# BÖLÜM 2

# KLİNİK ORTODONTİK PERSPEKTİFTEN MATURASYON TESPİTİ

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## GİRİŞ

Ortodontik tedavi planlamasında, yüz büyümesinin hızı ve zamanlaması ile kalan yüz büyümesi miktarının bilinmesi, tedavilerin en etkili ve doğru zamanda uygulanabilmesi için oldukça önemlidir. Tedavi zamanlaması ve planlamasının yanı sıra kalan büyüme miktarının öngörülmesi, tedavi sonrası nüks miktarının tahmin edilmesi ve stabilite için gerekli önlemlerin alınmasında da önemli rol oynamaktadır.

İnsanlarda biyolojik olgunlaşmanın zamanlaması kronolojik yaştan bağımsız olarak bireyler arasında da önemli farklılıklar gösterebilmektedir. Bu sebeplerle kronolojik yaş haricinde hastanın büyüme gelişimi tahmin edebilmek için; boy artışı, cinsel olgunluk, el-bilek röntgenlerinden el bilek kemiklerinin değerlendirilmesi ve sefalometrik röntgenler üzerinde vertebraların değerlendirilmesi ile belirlenen kemik maturasyon aşamaları ve dental maturasyon aşamaları gibi çeşitli parametreler de kullanılmaktadır (1,2).

## KRONOLOJİK YAŞ

Kronolojik yaş, içinde bulunulan günün tarihi ile doğum tarihi arasında oluşan takvim yaşıdır. Aynı ya da yakın kronolojik yaşa sahip olsa da büyümü gelişimi, iskeletsel maturasyon farklı olabilmektedir çünkü her bireyin gösterdiği büyüme ve gelişim basamakları kendine özel sırayla ortaya çıkmakta ve toplumlara, cinsiyetlere göre farklılık göstermektedir (3).

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Güncel çalışmalarda iskelet maturasyonu ile dental maturasyon arasındaki korelasyonun belirlenmesinde Demirjian methodu sıklıkla kullanılmakta ve aralarında anlamlı ilişki bulunmaktadır (48,56,70,71).

Tunç ve ark. (2008), Türk toplumunda Demirjian metodunun etkinliğini incelemek amacıyla gerçekleştirdikleri çalışmada dental maturasyon evrelerini değerlendirmişler ve kronolojik yaş ile anlamlı bir ilişki gösterdiğini bildirmişlerdir (72). Ayrıca Uysal ve ark. (2006), dental maturasyon değerlendirmede, alt çene köpek dişi ve birinci küçük azı dişlerinin tamamlanmış kök formasyonlarının pubertal atılım evresinin tespitinde kullanılabileceği belirtmişlerdir (73). Ercan ve ark. (2023), CS3 evresindeki servikal vertebra maturasyonu ve G evresindeki mandibular molar diş maturasyonunun, pubertal büyüme atağının zirvesi olarak değerlendirilebileceğini bildirmişlerdir (74).

## SONUÇ

Klinik ortodontik açıdan dental ve iskeletsel maturasyonun doğru bir şekilde tespit edilmesi, tedavi planlamasının başarısı açısından kritik bir rol oynamaktadır. Bireyin büyüme ve gelişim dönemine uygun olarak yapılan değerlendirmeler, özellikle büyüme modifikasyonuna yönelik ortopedik yaklaşımlarda tedavi zamanlamasının optimize edilmesini sağlar.Bu nedenle, sadece kronolojik yaşa değil, biyolojik olgunluk göstergelerine de dayanan bir değerlendirme yaklaşımı, ortodontik tedavinin hem etkinliğini hem de uzun dönemli stabilitesini artırmaktadır. Sonuç olarak, dental ve iskeletsel maturasyonun çeşitli yöntemlerle değerlendirilmesi, efektif ortodontik tedavi süreci için önemli bir aşamadır.

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