

BÖLÜM 5

REZİN KOMPOZİTLERDE GÜNCEL GELİŞMELER

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GİRİŞ

Restoratif diş hekimliğinin amacı, doğru tanı ve tedavi sürecinin sonunda fonksiyon ve estetiğin yeniden kazandırılmasıdır. Diş sert dokularındaki çürük ve defektlerin onarımında estetik ve dayanıklılık önemli olup, bu amaçla pek çok restoratif materyal geliştirilmektedir (Dayangaç, 2000). Restoratif materyalden beklenen mekanik ve fiziksel özellikler, yüksek kırılma dayanımı ve yüzey sertliğine sahip olması, düşük su emilimi, düşük çözünürlük, düşük aşınma göstermesi, polimerizasyon büzülmesinin az olması, polisajlanabilirliğinin iyi olması, yüksek renk uyumu ve renk stabilitesi göstermesidir. Ayrıca biyouyumlu olması, post-operatif hassasiyete neden olmaması, dişin yapısal bütünlüğünü koruyarak kırılma veya çatlak oluşumunu engellemesi ve çürük önleyici özellikler taşıması da beklentiler arasında yer alır (Hickel et al., 2007).

Rezin kompozitler ilk olarak 1960'lı yılların başlarında üretilmiş, akrilik ve silikat materyallere göre üstün mekanik özellikler taşıyan, termal genleşme katsayıları daha düşük, uygulama sırasında daha az boyutsal değişikliğe uğrayan, aşınmaya dirençli, klinik performansları iyileştirilmekte olan materyaller olarak piyasaya sürülmüştür (Sakaguchi & Powers, 2012). Hasta ve hekimlerin estetik beklentilerinin artması ve adeziv sistemlerdeki gelişmeler, diş hekimliği pratiğinde rezin kompozitlerin tercih sebepleri olmuştur. Rezin kompozitler diş sert doku kayıplarının giderilmesinde adeziv sistemler yardımı ile diş dokusuna bağlanabilme, mekanik ve estetik açıdan kabul edilebilir özellikler gösterme, direkt ve indirekt olarak uygulanabilme gibi avantajlara sahiptir (Althaqafi, Satterthwaite, & Silikas, 2020).

Rezin kompozitler, restoratif materyaller, kavite astarları, pit ve fissür örtücüler, kor materyali, inleyler, onleyler, kuronlar, geçici restorasyonlar, tek veya çoklu diş protezleri için yapıştırma materyali, endodontik kapatma materyali ve ortodontik

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