

Bir doku veya organın yapısını, biçimini bozan ve dıştan mekanik bir tepki sonucu oluşan yerel yara, örselenme olarak tanımlanan travma acil servise başvuran hastaların yaklaşık %3-16,5 kadarını oluşturur. Bunlar da motorlu araç kazaları, darp, delici/kesici alet yaralanmaları, ateşli silah yaralanmaları ve düşmeler şeklinde meydana gelebilmektedir.¹ Travma durumu anestezi uzmanları açısından özel yaklaşım gerektiren ölümcül olabilen acil bir durumdur. Acil travma durumlarında hastanın genetik anormalliğinin olup olmadığı, daha önce kronik hastalığının olup olmadığı, allerjisi var mı, kullandığı ilaçlar hakkında bilgi kısıtlıdır. Hastanın multipl hasarları ve bunlara farklı pozisyonlarda müdahale gerektiren durumu mevcut olabilir. Bunlar arasında zor havayolu yanında, tansiyon pnömotoraks ve kardiyak tamponad gibi durumlar sayılabilir. Ayrıca hastanın midesinin dolu olma ve servikal vertebra hasarı ihtimali yüksektir.²

TRAVMALI HASTADA HAVAYOLU YÖNETİMİ

Travmalı hastada, maksillo-fasiyal kırık, yanık, boyunda künt veya delici yaralanma, laringeal yaralanma, trakeaya bası, servikal vertebrada instabilite, boyun ve yüzde yanık nedeniyle havayolunda ödem gelişiminden dolayı zor havayolu gelişmiş olabilir veya daha önceden var olan zor havayolunu daha da kötüleştirir. Hastada bilinç kapalılığı gelişmişse dil kaslarının tonus kaybı nedeniyle dil farinkse doğru kayarak üst havayolunu tıkayabilir.

Hastada havayolu tıkanıklığı, hipoventilasyon (ilave oksijen tedavisine rağmen $SaO_2 \leq 90$), ciddi bilinç bozukluğu (Glasgow Coma Scale (GCS) Score ≤ 8), ciddi hemorajik şok ve kardiyak arrest halinde endotrakeal entübasyon endikasyonu vardır.³

Mümkün olan hastalarda, servikal vertebra stabilizasyonu sağlanıp, krikoid kırıkdağa baskı uygulayarak (tok veya açlık süresi bilinmeyen hastalarda), ve hızlı seri indüksiyon yöntemi (RSI: Rapid sequence induction) kullanılarak akciğere as-

Kaynaklar

1. Cullen A, Ferguson A. Perioperative management of the severely obese patient: a selective pathophysiological. *Can J Anaesth.* 2012;59:974-96.
2. Obezite, Dislipidemi, Hipertansiyon. Türkiye Endokrinoloji ve Metabolizma Derneği. Hekim İçin Tanı ve Tedavi Rehberi. 2018.
3. Obesity: preventing and managing the global epidemic: report of a WHO consultation. *World Health Organ Tech Rep Ser.* 2000;894:1-253.
4. Branca F, Nikogosian H, Lobstein T. The Challenge of obesity in the WHO European Region and the Strategies for Response. Denmark,WHO,2007.
5. National Health and Nutrition Examination Survey III; NHANES III of USA) 2011-2012
6. T.C. Sağlık Bakanlığı. Türkiye Obezite ile Mücadele Programı 2010-2014. Ankara, T.C Sağlık Bakanlığı Temel Sağlık Hizmetleri Müdürlüğü, 2011
7. Kopelman PG. Obesity as a medical problem. *Nature,* 6; 635-643, 2000.
8. Aslan D, Atilla S. Önemli bir sağlık sorunu: Şişmanlık. *STED,* 11: 169-171, 2002.
9. Nguyen NT, Wolfe BM. The physiologic effects of pneumoperitoneum in the morbidly obese. *AnnSurg,* 241: 219-226, 2005.
10. Fisher BL, Schauer P. Medical and surgical options in the treatment of severe obesity. *Am J Surg,* 184: 9-16, 2002.
11. Field AE, Coakley EH, Must A, Spadano JL, Laird N, Dietz WH, Rimm E, Colditz GA. Impact of overweight on the risk of developing common chronic diseases during a 10-year period. *Arch Intern Med,* 161: 1581-1586, 2001.
12. Banlı O, Altun H, Karakoyun R, Özdoğan H, Kahveci K, Çakmak B. Obezite tedavisinde laparoskopik gastrik bant yerleştirilmesi sonuçları: İlk 100 olgu. *Ulusal Cerrahi Dergisi,* 25: 11-14, 2009.
13. Cheah MH, Kam PCA: Obesity: basic science and medical aspects relevant to anaesthetists. *Anaesthesia,* 60: 1009-1021, 2005.
14. Serter R. Obezite Atlası. 1. Baskı, Karakter Color, Ankara 2004.
15. Ford ES, Williamson DF, Liu S. Weight change and diabetes incidence: Findings from a national cohort of US adults. *Am J Epidemiol,* 146: 214-22, 1997.
16. Colditz GA, Willett WC, Rotnitzky A, Manson JE. Weightgain as a risk factor for clinical diabetes mellitus in women. *AnnInternMed,* 122: 481-486, 1995.
17. Howard BV, Ruotolo G, Robbins DC. Obesity and dyslipidemia. *Endocrinol Metab Clin North Am,* 32: 855-867, 2003.
18. Reber A. Airways and respiratory function in obese patients. *Anaesthetic and intensive care aspects and recommendations. Anaesthesist,* 54: 715-725, 2005.
19. Marik P, Varon J. The obese patient in the ICU. *Chest,* 113: 492-498, 1998.
20. Arslan M, Turgut HC. Obezitedeki fizyolojik ve farmakolojik değişiklikler. *Türkiye Klinikleri J Anest Reanim-Special Topics.* 2015;8:1-10.
21. Nashar K, Egan BE. Relationship between chronic kidney disease and metabolic syndrome: current perspectives. *Diabetes Metab Syndr Obes.* 2014;7:421-43.
22. Juvin P, Lavaut E, Dupont H, Lefevre P, Demetriou M, Dumoulin JL et al. Difficult tracheal intubation is more common in obese than in lean patients. *Anesth Analg.* 2003;97:595-600.
23. Sarandan M, Guragata-Balasa C, Papurica M, Duta C, Hordovan E, Rus C et al. Anesthesia in laparoscopic bariatric surgery (gastric sleeve): preliminary experience. *Timisoara Medical Journal.* 2011;61:26-31.

24. American Academy of Sleep Medicine. International Classification of Sleep Disorders, 3rd ed.
25. Horvei LD, Braekkan SK, Mathiesen EB, Njolstad I, Wilsgaard T, Hansen JB. Obesity measures and risk of venous thromboembolism and myocardial infarction. *Eur J Epidemiol.* 2014;29:821-30.
26. Scholten DJ, Hoedema RM, Scholten SE. A comparison of two different prophylactic dose regimens of low molecular weight heparin in bariatric surgery. *Obes Surg.* 2002;12:19-24.
27. Apfelbaum JL, Hagberg CA, Caplan RA, Blitt CD, Connis RT, Nickinovich DG, et al. American Society of Anesthesiologists Task Force on Management of the Difficult Airway. Practice guidelines for management of the difficult airway: an updated report by the American Society of Anesthesiologists Task Force on Management of the Difficult Airway. *Anesthesiology.* 2013;118:251-70.
28. Domi R, Laho H. Anesthetic challenges in the obese patient. *J Anesth.* 2012;26:758-65.
29. Jayaraman L, Sinha A, Punhani D. A comparative study to evaluate the effect of intranasal dexmedetomidine versus oral alprazolam as a premedication agent in morbidly obese patients undergoing bariatric surgery. *J Anaesthesiol Clin Pharmacol.* 2013;29:179.
30. Wadhwa A, Singh PM, Sinha AC. Airway management in patients with morbid obesity. *Int Anesthesiol Clin.* 2013;51:26-40.
31. Aldenkortt M, Lysakowski C, Elia N, Brochard L, Tramèr MR. Ventilation strategies in obese patients undergoing surgery: a quantitative systematic review and meta-analysis. *Br J Anaesth.* 2012;109:493-502.
32. Gaszynski T, Szewczyk T, Gaszynski W. Randomized comparison of sugammadex and neostigmine for reversal of rocuronium-induced muscle relaxation in morbidly obese undergoing general anaesthesia. *Br J Anaesth.* 2012;108:236-9.
33. Van Lancker P, Dillemans B, Bogaert T, Mulier JP, De Kock M, Haspeslagh M. Ideal Versus Corrected Body Weight For Dosage Of Sugammadex In Morbidly Obese Patients. *Anaesthesia.* 2011; 66(8): 721-725.
34. Wang TJ, Parise H, Levy D, et al. Obesity and the risk of new-onset atrial fibrillation. *JAMA-J Am Med Assoc* 2004;292:2471-247.
35. Mendonça J, Pereira H, Xara D, Santos A, Abelha FJ. Obese Patients: Respiratory Complications In The Post- Anesthesia Care Unit. *Rev Port Pneumol.* 2014; 20(1):12-9.
36. Clincksales CP, Greenfield MLVH, Vanarase M, Polley LS. An observational study of the relationship between lumbar epidural space depth and body mass index in Michigan parturients. *Int J Obstet Anesth.* 2007;16:323-7
37. Cotter JT, Nielsen KC, Guller U, Steele SM, Klein SM, Greengrass RA et al. Increased body mass index and ASA physical status iv are risk factors for block failure in ambulatory surgery: an analysis of 9,342 blocks. *Can J Anaesth.* 2004;51:810-6.
38. Klasen J, Junger A, Hartmann B, et al. Increased body mass index and peri-operative risk in patients undergoing non-cardiac surgery. *Obes Surg.* 2004;14:275-81.
39. Obezite Hastalarında Anestezi Yönetimi Anesthetic Management of Patients with Obesity Uludağ Ö, Türktan M, Arşiv Kaynak Tarama Dergisi . *Archives Medical Review Journal* 2016; 25(3):406-419 doi:10.17827/aktd.248423
40. Westerly B, Dabbagh O. Morbidity And Mortality Characteristics Of Morbidly Obese Patients Admitted To Hospital And Intensive Care Units. *J Crit Care.* 2011;26:180-185.
41. Lewandowski K, Lewandowski M. Intensive care in the obese. *Best Pract Res Clin Anaesthesiol.* 2011;25:95-108.

42. White PF, Kehlet H, Neal JM, Schrickler T, Carr DB, Carli F, Fast-Track Surgery Study Group. The role of the anesthesiologist in fast-track surgery: from multimodal analgesia to perioperative medical care. *Anesth Analg*. 2007;104:1380-96.
43. Nguyen NT, Lee SL, Goldman C, et al. Comparison of Pulmonary Function and Postoperative Pain After Laparoscopic Versus Open Gastric Bypass: A Randomized Trial. *J Am Coll Surg*. 2001;192:469-476.
44. Ingrande J, Lemmens H. Dose Adjustment of Anaesthetics in the Morbidly Obese. *Br J Anaesth*. 2010;105(1):16-23.
45. Greenblatt DJ, Abernethy DR, Locniskar A, Harmatz JS, Limjuco RA, Shader RI. Effect of Age, Gender, and Obesity on Midazolam Kinetics. *Anesthesiology*. 1984; 61(1):27-35.
46. Jung D, Mayersohn M, Perrier D, Calkins J, Saunders R. Thiopental Disposition in Lean and Obese Undergoing Surgery. *Anesthesiology* 1982; 56:269-274.
47. Baturay F, Topuz C, Ay A, Gültop F. Obezite ve Anestezi. *Okmeydanı Tıp Dergisi*. 2014;30(ES 1):29-33,
48. Schwartz AE, Matteo RS, Ornstein E, Halevy JD, Diaz J. Pharmacokinetics and Pharmacodynamics of Vecuronium in the Obese Surgical Patient. *Anesth Analg*. 1992; 74:515-518.
49. Lemmens HJ, Brodsky JB. The Dose of Succinylcholine in Morbid Obesity. *Anesth Analg* 2006;102:438-442.
50. Casati A, Putzu M. Anesthesia in the Obese Patient: Pharmacokinetic Consideration. *J Clin Anesth*. 2005;17(2):134-45.
51. La Colla L, Albertin A, La Colla G, Mangano A. Faster Wash-out and Recovery for Desflurane vs Sevoflurane in Morbidly Obese Patients when no Premedication is Used. *Br J Anaesth*. 2007; 99(3): 353-358.