14.
BÖLÜM

İskemik İnmede Kök Hücre Tedavileri

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GİRİŞ

İnme, dünya çapındaki en önemli sakatlık ve ölüm nedenlerinden biridir (1). İnme ve serebrovasküler hastalık insidansı yüksek olmasına rağmen, etkili tedavi ve terapiler sınırlıdır. Şu anda, iskemik inme tedavisi, hızlı rekanalizasyon (trombektomi) ve kan akışını yeniden sağlamak için serebral arterlerdeki trombini parçalayan bir bileşik olan doku plazminojen aktivatörü (tPA) ile sınırlıdır (2). TPA tedavisindeki başlıca kısıtlılıklar arasında inmeden sonra ilk 4,5 saatlik dar bir terapötik pencerede yapılabiliyor olması ve hemorajik transformasyon için yüksek bir potansiyel bulunmasıdır. Bu nedenle, tPA'nın dar terapötik penceresini artırmak, zararlı yan etkileri en aza indirmek ve inmeden sonra hasta sonucunu iyileştirmek için yeni tedavi stratejilerine ihtiyaç vardır (3). İnme geçirdikten sonra iskemik dokuda iyileşmenin gerçekleşebilmesi ve hastanın kaybettiği fonksiyonlarını geri kazanılabilmesi için kök hücre uygulamaları umut verici görünmektedir. Ancak teknik konular; hangi hücreler uygulanmalı, hangi yol ile hücreler elde edilmeli, hangi hastalara uygulanmalı, etkileri hangi yöntemle izlenmeli, potansiyel riskler nedir, gibi pek çok soru henüz tam olarak cevaplandırılmış değildir. Hem hücre replasmanı hem de nöroprotektif hücre temelli tedaviler, nörodejeneratif hastalıklar ve inme alanında yeni bir araştırma aracı ve terapötik yaklaşım olarak ortaya çıkmıştır.

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yon ve metabolizmada iyileşme eğilimi göstermiş, ardından belirgin yan etkiler olmaksızın olumlu nörolojik düzelme göstermiştir (64). Bhasin ve arkadaşları kronik inmeli hastalarda kemik iliğinden türetilen kök hücre tedavisinin toleransını, güvenliğini ve fizibilitesini kanıtlayarak kök hücrelerin nöral implantasyon için "yapı iskelesi" görevi gördüğünü ve felçte onarım mekanizmalarını destekleyebileceğini bildirmiştir (65). 120 subakut iskemik inme hastasında yapılan çok merkezli, randomize bir faz II denemesi, intravenöz kemik iliği kök hücre tedavisinin güvenli ancak etkisiz olduğunu ortaya koydu (63). Bu negatif sonuçlar, hasta özelliklerine, hücre tedavisi zamanlamasına, dozuna ve hücre uygulama yoluna atfedilebilir. Dahası, lezyonların yeri ve uzantısı, standartlaştırılmamış sonlanımlar ve sonuç değerlendirmesi de bu sonuca katkıda bulunur (66). İki yıllık takipli iskemik inme hastalarında MKH ve NKH kombinasyonlarının transplantasyonu üzerine yapılan bir çalışma, nörolojik enfeksiyon, nörolojik bozulma ve tümör oluşumuna dair hiçbir kanıt ortaya koymadı ve nörolojik fonksiyonlarda iyileşme gösterdi (67).

SONUÇ

Bu klinik veriler, inmede kök hücre tedavisinin güvenliğini ve potansiyelini göstermektedir, ancak tam ölçekli, çift kör ve uygun şekilde randomize klinik çalışmalarla daha fazla doğrulanması gerekir.

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