

Konu 18

KOH'da Foliküler Gelişimin Monitorizasyonu

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İn vitro fertilizasyonda (IVF) ovaryan stimülasyonun amacı, çok sayıda folikül geliştirerek yeterli sayıda matür oosit ve kaliteli embriyo elde edebilmek, bunu yaparken stimülasyonun komplikasyonlarından, özellikle ciddi ve ölümcül olabilen ovaryan hipertimülasyon sendromundan (OHSS) kaçınmaktır; bu da ancak tedavinin uygun şekilde monitorizasyonu ile sağlanabilmektedir. Kontrollü ovaryan stimülasyon (KOS) IVF'in anahtar noktalarındandır, ancak IVF'te monitorizasyon KOS öncesinde başlamaktadır; bu şekilde tedavi öncesinde kötü yanıt veya aşırı yanıt verecek olgular belirlenebilmekte, her hasta için en uygun tedavi ve doz seçimi yapılabilmektedir. Yine stimülasyon öncesinde, en sık kullanılan KOS protokolü olan uzun protokolde, gonadotropinlere başlamadan önce yeterli hipofizer baskılamanın olup olmadığı da monitorize edilmelidir. Kontrollü ovaryan stimülasyon sırasında da yeterli foliküler gelişimin sağlanıp sağlanmadığının kontrolü ve hCG uygulaması için en uygun zamanın seçilmesi için de siklus monitorize edilmelidir.

Son 30 yılda, IVF'te hızlı ve önemli gelişmeler kaydedilmiş, çok değişik ovaryan stimülasyon ajanları ve protokolleri kullanıma girmiş ve buna bağlı olarak da farklı monitorizasyon yöntemleri geliştirilmiştir. Başlangıçta, ovulasyon indüksiyonu tek başına östrojen seviyesi-

nin ölçümü ile izlenmiştir. Bununla beraber, bu ölçümlerle kaç tane olgun folikülün geliştiğini tahmin etmek mümkün olmadığı için overlerin ve foliküllerin görüntülenebileceği basit bir yöntem olan ultrasonografi, östrojen ölçümünü tamamlamak üzere takipte kullanıma girmiş ve yaygın olarak kullanılmaya başlamıştır. Ultrason ve estradiol ölçümleri ve ovaryan stimülasyonun izleminde altın standart olarak kabul edilmiştir (1). Yakın zamanda, vajinal sonografinin renkli Doppler ile kombine edilmesi ile birlikte, ovulasyonun değerlendirilmesinde folikül duvarındaki kan akımının ve endometrijal reseptivitenin değerlendirilmesinde de uterin arterdeki kan akımının ölçümü mümkün hale gelmiştir.

IVF'te monitorizasyonun amaçları;

- Over yanıtının öngörülmesi ve en uygun tedavi protokolünün belirlenebilmesi için over rezervinin değerlendirilmesi,
- Uzun protokolde tedavinin başlangıcında hipofizer baskılamanın yeterli olup olmadığının belirlenmesi,
- Kullanılan ovaryan stimülasyon ajanlarına yanıtın değerlendirilmesi ve dozlarının ayarlanması,
- Ovulasyonun tetiklenmesi için en uygun zamanın belirlenmesi ve
- OHSS'nin önlenmesidir.

Over yanıtının değerlendirilmesi

Günümüzde çocuk sahibi olma yaşının 30'lu hatta 40'lı yaşlara geciktirilmesi, subfertil kadınların sayısının ve yardımcı üreme tekniklerine olan talebin artmasına neden olmuştur; overin yaşlanması ve azalmış over rezervi kavramları ortaya çıkmıştır. Over rezervi, overlerde kalan foliküllerin sayı ve kalitesi olarak tanımlanmaktadır. Overin yaşlanması over rezervindeki azalmada anahtar rol oynamaktadır; primordiyal folikül sayısı azalır, oosit kalitesi bozulur, implantasyon oranı azalır, embriyoda kromozomal anomali oranı ve bunun sonucunda düşük oranı artar. Zahmetli ve pahalı bir infertilite tedavi programına girmeden önce over rezervinin bir tarama testi ile değerlendirilmesi önem kazanmıştır (2).

IVF öncesinde over rezervinin değerlendirilmesi

nedeniyle, günümüzdeki teknolojik imkanlarla bu yöntemin rutin kullanıma girmesi henüz mümkün görünmemektedir. Bununla beraber, bir IVF siklusunda en iyi oosit ve embriyonun elde edilip transferinin yapılmasına gidildiği düşünülürse, araştırma safhasındaki bu alan önemini korumaktadır.

IVF’te monitorizasyonun nasıl ve hangi yöntemlerle yapılması gerektiği konusu tartışmalıdır. Takipte ultrasonografi ve serum E₂ yaygın olarak kullanılmasına rağmen, çok sık ve yakın takibin pahalı, zaman alıcı ve hasta için zahmetli olduğu gerekçesiyle, monitorizasyonun tek başına ultrasonografi ile ‘minimal’ ve ‘hasta dostu’ şekilde yapılabileceği görüşleri son zamanlarda öne çıkmaktadır. Yine, takiplerin ne sıklıkta yapılması gerektiği de açık değildir; çoğu klinikte takiplerin zamanlaması konusunda da bir standart yoktur. Bu konulara açıklık getirmek amacıyla yapılmış bir meta-analizde, ultrasonografi ve serum E₂ düzeyleri ile monitorizasyonun tek başına ultrasonografiye göre daha etkili olduğu gösterilememiştir ve geniş bir randomize çalışmaya ihtiyaç olduğu vurgulanmıştır. Sonuçta bu konu açıklığa kavuşana kadar, klinik pratikte ultrasonografi ve serum E₂ düzeyleri ile monitorizasyona devam edimesi akla yatkın görünmektedir (114).

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