

## Bölüm 2

# AVÜLSE DİŞLER İÇİN TAŞIMA SOLÜSYONLARI

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### 1. AVÜLSİYON

Avülsiyon; dişin alveol soketinden tamamen uzaklaşmasına neden olan, periodontal ligamanın (PDL) ve nörovasküler yapının rüptürüyle karakterize karmaşık bir travmatik yaralanmadır.<sup>1</sup>

Daimi dişlerde avülsiyon insidansı, tüm dental travmatik yaralanmaların yaklaşık% 0.5-16'sını oluşturmaktadır.<sup>2</sup> Daimi dişlerde avülsiyon çoğunlukla alveolar kemiğin daha esnek olduğu ve ekstrüzyon kuvvetlerine minimum direnç sağladığı 7-10 yaş grubunda görülmekte ve en sık daimi ön kesici dişler etkilenmektedir.<sup>3</sup>

Avülsiyon yaralanmaları için, acil diş replantasyonu periodontal iyileşme açısından en ideal tedavi seçeneği olarak gösterilmektedir. Avülse bir dişin 5 dk içerisinde replante edilmesi durumunda genellikle PDL hücrelerinin fonksiyonlarını kaybetmeden sürdürdüğü bildirilmiştir.<sup>4</sup> Öte yandan, 15 dakikadan fazla kuru ortamda kalan avülse bir dişte; öncü, projenitör veya kök hücrelerin fibroblastlara diferansiyasyon yeteneklerini kayb ettikleri ve kuru ortamda 30 dakika kaldıktan sonra neredeyse tüm PDL hücrelerinin nekrotik hale geldiği rapor edilmiştir.<sup>5</sup>

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Travmanın meydana geldiği yerde acil replantasyon her zaman mümkün olmadığından, diş hekimine ulaşıncaya kadar geçen sürede PDL hücrelerinin canlılığını korumak için avülse dişin bir taşıma solüsyonu içerisinde saklanması gerekmektedir.<sup>6</sup> Taşıma solüsyonunun, replante edilen dişlerin prognozunu doğrudan etkileyen önemli bir faktör olduğu bilinmektedir. İdeal bir taşıma solüsyonunun ankiloz ve replasman rezorpsiyonunu önlemek için, kök yüzeyindeki PDL hücrelerinin canlılığının korunmasına yardımcı olması gerekmektedir.<sup>7</sup>

Taşıma solüsyonunun klinik etkinliğinde, ekstra alveoler süre, solüsyonun ozmolalitesi, pH'ı ve sıcaklığı önemli rol oynamaktadır. İdeal bir taşıma solüsyonunun optimal hücre sel büyüme sağlayabilmesi için; 290-300 mosmol/kg ozmola-

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biyolojik tepki gerçekleştirerek bağırsak epitel homeostazisini kolaylaştırır.<sup>48</sup>

Bifidobacterium'un ağızda mikrobiyolojik dengeyi geliştirerek ve peroksidaz gibi oral savunma faktörleri ile bakterilerin asidojenitesini inhibe ederek ağız sağlığın korunmasında önemli bir rolü olabileceği bildirilmiştir.<sup>47</sup>

Çağlar ve ark<sup>48</sup> yaptıkları çalışmada, çok sayıda canlı PDL hücresi tespit ettikleri için Bifidobacterium animalis gibi probiyotiklerin avülse dişler için alternatif bir taşıma solüsyonu olabileceğini, ancak piyasada satılan ürünler kullanılarak daha fazla araştırma yapılması gerektiğini bildirmiştir.

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