

# Gebe Olguda Zor Havayolu Yönetimi

## 15. BÖLÜM

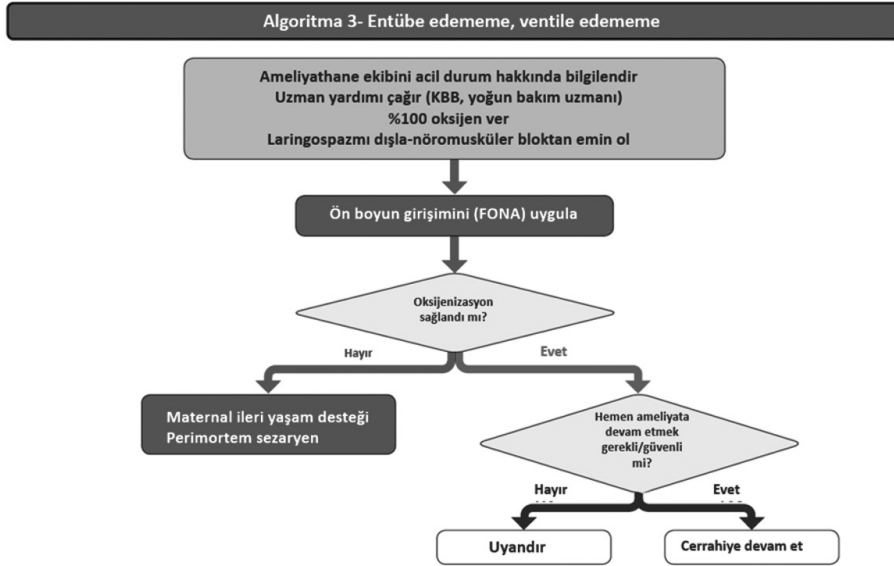
Selin EREL<sup>1</sup>  
Azer İlbengü KAPTAN<sup>2</sup>

### OLGU

29 yaşında, gravida 2, parite 1, 38 hafta gebe elektif sezaryen için hazırlandı. Preoperatif değerlendirmede laboratuvar değerlerinde ve elektrokardiyografi (EKG)'sinde anormallik saptanmadı. Mallampati 2, vücut kitle indeksi (VKİ) 28 kg/m<sup>2</sup>, ağız açıklığı, tiromental mesafe ve baş boyun hareketleri normal olarak değerlendirildi. Rutin monitörizasyon sonrası spinal anestezi tek seferde, 12 mg heavy bupivakain, 10 µg fentanil, 100 µg morfinle uygulandı. Duyusal bloğun gelişmemesi üzerine genel anesteziye geçildi. Genel anestezi; preoksijenizasyonu takiben intravenöz (i.v.) 200 mg propofol, 50 mg rokuronyum, 50 µg fentanil verilerek uygulandı. Hasta maske ile havalandırılırken eş zamanlı olarak cerrahi başlatıldı. 90. saniyede bebek 1. dakika APGAR skoru 9 olarak çıkarıldı. Entübasyon anestezi uzmanı tarafından 7.0 numara endotrakeal tüp ile denendi ancak başarılı olunamadı. Laringoskopide üst havayolu anatomisi ayırt edilemedi ve vokal kordlar izlenemedi. Maske ile tekrar havalandırılan hastada desatürasyon gözlenmedi. Tekrar entübasyon denenip başarılı olunamaması üzerine ikinci anestezi uzmanı acil olarak çağırıldı. Hasta 4.0 klasik laringeal maske (LMA) ile havalandırılmaya başlandı fakat yeterli tidal volüm oluşturulamaması, inspiratuar havayolu basıncının yükselmesi ve satürasyon düşüklüğünün başlaması üzerine ikinci anestezi uzmanı tarafından entübasyon denendi ancak yine başarılı olunamadı. Yeniden maske ile havalandırılmaya çalışılan hastanın hipoksisinin derinleşmeye başlaması üzerine CICO (can not intubate, can not oxygenate) tanısı konularak acil trakeostomi açtırıldı. Operasyon bitiminde sugammadeks verilerek spontan solunumu sağlanan hasta yoğun bakım ünitesi (YBÜ)'ne çıkarıldı. YBÜ takibi sırasında genel durumunda bozulma olmaması üzerine postoperatif 2. günde servise devredildi.

<sup>1</sup> Uzm. Dr. Selin EREL, Gazi Üniversitesi Tıp Fakültesi, Anesteziyoloji ve Reanimasyon AD., selinerel@yahoo.com

<sup>2</sup> Araş. Gör. Dr. Azer İlbengü KAPTAN, Gazi Üniversitesi Tıp Fakültesi, Anesteziyoloji ve Reanimasyon AD.,



**Şekil 4.**Entübe edememe ventile edememe

Reproduced from Mushambi MC, Kinsella SM, Popat M, Swales H, Ramaswamy KK, Winton AL, Quinn AC. *Obstetric Anaesthetists' Association and Difficult Airway Society guidelines for the management of difficult and failed tracheal intubation in obstetrics. Anaesthesia 2015; 70: 1286 – 1306, with permission from Obstetric Anaesthetists' Association / Difficult Airway Society'*

## KAYNAKLAR

1. Kheterpal S, Healy D, Aziz MF, et al. Incidence, predictors, and outcome of difficult mask ventilation combined with difficult laryngoscopy: a report from the multicenter perioperative outcomes group. *Anesthesiology* 2013;119:1360-1369.
2. Samsoun G, Young J. Difficult tracheal intubation: a retrospective study. *Anaesthesia* 1987;42:487-490.
3. Akıncı SB, Sarıcaoğlu F, Dal D AÜ. Preoperatif anestetik değerlendirme. *Hacettepe Tıp Dergisi* 2005;36:91-7.
4. Kayhan Z. Entübasyon güçlüğü, tanımı, nedenleri, sınıflandırılması, önceden belirlenmesi. *Anestezi Dergisi* 1998;6:91-96.
5. Lee A, Fan LT, Gin T, et al. A systematic review (meta-analysis) of the accuracy of the Mallampati tests to predict the difficult airway. *Anesthesia & Analgesia* 2006;102:1867-1878.
6. Savva D. Prediction of difficult tracheal intubation. *British journal of anaesthesia* 1994;73:149-153.
7. Bilgin H, Özyurt G. Screening tests for predicting difficult intubation. A clinical assessment in Turkish patients. 1998.
8. Schmitt HJ, Kirmse M, Radespiel-Troger M. Ratio of patient's height to thyromental distance improves prediction of difficult laryngoscopy. *Anaesthesia and intensive care* 2002;30:763-765.
9. Al Ramadhani S, Mohamed L, Rocke D, et al. Sternomental distance as the sole predictor of difficult laryngoscopy in obstetric anaesthesia. *British journal of anaesthesia* 1996;77:312-316.

10. Eberhart LH, Arndt C, Cierpka T, et al. The reliability “and validity of the upper lip bite test compared with the Mallampati classification to predict difficult laryngoscopy: an external prospective evaluation. *Anesthesia & Analgesia* 2005;101:284-289.
11. Gonzalez H, Minville V, Delanoue K, et al. The importance of increased neck circumference to intubation difficulties in obese patients. *Anesthesia & Analgesia* 2008;106:1132-1136.
12. Wilson M, Spiegelhalter D, Robertson J, et al. Predicting difficult intubation. *BJA: British Journal of Anaesthesia* 1988;61:211-216.
13. De Hert S, Staender S, Fritsch G, et al. Pre-operative evaluation of adults undergoing elective noncardiac surgery. *European journal of anaesthesiology* 2018;35:407-465.
14. Günaydın B, Kurtipek Ö. Elektif Non-Kardiyak Cerrahi Geçirecek Erişkinlerin Pre-Operatif Değerlendirme Kılavuzu: Avrupa Anesteziyoloji Derneği'nden Güncellenmiş Önerilerin Özeti: Pre-Operative Evaluation of Adults Undergoing Elective Noncardiac Surgery: Summary of the Updated Guideline From the European Society of Anaesthesiology. *Turkish Journal of Anaesthesiology and Reanimation* 2019;47:244.
15. Honarmand A, Safavi M. Prediction of difficult laryngoscopy in obstetric patients scheduled for Caesarean delivery. *European journal of anaesthesiology* 2008;25:714-720.
16. Tao W, Edwards JT, Tu F, et al. Incidence of unanticipated difficult airway in obstetric patients in a teaching institution. *Journal of anesthesia* 2012;26:339-345.
17. Ellegård EK. Clinical and pathogenetic characteristics of pregnancy rhinitis. *Clinical reviews in allergy & immunology* 2004;26:149-159.
18. Hegewald MJ, Crapo RO. Respiratory physiology in pregnancy. *Clinics in chest medicine* 2011;32:1-13.
19. Bourne T, Ogilvy A, Vickers R, et al. Nocturnal hypoxaemia in late pregnancy. *British journal of anaesthesia* 1995;75:678-682.
20. Vasdev GM, Harrison BA, Keegan MT, et al. Management of the difficult and failed airway in obstetric anesthesia. *Journal of Anesthesia* 2008;22:38-48.
21. Mushambi MC, Kinsella SM, Popat M, et al. Obstetric Anaesthetists' Association and Difficult Airway Society guidelines for the management of difficult and failed tracheal intubation in obstetrics. *Anaesthesia* 2015;70:1286-306.
22. Yüksek A, Miniksar ÖH, Honca M, et al. Incidence and Causes of Failed Spinal Anesthesia. *Dubai Medical Journal* 2020;3:50-54.
23. SO O. Failed spinal anaesthesia for caesarean section. *Journal of the West African college of surgeons* 2011;1:1.
24. Sng B, Lim Y, Sia A. An observational prospective cohort study of incidence and characteristics of failed spinal anaesthesia for caesarean section. *International journal of obstetric anesthesia* 2009;18:237-241.
25. Hawkins JL, Koonin LM, Palmer SK, et al. Anesthesia-related deaths during obstetric delivery in the United States, 1979–1990. *The Journal of the American Society of Anesthesiologists* 1997;86:277-284.
26. Shibli K, Russell I. A survey of anaesthetic techniques used for caesarean section in the UK in 1997. *International Journal of Obstetric Anesthesia* 2000;9:160-167.
27. Hawkins JL, Chang J, Palmer SK, et al. Anesthesia-related maternal mortality in the United States: 1979–2002. *Obstetrics & Gynecology* 2011;117:69-74.
28. Hawkins JL. Anesthesia-related maternal mortality. *Clinical obstetrics and gynecology* 2003;46:679-687.
29. Berg CJ, Atrash HK, Koonin LM, et al. Pregnancy-related mortality in the United States, 1987–1990. *Obstetrics & Gynecology* 1996;88:161-167.
30. Izci B, Vennelle M, Liston WA, et al. Sleep-disordered breathing and upper airway size in pregnancy and post-partum. *European Respiratory Journal* 2006;27:321-327.

31. Pilkington S, Carli F, Dakin M, et al. Increase in Mallampati score during pregnancy. *British journal of anaesthesia* 1995;74:638-642.
32. Loube IMD, Poceta JS, Morales MC, et al. Self-reported snoring in pregnancy: association with fetal outcome. *Chest* 1996;109:885-889.
33. Izci B, Riha RL, Martin SE, et al. The upper airway in pregnancy and pre-eclampsia. *American journal of respiratory and critical care medicine* 2003;167:137-140.
34. Balki M, Cooke Mary E, Dunington S, et al. Unanticipated Difficult Airway in Obstetric Patients: Development of a New Algorithm for Formative Assessment in High-fidelity Simulations. *Anesthesiology* 2012;117:883-897.
35. Soltanifar D, Bogod D, Harrison S, et al. Survey of accepted practice following failed intubation for emergency caesarean delivery. *Anesthesiology research and practice* 2015;2015.
36. Sellick B. Cricoid pressure to control regurgitation of stomach contents during induction of anaesthesia. *The lancet* 1961;278:404-406.
37. Asai T. Airway management in patients undergoing emergency Cesarean section. *Journal of anesthesia* 2015;29:927-933.
38. NA. 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. *The Journal of the American Society of Anesthesiologists* 2003;98:1269-1277.
39. Einav S, Leone M. Epidemiology of obstetric critical illness. *International journal of obstetric anesthesia* 2019;40:128-139.
40. Sriram S, Robertson MS. Critically ill obstetric patients in Australia: a retrospective audit of 8 years' experience in a tertiary intensive care unit. *Crit Care Resusc* 2008;10:124.
41. Dauphinee JD, Amato K, Kiehl E. Support of the breast-feeding mother in critical care. *AACN Advanced Critical Care* 1997;8:539-549.
42. Patel S, Wali A. Airway Management of the Obstetric Patient. *Current Anesthesiology Reports* 2020:1-11.