

Bölüm 14

KARACİĞER NAKLİ SONRASI GELİŞEN BİLİYER KOMPLİKASYONLAR

Bora BARUT¹

GİRİŞ

Starzl ve arkadaşları tarafından 1967 yılında ilk kadavra karaciğer naklinin gerçekleştirilmesinden bu yana karaciğer nakli son dönem karaciğer hastalığının, akut fulminan karaciğer yetmezliğinin, birtakım metabolik karaciğer hastalıklarının ve bazı metastatik ve primer karaciğer tümörlerinin tedavisinde altın standart model haline gelmiştir (1). Diğer yandan kadavra donör havuzunun karaciğer bekleme listesindeki hasta sayısını karşılayamaması, tüm dünyada canlı vericili karaciğer nakli seçeneğini gündeme getirmiş ve 1989 yılında Strong ve arkadaşları tarafından ilk başarılı canlı vericili karaciğer nakli gerçekleştirilmiştir (2). Ülkemizde ise, ilk kadavra ve canlı vericili karaciğer nakilleri, sırasıyla 1988 ve 1990 yıllarında Dr. Haberal ve ekibi tarafından gerçekleştirilmiştir (3,4). Yıllar içerisinde, dünyada ve ülkemizde başarılı karaciğer nakilleri gerçekleştirilmesine ve karaciğer nakli konusunda deneyimli ekipler kurulmuş olmasına rağmen, karaciğer nakli sonrası gelişen biliyer komplikasyonlar halen mortalite ve morbidite nedeni olmaya devam etmektedir.

Postoperatif Cerrahi Komplikasyonlar

Karaciğer nakli sonrası cerrahi komplikasyonlar %5-10 oranında görülmektedir. Ameliyat öncesi hastanın genel durumu, ciddi koagulopati varlığı, geçirilmiş karın ameliyatı gibi durumlar komplikasyon gelişmesi açısından önemli risk faktörlerdir. Postoperatif komplikasyonlar, basit ve ek cerrahi ile düzeltilebilen intraabdominal kanamadan, greft kaybına yol açan ve re-transplantasyon gerektiren durumları kapsayan geniş bir yelpazeyi içermektedir (5). Karaciğer nakli sonrası en sık görülen cerrahi komplikasyon, biliyer sistem ile ilişkili olup safra kaçağı, safra yolu darlığı ve safra anastomoz darlığı şeklinde görülürler (6).

1 Dr. Öğr. Üyesi, İnönü Üniversitesi Turgut Özal Tıp Merkezi Karaciğer Nakil Enstitüsü, borabarut@mynet.com

KAYNAKLAR

1. Akbulut S & Yilmaz S. (2015). Liver transplantation in Turkey: historical review and future perspectives. *Transplantation Reviews*, 29(3),161-167. Doi: 10.1016/j.trre.2014.12.002.
2. Strong RW & et al. (1990). Successful liver transplantation from a living donor to her son. *New England Journal of Medicine*, 322(21),1505-1507.
3. Haberal M & et al. (1992a). Living related and cadaver donor liver transplantation. *Transplantation Proceedings*, 24(5),1967-1969.
4. Haberal M & et al. (1992b). Segmental living liver transplantation in children and adults. *Transplantation Proceedings*, 24(6),2687-2689.
5. Mueller AR, Platz KP & Kremer B (2004). Early postoperative complications following liver transplantation. *Best Practice & Research Clinical Gastroenterology*, 18(5),881-900.
6. Greif F & et al. (1994). The incidence, timing, and management of biliary tract complications after orthotopic liver transplantation. *Annals of Surgery*, 219(1),40-45.
7. Gursimran Kochhar & et al. (2013). Biliary complications following liver transplantation. *World Journal of Gastroenterology*, 19(19),2841-2846. Doi: 10.3748/wjg.v19.i19.2841.
8. Scatton O & et al. (2001). Randomized trial of choledochcholedochostomy with or without a T tube in orthotopic liver transplantation. *Annals of Surgery*, 233(3),432-437.
9. Seehofer D & et al. (20013). Biliary complications after liver transplantation: old problems and new challenges. *American Journal of Transplantation*, 13(2),253-265. Doi: 10.1111/ajt.12034.
10. Zemel G & et al. (1988). The role of sonography and transhepatic cholangiography in the diagnosis of biliary complications after liver transplantation. *American Journal of Roentgenology*, 151(5),943-946.
11. Sherman S & et al. (1995). Biliary tract complications after orthotopic liver transplantation. Endoscopic approach to diagnosis and therapy. *Transplantation*, 60(5),467-470.
12. Kitazono MT & et al. (2007). Magnetic resonance cholangiography of biliary strictures after liver transplantation: a prospective double-blind study. *Journal of Magnetic Resonance Imaging*, 25(6),1168-1173.
13. Sherman S & et al. (1993). Endoscopic management of biliary fistulas complicating liver transplantation and other hepatobiliary operations. *Annals of Surgery*, 218(2),167-175.
14. Londoño MC, Balderramo D & Cárdenas A (2008). Management of biliary complications after orthotopic liver transplantation: the role of endoscopy. *World Journal of Gastroenterology*, 14(4),493-497.
15. Pascher A, Neuhaus P. (2005). Bile duct complications after liver transplantation. *Transplantation International*, 18(6),627-642.
16. Johnston TD & et al. (2000). Nonoperative management of bile leaks following liver transplantation. *Clinical Transplantation*, 14(4 Pt 2),365-369.
17. Klein AS & et al. (1991). Reduction of morbidity and mortality from biliary complications after liver transplantation. *Hepatology*, 14(5),818-823.
18. Kling K, Lau H & Colombani P. (2004). Biliary complications of living related pediatric liver transplant patients. *Pediatric Transplantation*, 8(2),178-184.

19. Sharma S, Gurakar A & Jabbour N. (2008). Biliary strictures following liver transplantation: past, present and preventive strategies. *Liver Transplantation*, 14(6),759-769. Doi: 10.1002/lt.21509.
20. Thethy S & et al. (2004). Management of biliary tract complications after orthotopic liver transplantation. *Clinical Transplantation*, 18(6),647-653.
21. Verdonk RC & et al. (2006). Anastomotic biliary strictures after liver transplantation: causes and consequences. *Liver Transplantation*. 12(5),726-35.
22. Park JS & et al. (2003). Efficacy of endoscopic and percutaneous treatments for biliary complications after cadaveric and living donor liver transplantation. *Gastrointestinal Endoscopy*. 57(1),78-85.
23. Rerknimitr R et al. (2002). Biliary tract complications after orthotopic liver transplantation with choledochocholedochostomy anastomosis: endoscopic findings and results of therapy. *Gastrointestinal Endoscopy*, 55(2),224-231.
24. Koneru B, Sterling MJ & Bahramipour PF. (2006). Bile duct strictures after liver transplantation: a changing landscape of the Achilles' heel. *Liver Transplantation*, 12(5),702-704.
25. Sundaram V & et al. (2011). Posttransplant biliary complications in the pre- and post-model for end-stage liver disease era. *Liver Transplantation*, 17(4),428-435. doi: 10.1002/lt.22251.
26. Baccarani U et al. (2009). Steatosis of the graft is a risk factor for posttransplantation biliary complications. *Transplantation Proceedings*, 41(4),1313-1315. doi: 10.1016/j.transproceed.2009.03.084.
27. Thuluvath PJ, Atassi T & Lee J. (2003). An endoscopic approach to biliary complications following orthotopic liver transplantation. *Liver International*, 23(3),156-162.
28. Thuluvath PJ & et al. (2005). Biliary complications after liver transplantation: the role of endoscopy. *Endoscopy*, 37(9),857-863.
29. Tsujino T & et al. (2006). Endoscopic management of biliary complications after adult living donor liver transplantation. *The American Journal of Gastroenterology*, 101(10),2230-2236.
30. Starzl TE & et al. (1977). Biliary complications after liver transplantation: with special reference to the biliary cast syndrome and techniques of secondary duct repair. *Surgery*, 81(2),212-221.
31. Farouk M & et al. (1991). Bile compositional changes and cholesterol stone formation following orthotopic liver transplantation. *Transplantation*, 52(4),727-730.
32. Pfau PR & et al. (2000). Endoscopic management of postoperative biliary complications in orthotopic liver transplantation. *Gastrointestinal Endoscopy*, 52(1),55-63.
33. Manzarbeitia C & et al. (1993). Management of hemobilia after liver biopsy in liver transplant recipients. *Transplantation*, 56(6),1545-1547.
34. Tung BY & Kimmey MB. (1999). Biliary complications of orthotopic liver transplantation. *Digestive Diseases*, 17(3),133-144.
35. Sawyer RG & Punch JD. (1998). Incidence and management of biliary complications after 291 liver transplants following the introduction of transcystic stenting. *Transplantation*, 66(9),1201-1207.