) temel alınarak sınıflandırılmaktadır: BKİ kişinin ağırlığının (kilogram (kg)), boyunun metre (m) cinsinden karesine bölünmesiyle ($BKİ=kg/m^2$) elde edilir. Dünya Sağlık Örgütü'ne göre BKİ $\geq 30 kg/m^2$ olan yetişkinler obez sınıfına girmektedir (Tablo 1) (1).

¹ Uzm. Ecz., Hacettepe Üniversitesi, Eczacılık Fakültesi, Klinik Eczacılık AD., melda_610@hotmail.com

² Doç. Dr., Hacettepe Üniversitesi, Eczacılık Fakültesi, Klinik Eczacılık AD., aygin@hacettepe.edu.tr



KAYNAKLAR

1. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
2. <https://sggm.saglik.gov.tr/Eklenti/39936/0/obezitemedyaklavuzupdf.pdf>.
3. <https://data.tuik.gov.tr/Bulten/Index?p=Turkiye-Saglik-Arastirmasi-2019-33661>
4. Zuckerman M, Greller HA, Babu KM. A review of the toxicologic implications of obesity. *J Med Toxicol.* 2015; 11(3): 342-54.
5. Erstad BL, Barletta JF. Drug dosing in the critically ill obese patient: a focus on medications for hemodynamic support and prophylaxis. *Crit Care.* 2021; 25(1): 77.
6. Polso AK, Lassiter JL, Nagel JL. Impact of hospital guideline for weight-based antimicrobial dosing in morbidly obese adults and comprehensive literature review. *J Clin Pharm Ther.* 2014; 39(6): 584-608.
7. Al-Dorzi HM, Al Harbi SA, Arabi YM. Antibiotic therapy of pneumonia in the obese patient: dosing and delivery. *Curr Opin Infect Dis.* 2014; 27(2): 165-73.
8. McCaughan GJB, Favalaro EJ, Pasalic L, Curnow J. Anticoagulation at the extremes of body weight: choices and dosing. *Expert Rev Hematol.* 2018; 11(10): 817-28.
9. Patanwala AE, Seaman SM, Kopp BJ, Erstad BL. Heparin dosing for venous thromboembolism prophylaxis in obese hospitalized patients: An observational study. *Thromb Res.* 2018; 169: 152-6.
10. Sanderink GJ, Le Liboux A, Jariwala N, Harding N, Ozoux ML, Shukla U et al. The pharmacokinetics and pharmacodynamics of enoxaparin in obese volunteers. *Clin Pharmacol Ther.* 2002; 72(3): 308-18.
11. Tellor KB, Nguyen SN, Bultas AC, Armbruster AL, Greenwald NA, Yancey AM. Evaluation of the impact of body mass index on warfarin requirements in hospitalized patients. *Ther Adv Cardiovasc Dis.* 2018; 12(8): 207-16.
12. Sebaaly J, Kelley D. Direct oral anticoagulants in obesity: An updated literature review. *Ann Pharmacother.* 2020; 54(11): 1144-58.
13. Wurtz R, Itokazu G, Rodvold K. Antimicrobial dosing in obese patients. *Clin Infect Dis.* 1997; 25(1): 112-8.
14. Janson B, Thursky K. Dosing of antibiotics in obesity. *Curr Opin Infect Dis.* 2012; 25(6): 634-49.
15. Meng L, Mui E, Holubar MK, Deresinski SC. Comprehensive guidance for antibiotic dosing in obese adults. *Pharmacotherapy.* 2017; 37(11): 1415-31.
16. David n. Gilbert. RCM J, George M. Eliopoulos., Henry F. Chambers., Michael S. Saag. *The Sanford Guide To Antimicrobial Therapy* 2013; 43.
17. Bahap M, Bakır-Ekinci P, Semiz E, Bayraktar-Ekincioglu A, Demirkan K. Obez hastalarda antimikrobiyal ilaç dozları. *Sted.* 2020; 29(2): 137-52.
18. Erstad BL, Barletta JF. Drug dosing in the critically ill obese patient-a focus on sedation, analgesia, and delirium. *Crit Care.* 2020; 24(1): 315.
19. Ingrande J, Lemmens HJ. Dose adjustment of anaesthetics in the morbidly obese. *Br J Anaesth.* 2010; 105(1): 16-23.
20. Rolle A, Paredes S, Cortinez LI, Anderson BJ, Quezada N, Solari S et al. Dexmedetomidine metabolic clearance is not affected by fat mass in obese patients. *Br J Anaesth.* 2018; 120(5): 969-77.



21. Erstad BL. Dosing of medications in morbidly obese patients in the intensive care unit setting. *Intensive Care Med.* 2004; 30(1): 18-32.
22. Renew JR, Naguib M. Management of neuromuscular blockade in the elderly and morbidly obese patient: What does the data show? *Current Anesthesiology Reports.* 2020; 10(2): 107-16.
23. Patanwala AE, Holmes KL, Erstad BL. Analgesic response to morphine in obese and morbidly obese patients in the emergency department. *Emerg Med J.* 2014; 31(2): 139-42.
24. Abernethy DR, Greenblatt DJ. Ibuprofen disposition in obese individuals. *Arthritis Rheum.* 1985; 28(10): 1117-21.
25. Davis RL, Quenzer RW, Bozigian HP, Warner CW. Pharmacokinetics of ranitidine in morbidly obese women. *DICP.* 1990; 24(11): 1040-3.
26. Bruley des Varannes S, Coudsy B, Waechter S, Delemos B, Xiang J, Lococo J et al. On-demand proton pump inhibitory treatment in overweight/obese patients with gastroesophageal reflux disease: are there pharmacodynamic arguments for using higher doses? *Digestion.* 2013; 88(1): 56-63.
27. Milsap RL, Plaisance KI, Jusko WJ. Prednisolone disposition in obese men. *Clin Pharmacol Ther.* 1984; 36(6): 824-31.
28. Dunn TE, Ludwig EA, Slaughter RL, Camara DS, Jusko WJ. Pharmacokinetics and pharmacodynamics of methylprednisolone in obesity. *Clin Pharmacol Ther.* 1991; 49(5): 536-49.
29. Johnston AJ, Steiner LA, O'Connell M, Chatfield DA, Gupta AK, Menon DK. Pharmacokinetics and pharmacodynamics of dopamine and norepinephrine in critically ill head-injured patients. *Intensive Care Med.* 2004; 30(1): 45-50.
30. Barletta JF. *CCSAP Book 2, Issues in Critical Care Practice.* Bradley A. Boucher & Curtis E. Haas (Eds), Drug dosing in special populations: Obesity and geriatrics. Lenexa, KS: American College of Clinical Pharmacy Publishing. 2020: 7-30.