

# ENDOMETRİYAL İMLANTASYON BELİRTEÇLERİ

## 80 BÖLÜM

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### GİRİŞ

Memelilerde türün devamlılığını sağlayan üreme; dişi üreme organında dölleme ile başlanmaktadır. Dölleme olayını takiben embriyo ve eklerinin endometriyuma tutunması (implantasyon) gerçekleşir. İmplantasyon türler arasında farklılık gösteren karmaşık mekanizmalarla gerçekleşmekte ve implantasyon için endometriyum çeşitli faktörlerle düzenlenen, yapısal, hücrel ve moleküler olayların dahil olduğu bir hazırlık dönemi geçirmektedir [1].

İmplantasyonun başarılı olması için, hem overyan hormonlar aracılığı ile uterin-endometrial farklılaşma, hem de blastokistin aktivasyon dönemine girmiş olması gereklidir. Ayrıca blastokistlerin, lüminal epitel (LE) ile etkileşime girebilmeleri için endometriyum implantasyon penceresi döneminde bulunmalıdır. İmplantasyonun tamamlanmasını takiben plasantasyon evresi başlar [1].

### Kemirgenlerde Üreme Sistemi

Fareler (Mus musculus) insan biyolojisine uygun kullanışlı bilgiler sağlayan ve temel biyolojik araştırmalarda kullanım alanı bularak en yaygın kullanılan omurgalı türüdür. Fareler 5 haftalık olduklarında puberteye ulaşır ve sıklık hale gelirler ve estrus evresi dişi farelerin çiftleş-

me davranışı gösterdikleri döneme karşılık gelir. Ortalama yaşam süreleri 1-2 yıl olan dişi farelerde; estrus döngüsü 4 (2-9) gün, estrus süresi 14 saat olmakla beraber oldukça değişken de olabilmektedir [2]. Her bir estrus siklusu estrus, meta-estrus, diestrus ve proestrus olmak üzere 4 evreden oluşur. Farelerde de insanlarda olduğu gibi estrus siklusları fonksiyonel bir hipotalomo-hipofiz-over aksı tarafından regüle edilir. Estrus siklusu ayrıca folliküler ve luteal faz olmak üzere iki overyan faza ayrılır. Folliküler faz overyan follikül gelişiminin olduğu estrus ve proestrus evrelerinden oluşurken luteal faz corpus luteumun oluştuğu ve fonksiyon gösterdiği metaestrus ve diestrus evrelerinden oluşur. Proestrus ve estrus süresince dolaşımdaki yüksek düzey estrojene bağlı olarak uterin vasküler geçirgenliğin artması ve sıvı toplanması sonucu uterus büyüme gösterir. Uterustaki bu distansiyon estrusun geç dönemlerinde azalmaya başlarken diestrus döneminde gözlenmez. Estrus siklusunun evreleri en iyi şekilde vajinal smeardeki gözlenen hücrelere göre tanımlanır [3].

Kemirgenlerde desidual endometriyum; bazal zon, kapsül, antimezometriyal desiduama, mezometriyal desiduama ve glikojenik bölge olmak üzere 5 farklı bölgeye ayrılır [4]. Farelerde normalde her siklusta 6-12 adet yumurta ovule

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