

Lokal Endometrial Hasar ve Fertilite

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GİRİŞ

İnfertilite 12 ay boyunca korunmasız cinsel ilişkiye rağmen spontan gebeliğin oluşmaması olarak tanımlanan, çiftlerin %15'ini etkileyen bir sağlık problemidir (1). Asiste Reprodüktif Teknoloji (ART)' lerde çok önemli yenilikler olmasına rağmen (preimplantasyon genetik test, yapay zekâ, overyan stimülasyonda yenilikler vb.) hala In Vitro Fertilizasyon (IVF) siklüslerinin %70'i endometrial reseptivite ve implantasyon problemleri nedeniyle başarısızlıkla sonuçlanmaktadır (1,2).

Sağlıklı bir implantasyon için endometriyumun embriyonun tutunmasına izin verecek yapılanmayı göstermesi gerekmektedir ve bu durum ancak reseptif bir endometrium ile mümkündür (3) Endometrial reseptivite; stromal desidualizasyon, luminal epitelde pinopod ve mikro villus gelişimi şeklinde tanımlanabilir (3). Reseptiviteyi arttırmak için endometriuma uygulanan lokal hasar sitokin, büyüme faktörü ve adezyon moleküllerinin salgılanmasını sağlayarak implantasyonu kolaylaştırmaktadır (4,5).

Lokal endometrial hasarın endometrium üzerindeki olumlu etkisi ilk kez 1907 yılında Loeb

ve ark. tarafından guinea pig endometriyumuna uygulanan lokal hasar sonrası gözlenen desidualizasyon ile gösterilmiştir (6). 2003 yılında Barash ve ark. insan üzerinde lokal endometrial hasarın implantasyon oranlarını arttırdığını IVF siklusu öncesi endometriuma 8,12,21,26. günlerde biyopsi uygulayarak göstermişlerdir (7).

Lokal endometrial hasarın implantasyon başarısını arttırmak için kullanıldığı 1900-2000'li yıllardan günümüze kadar pek çok araştırma, derleme ve meta analiz yapılmış, araştırmaların bir bölümü implantasyon başarısını arttırdığını diğerleri ise yararlı bir etkisinin olmadığını hatta intra uterin adezyona yol açabileceğini göstermiştir (2,6-8). Bu bölümde güncel literatür bilgileri ışığında aşağıdaki konu başlıkları ile lokal endometrial hasarın fertilite üzerindeki etkisi her yönü ile anlatılacaktır:

- » *Endometriyumun fertilitedeki önemi: Reseptivite ve implantasyon*
- » *Lokal endometrial hasarın endometrium üzerinde iki yönlü etkisi: İmplantasyon ve adezyon*
- » *Güncel veriler ışığında ART siklüslerinde lokal endometrial hasar ve fertilite*

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göre bu işlemin implantasyon başarısızlığında kullanılmasında net bir fikir birliği yoktur. Çünkü her hastanın inflamatuvar yanıtı, endometrial reseptiviteyi etkileyen sistemik problemleri, genetik olarak intra uterin adezyona eğilim ve endometriumda bulunan hormonal ve immun sistem ile ilgili reseptör donanımı gibi pek çok faktör sonucu etkileyebilmektedir. Bu konuda daha kapsamlı randomize kontrollü çalışmalara ihtiyaç vardır.

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