

GERİATRİ VE ASİT

Orhan ÇOŞKUN¹Fatma Betül BOZ²

GİRİŞ

Yaşlanma, bir kişinin yapısal değişiklik veya işlev bozukluğu nedeniyle homeostazi sürdürme yeteneğini yavaş yavaş kaybettiği ve daha sonra dış stres veya hasara karşı savunmasız hale geldiği bir durumdur (1). Karaciğerin morfolojik ve fonksiyonel yaşlanması, azalmış kalp debisi, azalmış hepatosit sayısı, metabolik fonksiyon kaybı ve karaciğerde detoksifikasyon kaybı nedeniyle karaciğerde azalmış karaciğer ağırlığı ve kan akışını içerir (2).

Siroz, kronik ilerleyici karaciğer hastalığının geri dönüşümsüz geç aşamasını temsil eder; hepatik mimarinin bozulması ve rejeneratif nodüllerin oluşumu ile karakterizedir. Majör komplikasyon gelişmemiş sirozlu hastalar kompanse siroz olarak sınıflandırılır (3). Varis kanaması, asit, spontan bakteriyel peritonit, hepatoselüler karsinom (HCC), hepatorenal sendrom veya hepatopulmoner sendrom gibi siroz komplikasyonları geliştiren hastalar dekompanse siroz olarak kabul edilir (3,4).

Asit, peritoneal kavitede anomalik sıvı birikimi olarak tanımlanır. Asit karaciğer sirozunun en sık görülen majör komplikasyonu olup, kompanse siroz tanısından sonraki 10 yıl içinde hastaların

yaklaşık %50'sinde asit gelişecektir (4,5). Asitin spesifik etyolojisinin ortaya konması oldukça önemlidir, bu yolla ancak etkin bir tedavi yaklaşımı sağlanabilir. Dikkatli bir öykü, sistemik muayene ve uygun asit sıvısı örneklemesiyle asit etyolojisinin belirlenmesi mümkündür (5).

ETİYOLOJİ

Asit nedeni %80-85 olguda karaciğer sirozu iken, diğer olgularda non-hepatik nedenler saptanmaktadır (Tablo 1) (6).

Tablo 1. Asit nedenleri

Siroz	%81
Kanser	%10
Kalp yetmezliği	%3
Tüberküloz	%2
Diyaliz	%1
Pankreatik hastalık	%1
Diğer nedenler	%2

Patogenez

Portal hipertansiyon ve splanknik vazodilatasyon, asit gelişimine yol açan temel olaydır. Asit olu-

¹ Doç. Dr., Ankara Bilkent Şehir Hastanesi, Gastroenteroloji Kliniği, drcoskunorhan@gmail.com, ORCID iD: 0000-0002-3124-9517

² Uzm. Dr., Konya Şehir Hastanesi, Gastroenteroloji Kliniği, betuluzuncan@hotmail.com, ORCID iD: 0000-0002-2037-7417

KAYNAKLAR

1. López-Otín C, Blasco MA, Partridge L, et al. The hallmarks of aging. *Cell*. 2013; 153:1194–1217. [PubMed: 23746838]
2. Tajiri K, Shimizu Y. Liver physiology and liver diseases in the elderly. *World J Gastroenterol* 2013; 19: 8459–8467 [PMID: 24379563 DOI: 10.3748/wjg.v19.i46.8459]
3. Ginés P, Quintero E, Arroyo V, et al. Compensated cirrhosis: natural history and prognostic factors. *Hepatology* 1987; 7:122.
4. Runyon BA, AASLD Practice Guidelines Committee. Management of adult patients with ascites due to cirrhosis: an update. *Hepatology* 2009; 49:2087.
5. European Association for the Study of the Liver; European Association for the Study of the Liver. EASL Clinical Practice Guidelines for the management of patients with decompensated cirrhosis. *J Hepatol* 2018; 69: 406–460 [PMID: 29653741 DOI: 10.1016/j.jhep.2018.03.024]
6. Runyon BA. Care of patients with ascites. *N Engl J Med* 1994; 330:337.
7. Ginès P, Fernández-Esparrach G, Arroyo V, Rodés J. Pathogenesis of ascites in cirrhosis. *Semin Liver Dis* 1997; 17:175.
8. Cattau EL Jr, Benjamin SB, Knuff TE, Castell DO. The accuracy of the physical examination in the diagnosis of suspected ascites. *JAMA* 1982; 247:1164.
9. Mercaldi CJ, Lanes SF. Ultrasound guidance decreases complications and improves the cost of care among patients undergoing thoracentesis and paracentesis. *Chest*. 2013;143:532-538
10. Ennis J, Schultz G, Perera P, et al. Ultrasound for detection of ascites and for guidance of the paracentesis procedure: technique and review of the literature. *Int J Clin Med*. 2014;5:1277-1293
11. Runyon BA, Montano AA, Akriviadis EA, et al. The serum-ascites albumin gradient is superior to the exudate-transudate concept in the differential diagnosis of ascites. *Ann Intern Med* 1992; 117:215.
12. The management of ascites in cirrhosis: report on the consensus conference of the International Ascites Club. *Hepatology* 2003; 38:258.
13. Runyon BA, Van Epps DE. Diuresis of cirrhotic ascites increases its opsonic activity and may help prevent spontaneous bacterial peritonitis. *Hepatology* 1986; 6:396.
14. Runyon BA, Antillon MR, McHutchison JG. Diuresis increases ascitic fluid opsonic activity in patients who survive spontaneous bacterial peritonitis. *J Hepatol* 1992; 14:249.
15. Dolz C, Raurich JM, Ibáñez J, et al. Ascites increases the resting energy expenditure in liver cirrhosis. *Gastroenterology* 1991; 100:738.
16. Kamimura K, Sakamaki A, Kamimura H, Setsu T, Yokoo T, Takamura M, Terai S. Considerations of elderly factors to manage the complication of liver cirrhosis in elderly patients. *World J Gastroenterol*. 2019 Apr 21;25(15):1817-1827. doi:10.3748/wjg.v25.i15.1817. PMID: 31057296; PMCID: PMC6478616.
17. Tsien CD, Rabie R, Wong F. Acute kidney injury in decompensated cirrhosis. *Gut* 2013; 62: 131-137 [PMID: 22637695 DOI: 10.1136/gutjnl-201
18. Runyon BA. Refractory ascites. *Semin Liver Dis* 1993; 13:343.
19. Stiehm AJ, Mendler MH, Runyon BA. Detection of diuretic-resistance or diuretic-sensitivity by the spot urine Na/K ratio in 729 specimens from cirrhosis with ascites: approximately 90% accuracy compared to 24-hr urine Na excretion. *Hepatology* 2002; 36:222A
20. Bories P, Garcia Compean D, Michel H, et al. The treatment of refractory ascites by the LeVeen shunt. A multi-centre controlled trial (57 patients). *J Hepatol* 1986; 3:212.
21. Biggins SW, Angeli P, Garcia-Tsao G, et al. Diagnosis, Evaluation, and Management of Ascites, Spontaneous Bacterial Peritonitis and Hepatorenal Syndrome: 2021 Practice Guidance by the American Association for the Study of Liver Diseases. *Hepatology* 2021; 74:1014.
22. Arroyo V, Ginès P, Rimola A, Gaya J. Renal function abnormalities, prostaglandins, and effects of nonsteroidal anti-inflammatory drugs in cirrhosis with ascites. An overview with emphasis on pathogenesis. *Am J Med* 1986; 81:104.
23. Midodrine in patients with cirrhosis and refractory or recurrent ascites: a randomized pilot study. *J Hepatol* 2012; 56:348.
24. Peltekian KM, Wong F, Liu PP, et al. Cardiovascular, renal, and neurohumoral responses to single large-volume paracentesis in patients with cirrhosis and diuretic-resistant ascites. *Am J Gastroenterol* 1997; 92:394.
25. Ascha M, Abuqayyas S, Hanouneh I, Alkukhun L, Sands M, Dweik RA, Tonelli AR. Predictors of mortality after transjugular portosystemic shunt. *World J Hepatol* 2016; 8: 520-529 [PMID: 27099653 DOI: 10.4254/wjh.v8.i11.520]
26. Syed MI, Karsan H, Ferral H, Shaikh A, Waheed U, Akhter T, Gabbard A, Morar K, Tyrrell R. Transjugular intrahepatic porto-systemic shunt in the elderly: Palliation for complications of portal hypertension. *World J Hepatol* 2012; 4: 35-42 [PMID: 22400084 DOI: 10.4254/wjh.v4.i2.35]
27. Sharabi Y, Illan R, Kamari Y, Cohen H, Nadler M, Messerli FH, Grossman E. Diuretic induced hyponatraemia in elderly hypertensive women. *J Hum Hypertens* 2002; 16: 631-635 [PMID: 12214259 DOI: 10.1038/sj.jhh.1001458]
28. Heidemann J, Bartels C, Berssenbrügge C, Schmidt H, Meister T. Hepatorenal syndrome: outcome of response to therapy and predictors of survival. *Gastroenterol Res Pract* 2015; 2015: 457613 [PMID: 25983746 DOI: 10.1155/2015/457613]
29. Cavallin M, Piano S, Romano A, Fasolato S, Frigo AC, Benetti G, Gola E, Morando F, Stanco M, Rosi S, Sticca A, Cillo U, Angeli P. Terlipressin given by continuous intravenous infusion versus intravenous boluses in the treatment of hepatorenal syndrome: A randomized controlled study. *Hepatology* 2016; 63: 983-992 [PMID: 26659927 DOI: 10.1002/hep.28396]

30. 1.Perri GA. Ascites in patients with cirrhosis. Can Fam Physician 2013; 59:1297.
31. Kathpalia P, Bhatia A, Robertazzi S, et al. Indwelling peritoneal catheters in patients with cirrhosis and refractory ascites. Intern Med J 2015; 45:1026.
32. Macken L, Joshi D, Messenger J, et al. Palliative long-term abdominal drains in refractory ascites due to end-stage liver disease: A case series. Palliat Med 2017; 31:671.
33. Macken L, Hashim A, Mason L, Verma S. Permanent indwelling peritoneal catheters for palliation of refractory ascites in end-stage liver disease: A systematic review. Liver Int 2019 nurses.pdf. Accessed July 7, 2018.
34. Rogal SS, Hansen L, Patel A, et al. AASLD Practice Guidance: Palliative care and symptom-based management in decompensated cirrhosis. Hepatology 2022; 76:819.