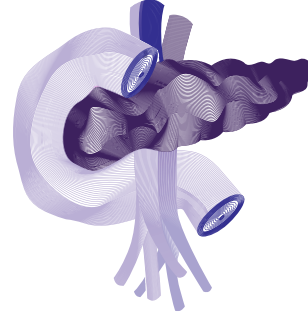


Bölüm 7

Akut Pankreatitte Medikal Tedavi



Ayberk DURSUN¹

Giriş

Akut pankreatit (AP) günümüzde tıptaki yeniliklere ve güncel tedavilere rağmen, tüm dünyada hala önemli morbidite ve mortalite nedenlerinden biridir ve görülme sıklığı giderek artmaktadır (1). Akut pankreatitin şiddeti Atlanta Sınıflamasına göre sınıflandırılmıştır ve tedavisi hastalığın şiddetine bağlı olarak değişmektedir (2). Prognozu temel olarak pankreatik/ peripankreatik nekroz, nekroza bağlı gelişen enfeksiyon veya pankreatite bağlı oluşan organ yetmezliği belirler (3). Akut pankreatitin medikal tedavisi sıklıkla hastanede yapılmaktadır. Şiddetli pankreatiti olan veya komorbiditesi olan hastalara erken tanı konulması ve bu hasta gruplarının ileri merkezlere yönlendirilmesi tedavide öncelikli konulardan biridir (4).

Hastaların çoğu yaklaşık 1 hafta içinde düzelen hafif akut pankreatit kliniği ile başvurur ve bu gruptaki akut pankreatitte hastalık kendi kendini sınırlar (3). Fakat hastaların yaklaşık %20'sinde pankreatik/ peripankreatik nekroz ve organ yetmezliği tablosunun görüldüğü orta veya şiddetli akut pankreatit kliniği gelişir ve bu hastalarda mortalite oranı %20-40 arasındadır (5,6).

Akut pankreatitin yönetimi

Polikliniklerde veya acil serviste akut pankreatit tanısı konduktan sonra ilk yapılması gereken hastalığın şiddetini belirlemek ve hastalığın tedavisine bu de-

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Endokrin pankreas yetmezliği AP sonrası görülen bir diğer klinik patolojidir. Başka bir meta analizde ilk AP atağından sonra %23 oranında diyabet görüldüğü bildirilmiştir ve rehberlerde “postpankreatit diyabet” olarak isimlendirilmiştir (55,56). Postpankreatik diyabetli hastalarda görülen mortalite ve hastabede yatış riski normal diyabet hastalarına göre daha yüksek olduğu düşünülmektedir (57). Postpankreatit diyabetin tedavisinde tip 2 diyabet tedavisi ve yaşam tarzı değişiklikleri önerilir (58).

Sonuç

Akut pankreatit ile ilgili son yıllarda yayınlanan geniş meta-analizler ve klinik çalışmalar sonucunda akut pankreatitin tedavisinde multidisipliner değerlendirilmenin, kişiye ve hastalığın şiddetine özel yaklaşımların önemi artmış; minimal invaziv yöntemler daha ağırlıklı rol oynamaya başlamıştır. Akut pankreatitin medikal tedavisindeki önemli değişikliklerin başında uzun süreli bağırsak istirahati yaklaşımının ve profilaktik antibiyotik kullanımının terk edilmesi gelmektedir. Güncel rehberlerde erken dönemde yeterli kaloriye sahip oral beslenme ve sadece gerekli klinik durumlarda antibiyotik kullanımı önerilmektedir. Medikal tedavideki en önemli aşamalar ağrının kesilmesi, uygun sıvı replasmanının ve beslenme desteğinin sağlanmasıdır. Fakat tedavide ve yoğun bakımdaki tüm gelişmelere rağmen, şiddetli akut pankreatit hala yüksek mortalite oranlarına sahiptir.

KAYNAKLAR

1. Janisch NH, Gardner TB. Advances in Management of Acute Pancreatitis. *Gastroenterol Clin North Am.* 2016;45(1):1-8. doi:10.1016/j.gtc.2015.10.004.
2. Banks PA, Bollen TL, Dervenis C, et al. Classification of acute pancreatitis--2012: revision of the Atlanta classification and definitions by international consensus. *Gut.* 2013;62(1):102-111. doi:10.1136/gutjnl-2012-302779.
3. Boxhoorn L, Voermans RP, Bouwense SA, et al. Acute pancreatitis. *Lancet.* 2020;396(10252):726-734. doi:10.1016/S0140-6736(20)31310-6.
4. Working Party of the British Society of Gastroenterology; Association of Surgeons of Great Britain and Ireland; Pancreatic Society of Great Britain and Ireland; Association of Upper GI Surgeons of Great Britain and Ireland. UK guidelines for the management of acute pancreatitis. *Gut.* 2005;54 Suppl 3(Suppl 3):iii1-iii9. doi:10.1136/gut.2004.057026.
5. Schepers NJ, Bakker OJ, Besselink MG, et al. Impact of characteristics of organ failure and infected necrosis on mortality in necrotising pancreatitis. *Gut.* 2019;68(6):1044-1051. doi:10.1136/gutjnl-2017-314657.
6. Gurusamy KS, Belgaumkar AP, Haswell A, et al. Interventions for necrotising pancreatitis. *Cochrane Database Syst Rev.* 2016;4:CD011383. Published 2016 Apr 16. doi:10.1002/14651858.CD011383.pub2.

7. Mandalia A, Wamsteker EJ, DiMagno MJ. Recent advances in understanding and managing acute pancreatitis. *F1000Res*. 2018;7:F1000 Faculty Rev-959. Published 2018 Jun 28. doi:10.12688/f1000research.14244.2.
8. Hines OJ, Pandol SJ. Management of severe acute pancreatitis. *BMJ*. 2019;367:l6227. Published 2019 Dec 2. doi:10.1136/bmj.l6227.
9. WHO. WHO's cancer pain ladder for adults. 2013. <https://www.who.int/cancer/palliative/painladder/en/> (accessed March 20, 2020).
10. ŞIWARTZ
11. Meng W, Yuan J, Zhang C, et al. Parenteral analgesics for pain relief in acute pancreatitis: a systematic review. *Pancreatology* 2013; 13: 201–06.
12. Lee PJ, Papachristou GI. New insights into acute pancreatitis. *Nat Rev Gastroenterol Hepatol*. 2019;16(8):479-496. doi:10.1038/s41575-019-0158-2.
13. van Dijk SM, Hallensleben ND, van Santvoort HC, et al. Acute pancreatitis: recent advances through randomised trials. *Gut*. 2017;66(11):2024-2032. doi:10.1136/gutjnl-2016-313595.
14. Jabaudon M, Belhadj-Tahar N, Rimmelé T, et al. Thoracic epidural analgesia and mortality in acute pancreatitis: a multicenter propensity analysis. *Crit Care Med* 2018; 46: e198–205.
15. Gardner TB, Vege SS, Pearson RK, et al. Fluid resuscitation in acute pancreatitis. *Clin Gastroenterol Hepatol*. 2008;6(10):1070-1076. doi:10.1016/j.cgh.2008.05.005.
16. Haydock MD, Mittal A, Wilms HR, et al. Fluid therapy in acute pancreatitis: anybody's guess. *Ann Surg*. 2013;257(2):182-188. doi:10.1097/SLA.0b013e31827773ff.
17. Wu BU, Hwang JQ, Gardner TH, et al. Lactated Ringer's solution reduces systemic inflammation compared with saline in patients with acute pancreatitis. *Clin Gastroenterol Hepatol*. 2011;9(8):710-717.e1. doi:10.1016/j.cgh.2011.04.026.
18. Hoque R, Farooq A, Ghani A, et al. Lactate reduces liver and pancreatic injury in Toll-like receptor- and inflammasome-mediated inflammation via GPR81-mediated suppression of innate immunity. *Gastroenterology*. 2014;146(7):1763-1774.
19. Khatua B, El-Kurdi B, Singh VP. Obesity and pancreatitis. *Curr Opin Gastroenterol*. 2017;33(5):374-382. doi:10.1097/MOG.0000000000000386.
20. de-Madaria E, Herrera-Marante I, González-Camacho V, et al. Fluid resuscitation with lactated Ringer's solution vs normal saline in acute pancreatitis: A triple-blind, randomized, controlled trial. *United European Gastroenterol J*. 2018;6(1):63-72. doi:10.1177/2050640617707864.
21. van Brunschot S, Schut AJ, Bouwense SA, et al. Abdominal compartment syndrome in acute pancreatitis: a systematic review. *Pancreas*. 2014;43(5):665-674. doi:10.1097/MPA.0000000000000108.
22. Ahmed Ali U, Issa Y, Hagenars JC, et al. Risk of Recurrent Pancreatitis and Progression to Chronic Pancreatitis After a First Episode of Acute Pancreatitis. *Clin Gastroenterol Hepatol*. 2016;14(5):738-746. doi:10.1016/j.cgh.2015.12.040.
23. Javed MA, Wen L, Awais M, et al. TRO40303 Ameliorates Alcohol-Induced Pancreatitis Through Reduction of Fatty Acid Ethyl Ester-Induced Mitochondrial Injury and Necrotic Cell Death. *Pancreas*. 2018;47(1):18-24. doi:10.1097/MPA.0000000000000953.
24. Wadhwa V, Patwardhan S, Garg SK, et al. Health Care Utilization and Costs Associated With Acute Pancreatitis. *Pancreas*. 2017;46(3):410-415. doi:10.1097/MPA.0000000000000755.

25. Janisch NH, Gardner TB. Advances in Management of Acute Pancreatitis. *Gastroenterol Clin North Am.* 2016;45(1):1-8. doi:10.1016/j.gtc.2015.10.004.
26. Al-Omran M, Albalawi ZH, Tashkandi MF, et al. Enteral versus parenteral nutrition for acute pancreatitis. *Cochrane Database Syst Rev.* 2010;2010(1):CD002837. Published 2010 Jan 20. doi:10.1002/14651858.CD002837.pub2.
27. Capurso G, Zerboni G, Signoretti M, et al. Role of the gut barrier in acute pancreatitis. *J Clin Gastroenterol.* 2012;46 Suppl:S46-S51. doi:10.1097/MCG.0b013e3182652096
28. Lariño-Noia J, Lindkvist B, Iglesias-García J, et al. Early and/or immediately full caloric diet versus standard refeeding in mild acute pancreatitis: a randomized open-label trial. *Pancreatology.* 2014;14(3):167-173. doi:10.1016/j.pan.2014.02.008.
29. Bakker OJ, van Brunschot S, van Santvoort HC, et al. Early versus on-demand nasoenteric tube feeding in acute pancreatitis. *N Engl J Med.* 2014;371(21):1983-1993. doi:10.1056/NEJMoa1404393.
30. Singh N, Sharma B, Sharma M, et al. Evaluation of early enteral feeding through nasogastric and nasojejunal tube in severe acute pancreatitis: a noninferiority randomized controlled trial. *Pancreas.* 2012;41(1):153-159. doi:10.1097/MPA.0b013e318221c4a8.
31. Petrov, M. S. Correia, M. I. T. D. & Windsor, J. A. Nasogastric tube feeding in predicted severe acute pancreatitis. A systematic review of the literature to determine safety and tolerance. *JOP* 9, 440–448 (2008).
32. Petrov MS, Loveday BP, Pylypchuk RD, et al. Systematic review and meta-analysis of enteral nutrition formulations in acute pancreatitis. *Br J Surg.* 2009;96(11):1243-1252. doi:10.1002/bjs.6862.
33. Oláh A, Belágyi T, Póto L, et al. Synbiotic control of inflammation and infection in severe acute pancreatitis: a prospective, randomized, double blind study. *Hepatogastroenterology.* 2007;54(74):590-594.
34. Besselink MG, van Santvoort HC, Buskens E, et al. Probiotic prophylaxis in predicted severe acute pancreatitis: a randomised, double-blind, placebo-controlled trial [published correction appears in *Lancet.*2008 Apr 12;371(9620):1246]. *Lancet.* 2008;371(9613):651-659. doi:10.1016/S0140-6736(08)60207-X.
- 35 Working Group IAP/APA acute pancreatitis guidelines. IAP/APA evidence-based guidelines for the management of acute pancreatitis. *Pancreatology* 2013; 13: e1–15.
36. Kandemir A, Coşkun A, Yavaşoğlu İ, et al. Therapeutic plasma exchange for hypertriglyceridemia induced acute pancreatitis: the 33 cases experience from a tertiary reference center in Turkey. *Turk J Gastroenterol.* 2018;29(6):676-683. doi:10.5152/tjg.2018.17627.
37. Lim CL, Lee W, Liew YX, et al. Role of antibiotic prophylaxis in necrotizing pancreatitis: a meta-analysis. *J Gastrointest Surg.* 2015;19(3):480-491. doi:10.1007/s11605-014-2662-6.
38. Wittau M, Mayer B, Scheele J, et al. Systematic review and meta-analysis of antibiotic prophylaxis in severe acute pancreatitis. *Scand J Gastroenterol.* 2011;46(3):261-270. doi:10.3109/00365521.2010.531486.
39. Lee HS, Lee SK, Park DH, et al. Emergence of multidrug resistant infection in patients with severe acute pancreatitis. *Pancreatology.* 2014;14(6):450-453. doi:10.1016/j.pan.2014.10.003.
40. Baron TH, DiMaio CJ, Wang AY, et al. American Gastroenterological Association Clinical Practice Update: Management of Pancreatic Necrosis. *Gastroenterology.* 2020;158(1):67-75.e1. doi:10.1053/j.gastro.2019.07.064.

41. Tenner S, Baillie J, DeWitt J, et al.; American College of Gastroenterology. American College of Gastroenterology guideline: management of acute pancreatitis [published correction appears in *Am J Gastroenterol*. 2014 Feb;109(2):302]. *Am J Gastroenterol*. 2013;108(9):1400-1416. doi:10.1038/ajg.2013.218.
42. Crockett SD, Wani S, Gardner TB, et al.; American Gastroenterological Association Institute Clinical Guidelines Committee. American Gastroenterological Association Institute Guideline on Initial Management of Acute Pancreatitis. *Gastroenterology*. 2018;154(4):1096-1101. doi:10.1053/j.gastro.2018.01.032.
43. Vege SS, DiMagno MJ, Forsmark CE, et al. Initial Medical Treatment of Acute Pancreatitis: American Gastroenterological Association Institute Technical Review. *Gastroenterology*. 2018;154(4):1103-1139. doi:10.1053/j.gastro.2018.01.031.
44. Lee HS, Chung MJ, Park JY, et al. Urgent endoscopic retrograde cholangiopancreatography is not superior to early ERCP in acute biliary pancreatitis with biliary obstruction without cholangitis. *PLoS One*. 2018;13(2):e0190835. Published 2018 Feb 5. doi:10.1371/journal.pone.0190835
45. Mandalia A, Wamsteker EJ, DiMagno MJ. Recent advances in understanding and managing acute pancreatitis. *F1000Res*. 2018;7:F1000 Faculty Rev-959. Published 2018 Jun 28. doi:10.12688/f1000research.14244.2
46. ASGE Standards of Practice Committee, Muthusamy VR, Chandrasekhara V, et al. The role of endoscopy in the diagnosis and treatment of inflammatory pancreatic fluid collections. *Gastrointest Endosc*. 2016;83(3):481-488. doi:10.1016/j.gie.2015.11.027
47. Banks PA, Freeman ML; Practice Parameters Committee of the American College of Gastroenterology. Practice guidelines in acute pancreatitis. *Am J Gastroenterol*. 2006;101(10):2379-2400. doi:10.1111/j.1572-0241.2006.00856.x
48. Villatoro E, Bassi C, Larvin M. Antibiotic therapy for prophylaxis against infection of pancreatic necrosis in acute pancreatitis. *Cochrane Database Syst Rev*. 2006;(4):CD002941. Published 2006 Oct 18. doi:10.1002/14651858.CD002941.pub2
49. Windsor JA. Infected pancreatic necrosis: drain first, but do it better. *HPB (Oxford)*. 2011;13(6):367-368. doi:10.1111/j.1477-2574.2011.00313.x
50. Freeman ML, Werner J, van Santvoort HC, et al. Interventions for necrotizing pancreatitis: summary of a multidisciplinary consensus conference. *Pancreas*. 2012;41(8):1176-1194. doi:10.1097/MPA.0b013e318269c660
51. Besselink MG, Verwer TJ, Schoenmaeckers EJ, et al. Timing of surgical intervention in necrotizing pancreatitis. *Arch Surg*. 2007;142(12):1194-1201. doi:10.1001/archsurg.142.12.1194.
52. Bakker OJ, van Santvoort HC, van Brunschot S, et al. Endoscopic transgastric vs surgical necrosectomy for infected necrotizing pancreatitis: a randomized trial. *JAMA*. 2012;307(10):1053-1061. doi:10.1001/jama.2012.276
53. Nealon WH, Walser E. Main pancreatic ductal anatomy can direct choice of modality for treating pancreatic pseudocysts (surgery versus percutaneous drainage). *Ann Surg*. 2002;235(6):751-758. doi:10.1097/00000658-200206000-00001
54. Huang W, de la Iglesia-García D, Baston-Rey I, et al. Exocrine Pancreatic Insufficiency Following Acute Pancreatitis: Systematic Review and Meta-Analysis. *Dig Dis Sci*. 2019;64(7):1985-2005. doi:10.1007/s10620-019-05568-9

55. Das SL, Singh PP, Phillips AR, et al. Newly diagnosed diabetes mellitus after acute pancreatitis: a systematic review and meta-analysis. *Gut*. 2014;63(5):818-831. doi:10.1136/gutjnl-2013-305062
56. American Diabetes Association. Diagnosis and classification of diabetes mellitus. *Diabetes Care*. 2014;37 Suppl 1:S81-S90. doi:10.2337/dc14-S081
57. Cho J, Scragg R, Petrov MS. Risk of Mortality and Hospitalization After Post-Pancreatitis Diabetes Mellitus vs Type 2 Diabetes Mellitus: A Population-Based Matched Cohort Study. *Am J Gastroenterol*. 2019;114(5):804-812. doi:10.14309/ajg.0000000000000225
58. American Diabetes Association. 4. Comprehensive Medical Evaluation and Assessment of Comorbidities: *Standards of Medical Care in Diabetes-2019*. *Diabetes Care*. 2019;42(Suppl 1):S34-S45. doi:10.2337/dc19-S004