

# BÖLÜM 4

## Retinol, Retinoik Asit ve Spermatogenez

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### GİRİŞ

İnfertilite Dünya Sağlık Örgütü (WHO) tanımlamasına göre bir yıl boyunca düzenli korunmasız cinsel birlikteliğe rağmen çocuk sahibi olamama durumudur (1). Üreme çağındaki çiftlerin % 15'inde bu sorunla karşılaşmaktadır (2). İnfertilitenin %30-40'ında neden erkek faktörü olup, spermatogenez bozuklukları ile prezente olmaktadır (2-4). Testiküler seminifer tübüllerde puberte ile birlikte meydana gelen spermatogenez, endokrin ve parakrin düzenleyicilerin rol aldığı spermatogonia'ların bölünerek farklılaşması ve spermatidleri oluşturması sürecidir (Şekil 1). Gonadotropinler, steroid hormonlar, testisin somatik hücreleri ve A vitamini spermatogenezin düzenlenmesinde önemli rol oynamaktadır (5-7). A vitamininin spermatogenez için gerekli olduğu, A vitamininden eksik diyetle beslenen sıçanlarda spermatogenezin duraksadığı 1925'den beri bilinmektedir (8). Kemirgenler üzerinde yapılan çok sayıda çalışmada, biyolojik olarak aktif bir A vitamini formu olan RA'nın spermatogenez sürecinde önemli rol oynadığı ortaya konulmuştur (9-11). A vitamini; spermatogonia farklılaşmasında, mayoz bölünmenin başlatılmasında, spermatozoanın seminifer tübül lümenine salınmasında ve spermatozoaya katılan sıkı bağlantıların oluşmasında etkilidir (12-17). RA'nın bu etkilere aracılık ettiği moleküler mekanizmalar tam olarak

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