

KARACİĞER NAKLİNDE GİRİŞİMSEL RADYOLOJİNİN YERİ

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Günümüzde karaciğer nakli, karaciğer yetmezliğinde ve seçilmiş erken evre hepatosellüler kanserli hastalarda kesin tedavi yöntemi haline gelmiştir. Cerrahi tekniklerin, immunsupresif terapilerin, radyolojik görüntüleme yöntemlerinin ve girişimsel tedavi tekniklerinin ilerlemesi ile organ ve hasta sağkalımı artmıştır. Türkiye’de 1975-2020 yılları arasında toplam 15.737 karaciğer nakli gerçekleştirilmiştir (1).

Karaciğer naklinin başlıca postoperatif komplikasyonları arasında vasküler komplikasyonlar, biliyer sisteme ait komplikasyonlar, sıvı koleksiyonları, greft rejeksiyonu, enfeksiyon, postoperatif kanama sayılabilir (2). Vasküler komplikasyonlar hepatik arter, portal ven, hepatik ven ve ya inferior vena kava kaynaklı olabilir. Arteriyel komplikasyonlar venöz komplikasyonlardan daha yaygındır ve hepatik arter trombozu, hepatik arter stenozu, hepatik arteriyel psodoanevrizma, arterioportal fistül ve hepatik arteriyel kanamadır. Portal ven trombozu, portal ven stenozu, hepatik venöz çıkış obstrüksiyonu karaciğer naklinin venöz komplikasyonlarının başlıcalarıdır. Biliyer sisteme ait komplikasyonlar biliyer darlıklar, biliyer kaçak, safra taşı, oddi sfinkter disfonksiyonudur (2,3).

Karaciğer nakil komplikasyonlarının erken teşhis ve tedavisi greft ve hasta sağkalımı üzerinde kritik öneme sahiptir. Komplikasyonların teşhisinde radyasyon içermemesi, invaziv olmaması, kolay ulaşılabilir ve yatak başı uygulanabilmesi sebepleri ile ultrasonografi ilk tercihtir (4,5). Karaciğer nakil komplikasyonlarının tanısında bilgisayarlı tomografinin ve manyetik rezonans görüntülemenin duyarlılığı ve özgüllüğü ultrasonografiden daha yüksektir. Vasküler komplikasyonların tanısında altın standart görüntüleme yöntemi dijital substraksiyon anjiyografi tetkikidir (6). Dijital substraksiyon anjiyografi minimal invaziv olması, komplikasyonların yönetiminde cerrahiye kıyasla daha az morbiditeye yol açması sebebi ile komplikasyonların tedavisinde önemli bir seçenektir (7). Girişimsel radyoloji karaciğer nakil komplikasyonlarının tedavisinde önemli bir role sahiptir. Vasküler trombozlara yönelik trombektomi, intraarteriyel-intravenöz tromboliz uygulamaları, stenotik vasküler ve ya biliyer sisteme yönelik balon dilatasyon tedavileri, stent tedavileri, post operatif koleksiyonlara yönelik perkütan drenaj tedavileri karaciğer nakli komplikasyonlarının girişimsel radyolojik tedavilerindedir.

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gereken görüntüleme yöntemi ultrasonografi, duyarlılığı ve özgüllüğü en yüksek invaziv olmayan görüntüleme yöntemi manyetik rezonans kolanjiyopankreatografidir. Tanıda altın standart görüntüleme metodları ise endoskopik retrograd kolanjiyopankreatografi ve perkütan transhepatik kolanjiyopankreatografi tetkikleridir (84,85).

Anastomotik striktür tedavisinde endoskopik ve ya perkütan transhepatik yolla gerçekleştirilen dilatasyon, stent ve biliyer drenaj tedavileri ilk seçenektir. Biliyer-enterik anastomoz yapılan hasta grubunda, endoskopik tedavinin başarısız olduğu hasta grubunda perkütan transhepatik yol tercih edilmektedir. Biliyer striktür tedavisinde perkütan tedavilerin klinik ve teknik başarı oranı %85' in üzerindedir (86,87). Perkütan tedaviler arasında transhepatik biliyer drenaj, balon dilatasyonu, stent yerleştirilmesi işlemleridir (86,88,89). Perkütan girişim öncesi septik komplikasyonları azaltmak amacı ile geniş spektrumlu antibiyotik kullanılması önerilmektedir. Safra yollarına erişim sonrasında perkütan kolanjiografi görüntülerinde stenotik segment uygun klavuz tel, kateter ve farklı çaplardaki balon ile dilate edilir. Tedavi başarısını artırmak için balon dilatasyon işlemi 2 ile 4 hafta ara verilerek tekrarlanabilir ve stenotik segmente perkütan yolla stent yerleştirilebilir. Perkütan biliyer drenaj tedavisinde hemobili, hepatik arteriyel psodoanevrizma, arteriyoportal fistül, pankreatit gibi komplikasyonlar meydana gelebilmektedir (3). Tekrarlayan, tedaviye cevapsız biliyer striktür tedavisinde perkütan ve endoskopik tedavilerin bir arada kullanıldığı stenotik segmentin proksimal ve distal kesimine mıknatıs yerleştirilerek gerçekleştirilen manyetik kompresyon anastomoz tekniği kullanılabilir (3). Jang ve ark. (90) tarafından yapılan bir araştırmada refrakter anastomotik stenotik hasta grubunda bu tekniğin %88 oranında başarılı olduğunu bildirmişlerdir.

Non-anastomotik striktür en sık iskemiye bağlı ortaya çıkar ve bu hasta grubunun yaklaşık yarısında hepatik arter stenozu tespit edilmektedir. Hiler bölge en sık etkilenen bölge olmakla

beraber uzun segment, multipl seviyelerde meydana gelebilmektedir. Non-anastomotik striktürler endoskopik ve ya perkütan yolla anastomotik striktürlere benzer şekilde tedavi edilmektedir. Ancak non-anastomotik striktürlerin progresif seyri ve çoğunlukla multipl seviyelerde meydana gelmesi sebebi ile tedavi etkinliği daha düşüktür. Non-anastomotik striktür tedavisinde yerleştirilen stentlerde daha yüksek oranda migrasyon ve oklüzyon ile karşılaşmaktadır (91).

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