

## Bölüm 16

### **ÇOCUK DİŞ HEKİMLİĞİNDE MTA KULLANIMI**

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#### **1. GİRİŞ**

Çocuk diş hekimliğinde uygulanan tedavilerde başarılı sonuçlar elde etmek için doğru endikasyon ve teknikle beraber biyoyumlu, sisidirmazlık özelliği yüksek, toksik olmayan malzemeler kullanmak gereklidir. Kullanılan restoratif materyaller, vital dokularla temasta olacağından biyoyumlu olmasının yanında dokularda rejenerasyonu tetiklemeli ve mikroorganizma geçişini önlemelidir (1). Bugüne kadar, kök/kanal sistemi-oral kavite ve kök/kanal sistemi periradiküler dokular arasında, diş pulpasında herhangi bir nedenle oluşan açılmlar mikroorganizma geçiş yollarını kapatmak amacıyla birçok restoratif materyal kullanılmıştır. Bunlardan bazıları amalgam, ZnOE esaslı simanlar (IRM, Süper-EBA vb), kompozit rezinler ve cam iyonomer simanlardır. Fakat bu materyallerin, toksisiteye sahip olmaları, neme karşı hassas olmaları ve mikroorganizma geçişini yeteri kadar engellememeleri gibi dezavantajları vardır. Bu amaçla son yıllarda, kök-kanal sistemi ve dişin dış yüzeyleri arasında bağlantı yollarını kapatmak amacıyla geliştirilen ve klinik uygulamalarda başarılı sonuçlar verdiği rapor edilen Mineral Trioksit Agregat (MTA) kullanılmaya başlanmıştır (2).

Mineral trioksit agregat (MTA) bu özellikleriyle çocuk diş hekimliğinde vital pulpa tedavileri, apeksifikasyon, rejeneratif pulpa tedavisi uygulamaları, persiste süt dişlerinin kanal dolumu amacıyla kullanılan geleneksel endodontik materyallere üstün bir alternatif haline gelmiştir (1).

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renk değiştirir. Portland simanı renk değiştirme potansiyelinin, özellikle kana maruz kaldıklarında malzemelerin gözenekliliğinden kaynaklandığı bildirilmiştir (114).

İrrigant türünün de bizmut oksit içeren simanların renk bozulmasına sebep olduğu varsayılmaktadır (112). İrrigasyonun ardından diş renginde ProRoot MTA yerleştirildiğinde dentin tübüllerinde kalan NaOCl renk değişikliğine neden olabileceği bildirilmiştir (113).

## **6. SONUÇ**

Başlangıçta kök ucu dolgu maddesi olarak geliştirilen MTA günümüzde diş hekimliğinde kullanım alanı yaygınlaşmıştır. Dokularda rejenerasyonu sağlama, mikroorganizma geçişini yeteri kadar önleyebilmesi, biyo-uyumluluğu yüksek ve çocukların güvenle kullanılabilmesi Çocuk Diş Hekimleri için önemlidir. Yapılan çok sayıdaki in-vivo, in-vitro ve hayvan çalışmalarının sonuçlarına göre Çocuk Diş Hekimliği alanında uygulanan birçok tedavide MTA'nın güvenle ve başarıyla kullanılmasının ve rutin klinik kullanımını desteklemiştir (2).

MTA'nın bu avantajlarının yanında dişte renklenmeye sebep olabilmesi, klinik kullanımının teknik hassasiyet gerektirmesi, uzun sertleşme zamanı, yüksek maliyeti, materyal için bilinen bir çözücüün olmaması ve iyileşme sonrası ortamdan uzaklaştırılmasının zor olması gibi var olan dezavantajlarını yok etmek amacıyla daha büyük örneklem büyülüklüklerine sahip, uzun dönem takılı çalışmaların yapılması gerekmektedir (115).

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