Bölüm
42

PANKREAS VE ADACIK HÜCRE NAKLİ

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GİRİŞ

Dünyada, diyabetin görülme sıklığı son 30 yılda yaklaşık 2 kat artmıştır ve bu artış özellikle orta ve düşük gelirli ülkelerde daha hızlı olmuştur (1). Dünya sağlık örgütünün raporuna göre, 2016 yılında diyabet ile ilişkili ölüm 1.6 milyon olarak bildirilmiştir (1). Ölümlerin dışında diyabete bağlı mikro ve makro vasküler komplikasyon sonucu gelişen, diyabetik nefropati, nöropati ve retinopati nedeniyle oluşan sağlık sorunları, tüm dünyada önemli mali ve sosyal yük oluşturmuştur (2).

Bugün pankreas nakli, esas olarak tip 1 diyabet (T1DM) tedavisinde ağırlıklı olarak kullanılır (3, 4). Bozulmuş glikoz homeostazını, hipoglisemi ya da hiperglisemi atakları olmadan sağlayabilecek tek tedavi seçeneğidir (5). Bazı tip 2 diyabet olgularında, insülin direnci ile birlikte aynı zamanda düşük miktarda insülin yapımı vardır ve bu hastalarda pankreas nakli gerekebilir. Tüm dünyada yapılan pankreas nakillerinin %10'unu bu şekilde tip 2 diyabet hastalarına uygulanmıştır. Pankreas nakillerinin çok az bir bölümü ise pankreasın benign tümörleri ve kronik pankreatit nedeniyle gerçekleştirilmiştir (Tablo-1).

Pankreas nakli pankreasın ekzokrin ve endokrin fonksiyonlarını içerecek şekilde organın bütün olarak nakledilmesi veya yalnızca endokrin fonksiyonlarını içeren adacık hücre nakli şeklinde yapılmaktadır.

Pankreas Nakli

İlk insan pankreas nakli, 1966'da Minnesota üniversitesinde, Kelly ve ark. tarafından uygulanmıştır (6). 1980'lerde, pankreas gövde ya da kuyruk kısımlarını içeren segmental pankreas nakilleri gerçekleştirilmiştir (3). İmmunosupresyon ve cerrahi tekniklerdeki gelişmeler sonucunda yapılan nakil sayısı artmıştır.

Medikal tedaviye yanıt vermeyen hastalar başta olmak üzere pankreas nakli yapılacak hastanın seçiminin dikkatli yapılması gerekmektedir. Son zamanlarda pankreas ile sınırlı malign tümörler ve travmatik pankreas yaralanmalarında da nakil uygulanmıştır (7,8).

Pankreas nakli başlıca 3 ana tipte yapılır;

- Böbrek fonksiyonları normal ya da minimal bozukluk taşıyan diyabetli hastalarda, yalnızca pankreas nakledilir (soliter pankreas nakli (PTA)).
- Böbrek yetmezliği bulunan diyabetli hastada eş zamanlı, kombine böbrek ve pankreas (SPK) nakli şeklinde yapılabilen tip.
- Eş zamanlı olarak hem böbrek hem de pankreas bulunamadığı zamanlarda, ilk önce kadaverik ya da canlı vericiden böbrek nakli ve ardından uygun zamanda pankreasın (PAK) naklidir.

SPK %80 oranında uygulanırken, PAK %15 ve PTA ise sadece %5 oranında uygulanmıştır (9).

Pankreatik greft temini, genellikle multiple organ nakli esnasında, karciğer ile birlikte blok ne kadar 6 olguda Dünyada ise 2014 yılına kadar 48.301 hastada pankreas nakli gerçekleştirilmiştir. Tüm dünyada diyabet ya da diğer nedenlerle insüline bağımlılık düşünüldüğünde nakil yapılması gereken hasta sayısı ile yapılan nakil oranının ne kadar düşük olduğu görülecektir. Bu nedenle pankreas temininde yaşanan kısıtlılığın ortadan kaldırılması için, mezenkimal stem cell gibi yeni kaynak ve yeni tekniklerin geliştirilmesi için yoğun çalışmalara ihtiyaç vardır.

Anahtar Kelimeler: Allojenik Adacık hücre transplantasyonu, Pankreas transplantasyonu, Pankreas otolog adacık hücre transplantasyonu

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