

## GİRİŞ

Oogenez

Ovaryan Foliküllerin Gelişimi ve Etkin Olan Moleküler Mekanizmalar

Primordiyal Foliküller

Primer Foliküller

Sekonder (Antral) Foliküller

Olgun (Graaf) Foliküller

Atretik Foliküller

Oosit Matürasyonu

Ovulasyon

Korpus Luteum

Spermatogenez

Seminifer Tübül

Peritübüler (Myoid) Hücreler

Sertoli Hücreleri

Spermatogenik seri hücreleri

Spermatogenez

Kan-testis bariyeri

Epididimal Matürasyon

KAYNAKLAR

## GİRİŞ

Gelişimin başlangıcı dişi germ hücresi oosit ve erkek germ hücresi spermin birleşerek, yeni gelişecek canlıyı oluşturacak ilk hücre olan zigotun oluşumudur. Zigot anneye ve babaya ait genetik bilgiyi taşıyan, özelleşmiş totipotent özellikte, 46 kromozomlu ve 2n DNA'ya sahip somatik hücre karakterinde bir hücredir. Zigotun gelişimi embriyoner gelişim sürecinin başlangıcını oluşturur.

Embriyoner gelişimin ilk üç gününde sadece hücre proliferasyonu gerçekleşerek, mitozun gerçekleşmesi ile birlikte embriyoda hücre (blastomer) sayısı artacaktır. Gelişimin 4. gününden itibaren bu sürece diferansiyasyon, kutuplaşma ve göç mekanizmaları da eklenir (şekil 1). Embriyoner gelişim süreci boyunca hücrelerin proliferasyonu, diferansiyasyonu ve migrasyonu çeşitli indüksiyon mekanizmalarının kontrolünde gerçekleşerek yeni organizma oluşacaktır.

<sup>1</sup> Bursa Uludağ ÜTF Histoloji-Embriyoloji AD ve Kadın Hastalıkları ve Doğum AD ÜYTE Merkezi

bir şekilde düzenlenmiş, korunmuş mikroçevre içinde tutulmaları gerekmektedir. Kan-testis bariyeri seminifer epiteli (germinal epitel) bazal ve adluminal olmak üzere iki ayrı kompartımana ayıran ve maddelerin parasellüler geçişini kısıtlayan anatomik ve fonksiyonel bir engeldir. Sertoli hücreleri arasındaki sıkı bağlantı kompleksleri kan-testis bariyerini oluşturur (şekil 20). Kan testis bariyeri ile ilgili ayrıntılı bilgi erkek genital sistemde anlatılmıştır.

### Epididimal Matürasyon

Spermiyogenez tamamlandıktan sonra oluşan spermatozoonlar seminal sıvı ile birlikte seminifer tübül lümenine atılır. Seminifer tübül-lerde üretilen spermler tubuli rekti, rete testis ve duktuli efferentes'ten geçtikten sonra duktus epididimis'te depolanır.

Spermatogenez sürecinde sperm morfolojik olarak farklılaşmakta, fakat hareket kabiliyetini ve fertilizasyon kapasitesini elde edememektedir. Bu yeteneklerini kazanabilmesi için iki ekstrapostiküler olgunlaşma sürecini tamamlaması gerekir. Bu süreçlerden biri erkek genital sistemde gerçekleşecektir ve kapasitasyon olarak tanımlanır. Diğer ise dişi genital sistemde gerçekleşen biyokimyasal değişiklikler zinciridir.

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