

GERİATRİ VE KRONİK PANKREATİT

Ali BİLGİN¹
Yavuz ÇAĞIR²

GİRİŞ

Kronik pankreatit, pankreasın fonksiyonel bozukluklara ve/veya morfolojik değişikliklere yol açabilen geri dönüşümsüz, progresif, fibroinflatuvar bir hastalıktır (1). Kronik pankreatit, herhangi bir nedene bağlı tekrarlayan akut pankreatit ataklarından kaynaklanır. Pankreasın devam eden inflamatuvar lezyonları ile progresif destruksiyon ve fibrozisi sonucu oluşan tablodur. Ekzokrin pankreatik doku ve fonksiyonu erken dönemde kaybolur, takiben endokrin parankim ve fonksiyonu kaybolur. İnflamasyon ve fibrozisin yıllarca devam etmesiyle pankreatik yetmezlik gelişir; sonuçta malabsorbsiyon, steatore ve diyabet kliniğine neden olur. Karın ağrısı bu sürece eşlik etmektedir. Kronik pankreatit, hem başlangıç hem de hastalığın ilerlemesi için çeşitli risk faktörleri, değişken klinik ve görüntüleme özellikleri ve komplikasyonları olan çeşitli etyolojilere sahiptir (2). Pek çok hastada hastalık, kesin geçiş noktaları olmamakla beraber akut akuttan akuta, akut nükseden kronik pankreatite geçebilir, yani genel olarak akut pankreatit kronik pankreatitin başlangıcı olarak kabul edilmektedir. Sürekli artan yaşam süresi ve azalan doğum oranı nedeniyle, yaşlı bireyler nüfusun giderek daha büyük

bir bölümünü oluşturmaktadır. Hekimler geriatric yaş grubundaki hastalarda kronik pankreatit yönetimi ile daha sık karşılaşmaktadır.

EPİDEMİYOLOJİ

Kronik pankreatit prevalansında etyolojiye göre bölgesel farklılıklar vardır. Alkole bağlı pankreatit, diğer Asya ülkeleriyle karşılaştırıldığında Japonya ve Batıda daha yaygın görülmektedir. Tropikal ülkelerde endemik olan bir kronik pankreatit formunun prevalansında büyük farklılıklar olabilmektedir (3). Kronik pankreatit insidansı 5-12/100000 arasında, prevalansı 17-42/100000 civarındadır. Alkol tüketiminin yoğun olduğu toplumlarda insidans 100.000'de 3-9, prevalans ise 100.000'de 26,4-28,5 olduğu gösterilmiştir. Prevalans ve insidansın ülkeler arasında değişiklik gösterebileceği göz ardı edilmemelidir (toplumun alkol tüketimi ve tropikal bölgelerde yaşama gibi). Tek başına alkol ve tüm etyolojik nedenler bir arada değerlendirildiğinde bile, insidansın zirveye çıktığı dönem 4.- 5. dekatlardır. 85 yaş altı tüm yaş gruplarında; erkeklerde daha sık (E/K: 3.5/1) olduğu görülür (4-7). ABD'de pankreatit, 65 yaş üstü hastalar için; 2004 yılında 72.000 hastaneden taburcu edilen hasta ve 101.000 ayaktan

¹ Uzm. Dr., Gaziantep Dr. Ersin Arslan Eğitim ve Araştırma Hastanesi, Gastroenteroloji Kliniği, dralibilgen@hotmail.com, ORCID iD: 0000-0002-5686-3599

² Uzm. Dr., Ankara Bilkent Şehir Hastanesi, Gastroenteroloji Kliniği, yvzcgir@hotmail.com, ORCID iD: 0000-0002-5676-9914

rik hastalarda bakteriyel aşırı çoğalma steatoreyi komplike hale getirebilir ve ona özgün tedavi gerektirebilir. Emilim için lipaza ihtiyaç duymayan orta zincirli trigliseritlere, pankreatik steatore tedavisinde nadiren ihtiyaç duyulur (44). Özellikle geriatrik popülasyonda daha sık görülen Tip 1 OİP tedavisinde steroid temel tedavidir. Steroid kullanımında veya steroid kesilmesinin ardından nüks gösteren hastalarda immünsüpresyon (azatiyoprin, mikofenolat, siklofosamid, vb.) gerekebilir (69). Kronik pankreatitte meydana gelen pankreatojenik diyabette beta hücreleriyle birlikte alfa ve pankreatik polipeptit salgılayan hücrelerin de hasar görmesi sebebiyle, özellikle de geriatrik hastalarda insülin kullanımı konusunda hipoglisemi açısından dikkatli olmak gerekir.

KAYNAKLAR

1. Soytürk, M., et al., *Turkish Gastroenterology Association, Pancreas Study Group, Chronic Pancreatitis Committee Consensus Report*. The Turkish Journal of Gastroenterology, 2020. **31**(Suppl 1): p. S1.
2. Whitcomb, D.C., et al., *Chronic pancreatitis: an international draft consensus proposal for a new mechanistic definition*. Pancreatology, 2016. **16**(2): p. 218-224.
3. Garg, P. and D. Narayana, *Changing phenotype and disease behaviour of chronic pancreatitis in India: evidence for gene-environment interactions*. Global Health, Epidemiology and Genomics, 2016. **1**: p. e17.
4. Welinsky, S. and A.L. Lucas, *Familial pancreatic cancer and the future of directed screening*. Gut and Liver, 2017. **11**(6): p. 761.
5. Bracci, P.M., *Obesity and pancreatic cancer: overview of epidemiologic evidence and biologic mechanisms*. Molecular carcinogenesis, 2012. **51**(1): p. 53-63.
6. Ludwig, E., et al., *Feasibility and yield of screening in relatives from familial pancreatic cancer families*. The American journal of gastroenterology, 2011. **106**(5): p. 946.
7. Clinton, S.K., E.L. Giovannucci, and S.D. Hursting, *The world cancer research fund/American institute for cancer research third expert report on diet, nutrition, physical activity, and cancer: impact and future directions*. The Journal of nutrition, 2020. **150**(4): p. 663-671.
8. Everhart, J.E. and C.E. Ruhl, *Burden of digestive diseases in the United States Part III: Liver, biliary tract, and pancreas*. Gastroenterology, 2009. **136**(4): p. 1134-1144.
9. Lin, Y., et al., *Nationwide epidemiological survey of chronic pancreatitis in Japan*. Journal of gastroenterology, 2000. **35**: p. 136-141.
10. Lévy, P., et al., *Estimation of the prevalence and incidence of chronic pancreatitis and its complications: A prospective survey in adults attending gastroenterologists in France*. Gastroenterologie clinique et biologique, 2006. **30**(6-7): p. 838-844.
11. Setiawan, V.W., et al., *Uniting epidemiology and experimental disease models for alcohol-related pancreatic disease*. Alcohol research: current reviews, 2017. **38**(2): p. 173.
12. Lugea, A., et al., *The combination of alcohol and cigarette smoke induces endoplasmic reticulum stress and cell death in pancreatic acinar cells*. Gastroenterology, 2017. **153**(6): p. 1674-1686.
13. Lerch, M.M. and F.S. Gorelick, *Models of acute and chronic pancreatitis*. Gastroenterology, 2013. **144**(6): p. 1180-1193.
14. Nøjgaard, C., et al., *Progression from acute to chronic pancreatitis: prognostic factors, mortality, and natural course*. Pancreas, 2011. **40**(8): p. 1195-1200.
15. Wilcox, C.M., et al., *Racial differences in the clinical profile, causes, and outcome of chronic pancreatitis*. The American journal of gastroenterology, 2016. **111**(10): p. 1488.
16. Machicado, J.D. and D. Yadav, *Epidemiology of recurrent acute and chronic pancreatitis: similarities and differences*. Digestive diseases and sciences, 2017. **62**: p. 1683-1691.
17. Gloor, B., et al., *Pancreatic disease in the elderly*. Best practice & research clinical Gastroenterology, 2002. **16**(1): p. 159-170.
18. Pitchumoni, C., et al., *Pancreatic Fibrosis in Chronic Alcoholics and Nonalcoholics without Clinical Pancreatitis*. American Journal of Gastroenterology (Springer Nature), 1984. **79**(5).
19. Shimizu, M., et al., *Interstitial fibrosis in the pancreas*. American journal of clinical pathology, 1989. **91**(5): p. 531-534.
20. Schmitz-Moormann, P., et al., *Comparative radiological and morphological study of human pancreas. Pancreatitis like changes in postmortem ductograms and their morphological pattern. Possible implication for ERCP*. Gut, 1985. **26**(4): p. 406-414.
21. Yang, A.L., et al., *Epidemiology of alcohol-related liver and pancreatic disease in the United States*. Archives of internal medicine, 2008. **168**(6): p. 649-656.
22. Ito, K., et al., *Efficacy of combined endoscopic lithotomy and extracorporeal shock wave lithotripsy, and additional electrohydraulic lithotripsy using the SpyGlass direct visualization system or X-ray guided EHL as needed, for pancreatic lithiasis*. BioMed Research International, 2014. **2014**.
23. Ammann, R. and H. Sulser, "Senile" chronic pancreatitis: a new nosologic entity? Studies in 38 cases. Indications of a vascular origin and relationship to the primarily painless chronic pancreatitis. Schweizerische Medizinische Wochenschrift, 1976. **106**(13): p. 429-437.
24. Etamad, B. and D.C. Whitcomb, *Chronic pancreatitis: diagnosis, classification, and new genetic developments*. Gastroenterology, 2001. **120**(3): p. 682-707.
25. Forsmark, C.E., *Medical Therapy for Chronic Pancreatitis: Antioxidants*. The Pancreas: An Integrated Textbook of Basic Science, Medicine, and Surgery, 2018: p. 435-438.

26. Garg, P.K. and R.K. Tandon, *Survey on chronic pancreatitis in the Asia-Pacific region*. Journal of gastroenterology and hepatology, 2004. **19**(9): p. 998-1004.
27. Hegyi, E. and M. Sahin-Tóth, *Genetic risk in chronic pancreatitis: the trypsin-dependent pathway*. Digestive diseases and sciences, 2017. **62**(7): p. 1692-1701.
28. Majumder, S. and S.T. Chari, *Chronic pancreatitis*. The Lancet, 2016. **387**(10031): p. 1957-1966.
29. Layer, P., et al., *The different courses of early-and late-onset idiopathic and alcoholic chronic pancreatitis*. Gastroenterology, 1994. **107**(5): p. 1481-1487.
30. Machicado, J.D., et al., *Quality of life in chronic pancreatitis is determined by constant pain, disability/unemployment, current smoking and associated co-morbidities*. The American journal of gastroenterology, 2017. **112**(4): p. 633.
31. Wilcox, C.M., et al., *Chronic pancreatitis pain pattern and severity are independent of abdominal imaging findings*. Clinical Gastroenterology and Hepatology, 2015. **13**(3): p. 552-560.
32. Drewes, A.M., et al., *Guidelines for the understanding and management of pain in chronic pancreatitis*. Pancreatology, 2017. **17**(5): p. 720-731.
33. Ross, S.O. and C.E. Forsmark, *Pancreatic and biliary disorders in the elderly*. Gastroenterology Clinics, 2001. **30**(2): p. 531-545.
34. DiMagno, E.P., V.L. Go, and W. Summerskill, *Relations between pancreatic enzyme outputs and malabsorption in severe pancreatic insufficiency*. New England Journal of Medicine, 1973. **288**(16): p. 813-815.
35. Olesen, S.S., et al., *Sarcopenia associates with increased hospitalization rates and reduced survival in patients with chronic pancreatitis*. Pancreatology, 2019. **19**(2): p. 245-251.
36. Hao, L., et al., *The different course of alcoholic and idiopathic chronic pancreatitis: a long-term study of 2,037 patients*. PloS one, 2018. **13**(6): p. e0198365.
37. Lankisch, P.G., *Natural course of chronic pancreatitis*. Pancreatology, 2001. **1**(1): p. 3-14.
38. Anderson, M.A., et al., *Mechanism, assessment and management of pain in chronic pancreatitis: Recommendations of a multidisciplinary study group*. Pancreatology, 2016. **16**(1): p. 83-94.
39. Olesen, S.S., et al., *Towards a neurobiological understanding of pain in chronic pancreatitis: mechanisms and implications for treatment*. Pain reports, 2017. **2**(6).
40. Min, M., et al., *Exocrine pancreatic insufficiency and malnutrition in chronic pancreatitis: identification, treatment, and consequences*. Pancreas, 2018. **47**(8): p. 1015.
41. Beger, H.G. and B. Mayer, *Early postoperative and late metabolic morbidity after pancreatic resections: An old and new challenge for surgeons-A review*. The American Journal of Surgery, 2018. **216**(1): p. 131-134.
42. Wu, B.U., et al., *Influence of ambulatory triglyceride levels on risk of recurrence in patients with hypertriglyceridemic pancreatitis*. Digestive diseases and sciences, 2019. **64**: p. 890-897.
43. de Pretis, N., A. Amodio, and L. Frulloni, *Hypertriglyceridemic pancreatitis: epidemiology, pathophysiology and clinical management*. United European gastroenterology journal, 2018. **6**(5): p. 649-655.
44. Chowdhury, R. and C. Forsmark, *Pancreatic function testing*. Alimentary pharmacology & therapeutics, 2003. **17**(6): p. 733-750.
45. Herzig, K.-H., et al., *Fecal pancreatic elastase-1 levels in older individuals without known gastrointestinal diseases or diabetes mellitus*. BMC geriatrics, 2011. **11**(1): p. 1-5.
46. Hart, P.A., Y. Zen, and S.T. Chari, *Recent advances in autoimmune pancreatitis*. Gastroenterology, 2015. **149**(1): p. 39-51.
47. Sah, R.P., et al., *Differences in clinical profile and relapse rate of type 1 versus type 2 autoimmune pancreatitis*. Gastroenterology, 2010. **139**(1): p. 140-148.
48. Issa, Y., et al., *Diagnostic performance of imaging modalities in chronic pancreatitis: a systematic review and meta-analysis*. European radiology, 2017. **27**: p. 3820-3844.
49. Gleeson, F.C. and M. Topazian, *Endoscopic retrograde cholangiopancreatography and endoscopic ultrasound for diagnosis of chronic pancreatitis*. Current gastroenterology reports, 2007. **9**(2): p. 123-129.
50. Varadarajulu, S., et al., *Histopathologic correlates of non-calcific chronic pancreatitis by EUS: a prospective tissue characterization study*. Gastrointestinal endoscopy, 2007. **66**(3): p. 501-509.
51. Rajan, E., et al., *Age-related changes in the pancreas identified by EUS: a prospective evaluation*. Gastrointestinal endoscopy, 2005. **61**(3): p. 401-406.
52. Trikudanathan, G., et al., *Diagnostic performance of contrast-enhanced MRI with secretin-stimulated MRCP for non-calcific chronic pancreatitis: a comparison with histopathology*. Official journal of the American College of Gastroenterology| ACG, 2015. **110**(11): p. 1598-1606.
53. Hastier, P., et al., *A prospective study of pancreatic disease in patients with alcoholic cirrhosis: comparative diagnostic value of ERCP and EUS and long-term significance of isolated parenchymal abnormalities*. Gastrointestinal endoscopy, 1999. **49**(6): p. 705-709.
54. Conwell, D.L., et al., *American Pancreatic Association Practice Guidelines in Chronic Pancreatitis: evidence-based report on diagnostic guidelines*. Pancreas, 2014. **43**(8): p. 1143.
55. Löhr, J.M., et al., *United European Gastroenterology evidence-based guidelines for the diagnosis and therapy of chronic pancreatitis (HaPanEU)*. United European gastroenterology journal, 2017. **5**(2): p. 153-199.
56. Yadav, D., et al., *PROspective evaluation of chronic pancreatitis for EpidEmiologic and translational StuDies (PROCEED): Rationale and study design from the consortium for the study of chronic pancreatitis, diabetes, and pancreatic cancer*. Pancreas, 2018. **47**(10): p. 1229.
57. Hart, P.A., et al., *Type 3c (pancreatogenic) diabetes mellitus secondary to chronic pancreatitis and pancreatic cancer*. The lancet Gastroenterology & hepatology, 2016. **1**(3): p. 226-237.
58. Duggan, S.N., et al., *High prevalence of osteoporosis in patients with chronic pancreatitis: a systematic review and meta-analysis*. Clinical Gastroenterology and Hepatology, 2014. **12**(2): p. 219-228.

59. Martínez-Moneo, E., et al., *Deficiency of fat-soluble vitamins in chronic pancreatitis: A systematic review and meta-analysis*. *Pancreatology*, 2016. **16**(6): p. 988-994.
60. Bellin, M.D., et al., *Patient and disease characteristics associated with the presence of diabetes mellitus in adults with chronic pancreatitis in the United States*. *The American journal of gastroenterology*, 2017. **112**(9): p. 1457.
61. Mangiavillano, B., et al., *Outcome of stenting in biliary and pancreatic benign and malignant diseases: a comprehensive review*. *World Journal of Gastroenterology: WJG*, 2015. **21**(30): p. 9038.
62. Raimondi, S., et al., *Pancreatic cancer in chronic pancreatitis; aetiology, incidence, and early detection*. *Best practice & research Clinical gastroenterology*, 2010. **24**(3): p. 349-358.
63. Whitcomb, D.C., et al., *International consensus statements on early chronic Pancreatitis. Recommendations from the working group for the international consensus guidelines for chronic pancreatitis in collaboration with The International Association of Pancreatology, American Pancreatic Association, Japan Pancreas Society, PancreasFest Working Group and European Pancreatic Club*. *Pancreatology*, 2018. **18**(5): p. 516-527.
64. Strum, W.B. and C.R. Boland, *Advances in acute and chronic pancreatitis*. *World Journal of Gastroenterology*, 2023. **29**(7): p. 1194.
65. Bhardwaj, P., et al., *A randomized controlled trial of antioxidant supplementation for pain relief in patients with chronic pancreatitis*. *Gastroenterology*, 2009. **136**(1): p. 149-159. e2.
66. Slaff, J., et al., *Protease-specific suppression of pancreatic exocrine secretion*. *Gastroenterology*, 1984. **87**(1): p. 44-52.
67. Gress, F., et al., *A prospective randomized comparison of endoscopic ultrasound-and computed tomography-guided celiac plexus block for managing chronic pancreatitis pain*. *The American journal of gastroenterology*, 1999. **94**(4): p. 900-905.
68. Andrews, L., *Endoscopic or surgical intervention for painful obstructive chronic pancreatitis*. *Gastroenterology Nursing*, 2016. **39**(5): p. 401-402.
69. Sugumar, A. and S.T. Chari, *Diagnosis and treatment of autoimmune pancreatitis*. *Current opinion in gastroenterology*, 2010. **26**(5): p. 513-518.