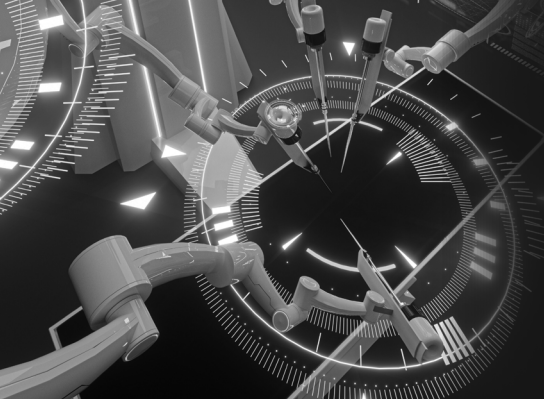




Bölüm 13

AKALAZYA TEDAVİSİNDE LAPAROSKOPIK VE ROBOTİK CERRAHİ

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Genel Bilgiler

Akalazya; özofagusta peristaltizm eksikliği ve yutmaya cevap olarak özofagus alt sfinkterinde gevşeme bozukluğu ile karakterize, nadir görülen fakat tüm özofagus motor hastalıkları içerisinde en sık görülen primer motor hastalığıdır (1/100.000 insidans ve 10/100.000 prevalans) (1,2). Erkek ve kadın cinsiyette görülme sıklığı hemen hemen birbirine eşittir ve insidansı yaş ile birlikte artmaktadır (3). Son 2-3 dekatta tanı yöntemlerinde ki gelişmelere bağlı olarak da Akalazya prevalansında artış gözlenmektedir (4).

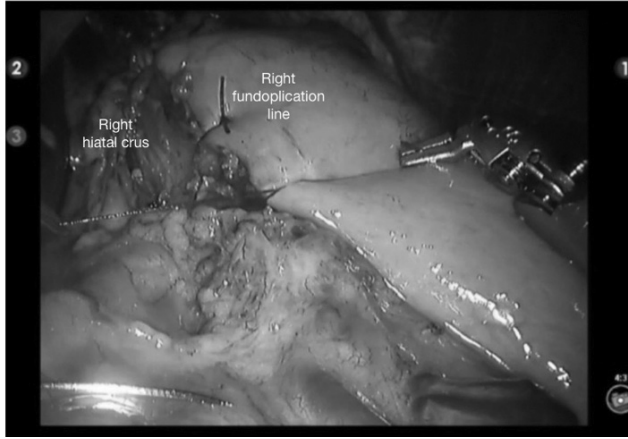
Akalazya hastalığının etyolojisindeki belirsizlik devam etmektedir fakat etyolojik faktör ne olursa olsun net sonuç; özofagusun distalindeki Myenterik pleksusun hasarı ve alt özofagus sfinkterindeki inhibitör nöronların kronik bozukluğu olarak ortaya çıkmaktadır (5).

Klinik Bulgular

Özofagus gövdesinde peristaltizmin bozulması - kaybolması ve alt özofagus sfinkterindeki yetersiz gevşeme sonucunda yenilen gıdaların mideye geçişinde zorlanma olur ve bu kliniğe *disfaji* olarak yansır. Akalazya'daki disfaji literatürde *paradoksal disfaji* olarak tanımlanmıştır; yani katı gıdaların geçişi daha kolay olurken sıvı gıdaların geçişinde zorlanma daha fazla olmaktadır. Bunun nedeni;

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Resim 9. Funduplikasyonun ikinci aşamasında gastrik fundus sağ lateral myotomi hattına tespiti.

KAYNAKLAR

1. Kamil Nurczyk, Marco G. Patti Surgical management of achalasia. *Ann Gastroenterol Surg.* 2020 Jul; 4 (4): 343-351.
2. Sadowski DC, Ackah F, Jiang B, et al. . Achalasia: incidence, prevalence and survival: a population based study. *Neurogastroenterol Motil.* 2010;22(9):e256-e261.
3. Boeckxstaens GE, Zaninotto G, Richter JE. Achalasia. *Lancet.* 2014; 383(9911): 83- 93
4. Tebaibia A, Boudjella MA, Boutarene D, Benmediouni F, Brahimi H, Oumnia N. Incidence, clinical features and para-clinical findings of achalasia in Algeria: experience of 25 years. *World J Gastroenterol.* 2016; 22(38): 8615- 23
5. László András, MD, Attila Paszt, MD, PhD, Zsolt Simonka, MD, PhD, Szabolcs Ábrahám, MD, PhD, Márton Erdős, MD, András Rosztóczy, MD, PhD, Georgina Ollé, MD, and György Lázár, MD, PhD, DSc. Surgical Treatment of Esophageal Achalasia in the Era of Minimally Invasive Surgery. *JLS.* 2021 Jan-Mar; 25(1): e2020.00099.
6. Ferguson MK, Little AG. Angina-like chest pain associated with high-amplitude peristaltic contractions of the esophagus. *Surgery.* 1988; 104(4): 713- 9.
7. Eckardt VF, Stauf B, Bernhard G. Chest pain in achalasia: patient characteristics and clinical course. *Gastroenterology.* 1999; 116: 1300-1304
8. Rohof WO, Salvador R, Annese V, et al. Outcomes of treatment for achalasia depend on manometric subtype. *Gastroenterology.* 2013; 144: 718-725
9. Moonka R, Patti MG, Feo CV, Arcerito M, De Pinto M, Horgan S, et al. Clinical presentation and evaluation of malignant pseudoachalasia. *J Gastrointest Surg.* 1999; 3(5): 456- 61.
10. Triadafilopoulos G, Boeckxstaens GE, Gullo R, et al. The Kagoshima consensus on esophageal achalasia. *Dis Esophagus.* 2012; 25: 337-348
11. Kahrilas PJ, Bredenoord AJ, Fox M, Gyawali CP, Roman S, Smout AJPM, et al. The Chicago classification of esophageal motility disorders, v3.0. *Neurogastroenterol Motil.* 2015; 27(2): 160- 74
12. Kahrilas PJ Esophageal motor disorders in terms of high-resolution esophageal pressure topography: what has changed?. *Am J Gastroenterol.* 2010; 105: 981-987
13. Willis T *Pharmaceutice Rationalis Sive Diatribe de Medicamentorum Operationibus in Human Corpore.* Hagae Comititis, London, England 1674
14. Brewer LA. History of surgery of the esophagus. *Am J Surg.* 1980;139:730-743. doi: 10.1016/0002-9610(80)90375-X.

15. Heller E. Extramukose cardioplatik beim chronischen cardiospasmus mit dilation of the oesophagus. *Mitt Grenz Med Chir.* 1914;27:141–149.
16. Pelligrini C, Wetter LA, Homan CB, et al. Thoracoscopic esophagomyotomy: initial experience with a new approach for the treatment of achalasia. *Ann Surg.* 1992;216:291–299. doi: 10.1097/00000658-199209000-000813.
17. Hunter JG, Trus TL, Branum GD, et al. Laparoscopic heller myotomy and fundoplication for achalasia. *Ann Surg.* 1997;225(6):655–664. doi: 10.1097/00000658-199706000-00003.
18. Ancona E, Anselmino M, Zaninotto G, et al. Esophageal achalasia: laparoscopic versus conventional open Heller-Dor operation. *Am J Surg.* 1995;170(3):265–270.
19. Patti M.G., Molena D., Fisichella P.M., Whang K., Yamada H., Perretta S. Laparoscopic Heller myotomy and Dor fundoplication for achalasia: analysis of successes and failures. *Arch Surg.* 2001;136(8):870–877.
20. Zaninotto G., Costantini M., Molena D., Buin F., Carta A., Nicoletti L. Treatment of esophageal achalasia with laparoscopic Heller myotomy and Dor partial anterior fundoplication: prospective evaluation of 100 consecutive patients. *J Gastrointest Surg.* 2000;4(3):282–289.
21. Khajanchee Y.S., Kanneganti S., Leatherwood A.E., Hansen P.D., Swanstrom L. Laparoscopic Heller myotomy with Toupet fundoplication: outcomes predictors in 121 consecutive patients. *Arch Surg.* 2005;140(9):827–833. discussion 833–4.
22. Campos GM, Vittinghoff E, Rabl C, et al. Endoscopic and surgical treatments for achalasia: a systematic review and meta-analysis. *Ann Surg.* 2009;249(1):45–57. 45e57.
23. Costantini M, Salvador R, Capovilla G, Vallese L, Costantini A, Nicoletti L, et al. A thousand and one laparoscopic Heller myotomies for esophageal achalasia: a 25-year experience at a single tertiary center. *J Gastrointest Surg.* 2019;23(1):23–35.
24. Tomasko JM, Augustin T, Tran TT, Haluck RS, Rogers AM, Lyn-Sue JR. Quality of life comparing dor and toupet after heller myotomy for achalasia. *JSLs.* 2014;18(3):e2014.00191.
25. Little VR. Laparoscopic Heller myotomy for achalasia: a review of the controversies. *Ann Thorac Surg.* 2008;85(2):S743–S746
26. Shemmeri E, O'Wee J. Robotics and minimally invasive esophageal surgery *AnnTransl-Med.* 2021 May; 9(10): 898
27. Horgan S, Galvani C, Gorodner MV, Omelanczuk P, Elli F, Moser F, Durand L, Caracoché M, Nefa J, Bustos S, Donahue P, Ferraina P. Robotic-assisted Heller myotomy versus laparoscopic Heller myotomy for the treatment of esophageal achalasia: multicenter study. *J Gastrointest Surg* 2005;9(8):1020
28. Melvin WS, Dundon JM, Talamini M, Horgan S. Computer-enhanced robotic telesurgery minimizes esophageal perforation during Heller. *Surgery* 2005;138(4):553–558
29. Sanchez A, Rodriguez O, Nakhel E, Davilla H, Valero R, Sanchez R, Pena R, Visconti MF. Robotic-assisted Heller myotomy versus laparoscopic Heller myotomy for the treatment of esophageal achalasia: a case-control study. *J Robot Surg* 2012;6(3):213–216
30. Ballouhey Q, Dib N, Binet A, Carcauzon-Couvrat V, Clermidi P, Longis B, Lardy H, Lanquepin J, Cros J, Fourcade L. How robotic-assisted surgery can decrease the risk of mucosal tear during Heller myotomy procedure ? *J Robot Surg* 2017;11(2):255–258
31. Huffman LC, Pandalai PK, Boulton BJ, James L, Starnes SL, Reed MF, Howington JA, Nussbaum MS. Robotic Heller myotomy: a safe operation with higher postoperative quality-of-life indices. *Surgery* 2007;142(4):613–620
32. Stefanidis D, Richardson W, Farrell TM, Kohn GP, Augenstein V, Fanelli RD; Society of American Gastrointestinal and Endoscopic Surgeons. SAGES guidelines for the surgical treatment of esophageal achalasia. *Surg Endosc* 2012;26(2):296–311
33. Shaligram A, Unniravi J, Simorov A, Kothari VM, Oleynikov D. How does the robot affect outcomes? A retrospective review of open, laparoscopic, and robotic Heller myotomy for achalasia. *Surg Endosc* 2012;26(4):1047–1050
34. Maeso S, Reza M, Mayol JA, Blasco JA, Guerra M, Andradás E, Plana MN. Efficacy of the Da Vinci surgical system in abdominal surgery compared with that of laparoscopy: a systematic review and meta-analysis. *Ann Surg* 2010;252(2):254–262