

Bölüm 33

İNFERTİLİTEDE YENİ UMUT: KÖK HÜCRE

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GİRİŞ

İnfertilite, Dünya Sağlık Örgütü tarafından “Üreme çağındaki çiftlerde bir yıl veya daha fazla süreli düzenli korunmasız cinsel ilişkiye rağmen gebeliğin sağlanamaması ile tanımlanan üreme sisteminin bir hastalığı” olarak tarif edilmektedir (1). Sağlıklı genç çiftlerin yaklaşık %85-90’ nında ilk bir yıl içerisinde gebelik gerçekleşmektedir. Dolayısıyla infertilite genç çiftlerin %10-15’ ini ilgilendiren ve yaklaşık 6 çiftin 1’ inde bildirilen yüksek prevalanslı küresel bir halk sağlığı sorunudur (1-4). Dünya genelinde 186 milyon insanı etkilediği tahmin edilmektedir (5).

İnfertilite, kadın ve erkeklerde birçok nedenle ortaya çıkabilen heterojen bir durumdur. Yardımcı üreme tedavilerine yönelik ilerlemelerle, günümüzde üreme sorunları yaşayan çiftlerin %80’ inden fazlasında gebelik elde etmek mümkün olmaktadır ancak tedavi seçeneklerinin çoğu, her iki çiftin de fonksiyonel gamet ürettiği fikrine dayanmaktadır (4). Çiftlerden birinde veya her ikisinde fonksiyonel gamet üretilemediği durumlarda, donör gamet kullanımından başka hiçbir tedavi seçeneği mevcut değildir ancak bu durumda da birçok çift, genetik olarak soy bağı olmayan bir gebeliği istememektedir.

Son yıllarda kök hücre tedavisi, hastalıkları tedavi etmek için modern terapötik yaklaşımlardan biri olarak dikkat çekmektedir. Gelecek vaat eden ve kabul görmüş bir tedavi şekli olarak kök hücre tedavisi, tıp ve paramedikal bilimlerin hemen hemen tüm alanlarında, hasarlı veya nekrotik dokuların rejeneratif maddesi olarak uygulanmaktadır (6). Kök hücreler, sınırsız kaynakları ve yüksek farklılaşma potansiyelleri nedeniyle, infertilite tedavisi için potansiyel olarak yeni tedavi edici ajanlar olarak kabul edilmekte, erkek ve dişi gametler dahil olmak üzere çeşitli sayıda özel hücre geliştirmek için in vitro olarak uyarılabilmektedir-

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tedavileri, klinikte kullanılmadan önce çok daha geniş klinik bilgi edinilmesi gerekmektedir (71). Bununla birlikte, son yıllarda, infertilitenin tedavisine odaklanılan ve hızla gelişen klinik çalışmalarda, kök hücre temelli tedavilerin çok önemli rolü olduğu açıktır ve her geçen gün yeni gelişmeler yaşanmaktadır. Çok yakın gelecekte, infertilite tedavisinde kök hücre temelli tedavilerde çığır açacak yeni gelişmelerin ortaya çıkması an meselesidir.

Anahtar Kelimeler: kök hücre, erkek infertilitesi, kadın infertilitesi, infertilite

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