



BÖLÜM 3

ZOR HAVAYOLU

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GİRİŞ

Havayolu yönetimi anestezi pratiğinin çok önemli bir parçasıdır. Havayolu yönetiminde yaşanabilecek zorluklar; örneğin anestezi indüksiyonu yapılmış bir hastada kalıcı ve güvenli bir havayolu sağlanamaması, dakikalar içinde gelişebilecek hipoksik beyin hasarı ve hatta ölüm gibi ciddi sonuçlar doğurma potansiyeli taşımaktadır (1). Amerikan Anestezistler Derneğinin (ASA); “Zor Havayolu Yönetimi Kılavuzu (2022)”, zor havayolunu; Anestezi eğitimi almış bir hekimin; maske ventilasyon, larigoskopi, supraglottik havayolu kullanılarak ventilasyon, trakeal entübasyon, ekstübasyon veya invaziv havayolu işlemlerinin herhangi birinde ya da birden fazlasında deneyimlediği zorluk ya da başarısız girişim olarak tanımlamaktadır (2).

Kulak burun boğaz (KBB) cerrahisinde hastaların var olan baş ve boyun patolojileri nedeniyle zor havayolu insidansı artmıştır (3,4). KBB cerrahisinde havayolu yönetimini zorlaştıran durumlar arasında subglottik stenoz, glottik ve

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KAYNAKLAR

1. Artime C. A., Roy S., Hagberg C. A. The Difficult Airway. *Otolaryngologic Clinics of North America* 2019; 52: 1115–1125. doi:10.1016/j.otc.2019.08.009
2. Apfelbaum JL, Hagberg CA, Connis RT, et al. 2022 American Society of Anesthesiologists Practice Guidelines for Management of the Difficult Airway. *Anesthesiology*. 2022;136(1):31-81. doi:10.1097/ALN.0000000000004002
3. Arné J, Descoins P, Fusciardi J, et al. Preoperative assessment for difficult intubation in general and ENT surgery: predictive value of a clinical multivariate risk index. *Br J Anaesth*. 1998;80(2):140-146. doi:10.1093/bja/80.2.140
4. Heidegger T, Hagberg CA. Algorithms for Management of the Difficult Airway. In: Hagberg CA, Artime CA, Aziz MF (eds.) *Hagberg and Benumof's Airway Management*. 4Th ed. China: Elsevier ;2018 . p 203-216
5. National Audit Project. *NAP4: Major Complications of Airway Management in the United Kingdom* Available from: https://www.nationalauditprojects.org.uk/NAP4_home#pt. [Accessed: 21st February 2021]
6. Rosenblatt W, Ianus AI, Sukhupragarn W, Fickenscher A, Sasaki C. Preoperative endoscopic airway examination (PEAE) provides superior airway information and may reduce the use of unnecessary awake intubation. *Anesth Analg*. 2011;112(3):602-607. doi:10.1213/ANE.0b013e3181fd1c
7. Rosenblatt WH. The Airway Approach Algorithm: a decision tree for organizing preoperative airway information. *J Clin Anesth*. 2004;16(4):312-316. doi:10.1016/j.jclinane.2003.09.005
8. Benumof JL. Management of the difficult adult airway. With special emphasis on awake tracheal intubation [published correction appears in *Anesthesiology* 1993 Jan;78(1):224]. *Anesthesiology*. 1991;75(6):1087-1110. doi:10.1097/00000542-199112000-00021
9. Mason RA, Fielder CP. The obstructed airway in head and neck surgery. *Anaesthesia*. 1999;54(7):625-628. doi:10.1046/j.1365-2044.1999.01036.x
10. Iseli TA, Iseli CE, Golden JB, et al. Outcomes of intubation in difficult airways due to head and neck pathology. *Ear Nose Throat J*. 2012;91(3):E1-E5. Doi: 10.1177/014556131209100313
11. Kaplan MB, Hagberg CA, Ward DS, et al. Comparison of direct and video-assisted views of the larynx during routine intubation. *J Clin Anesth*. 2006;18(5):357-362. doi:10.1016/j.jclinane.2006.01.002
12. Hagberg CA, Artime C. *Flexible scope intubation for anesthesia*. Available from: <https://www.uptodate.com/contents/flexible-scope-intubation-for-anesthesia>. [Accessed: 21st February 2021]
13. Sagiv D, Nachalon Y, Mansour J, et al. Awake Tracheostomy: Indications, Complications and Outcome. *World J Surg*. 2018;42(9):2792-2799. doi:10.1007/s00268-018-4578-x

14. Kaufman MR, Alfonso KP, Burke K, Aouad RK. Awake vs Sedated Tracheostomies: A Review and Comparison at a Single Institution. *Otolaryngol Head Neck Surg.* 2018;159(5):830-834. doi:10.1177/0194599818789079
15. Cavallone LF, Vannucci A. Review article: Extubation of the difficult airway and extubation failure. *Anesth Analg.* 2013;116(2):368-383. doi:10.1213/ANE.0b013e-31827ab572
16. Artime CA, Hagberg CA. Tracheal extubation. *Respir Care.* 2014;59(6):991-1005. doi:10.4187/respcare.02926
17. Russo SG, Goetze B, Troche S, Barwing J, Quintel M, Timmermann A. LMA-ProSeal for elective postoperative care on the intensive care unit: a prospective, randomized trial. *Anesthesiology.* 2009;111(1):116-121. doi:10.1097/ALN.0b013e3181a16303
18. Fujii Y, Toyooka H, Tanaka H. Cardiovascular responses to tracheal extubation or LMA removal in normotensive and hypertensive patients [retracted in: *Can J Anaesth.* 2013 Jun;60(6):619]. *Can J Anaesth.* 1997;44(10):1082-1086. doi:10.1007/BF03019230
19. Nair I, Bailey PM. Use of the laryngeal mask for airway maintenance following tracheal extubation. *Anaesthesia.* 1995;50(2):174-175. doi:10.1111/j.1365-2044.1995.tb15104.x
20. Peterson GN, Domino KB, Caplan RA, Posner KL, Lee LA, Cheney FW. Management of the difficult airway: a closed claims analysis. *Anesthesiology.* 2005;103(1):33-39. doi:10.1097/00000542-200507000-00009
21. Rosenblatt WH. Preoperative endoscopic airway examination. In: Adelman B, Doyle DJ (eds.) *Anesthesia for Otolaryngologic Surgery.* Cambridge University Press; 2012. p. 50-57. doi:10.1017/CBO9781139088312.008