

# BÖLÜM 1

## DEVİTAL DİŞLERDE AĞARTMA YÖNTEMLERİ

Salih DÜZGÜN<sup>1</sup>

### GİRİŞ

Günümüzde toplum güzellik ve mükemmelliğe önceden hiç olmadığı kadar önem vermeye başlamıştır. Özellikle düz ve daha beyaz dişleri içeren mükemmel bir gülümseme daha fazla önem kazanmıştır. Böylelikle diş hekimliğinde dişlerin ağartılması önemli bir iş haline gelmiştir. Devital dişlerde ağartma genellikle endodontik tedavi sonrası renk değiştirmiş dişin renginin açılması amacıyla uygulanmaktadır ve böylece komşu dişle renk uyumunun ve estetiğin sağlanması amaçlanmaktadır.<sup>1</sup>

Renk değiştirmiş devital dişlerdeki ağartma işlemi ilk kez 19. yüzyılın ortalarında tanımlanmıştır.<sup>2</sup> İlk başlarda klorlu kireç<sup>3</sup>, ardından okzalik asit<sup>4,5</sup>, klorin bileşimleri ve solüsyonları<sup>6-8</sup>, sodyum peroksit<sup>9</sup>, sodyum hipoklorit<sup>10</sup> veya 75% eter içerisinde 25% hidrojen peroksit içeren karışım<sup>11,12</sup> gibi kimyasal ajanlar tavsiye edilmiştir. İlk kez hidrojen peroksit kullanımı (1884) Harlan<sup>13</sup> tarafından rapor edilmiştir. Süperoksol'un (30% Hidrojen peroksit) kullanımı 1918 yılında Abbot<sup>14</sup> tarafından bahsedilmiştir. 1924 yılında Prinz<sup>15</sup>, pulpa odası kavitesinin temizlenmesinde süperoksol ve sodyum perborat içeren solüsyonun ısıtılarak kullanımını önermiştir. Bazı araştırmacılar ağartma ajanlarının aktivasyonunu gerçekleştirmek için ışık<sup>16,17</sup>, ıslı<sup>16,18-22</sup> ve elektrik<sup>23,24</sup> akımının kullanılmasını önermektedir.

### DİŞ RENKLENMELERİNİN NEDENLERİ

Diş renklenmeleri etyolojiye, görünümüne, yerleşimine, şiddetine ve diş dokularına bağlanma kapasitesine göre değişiklik gösterir<sup>25</sup>. Diş renklenmeleri yerleşim ve etyolojiye göre, iç kaynaklı, dış kaynaklı ve bunların kombinasyonu olmak üzere sınıflandırılabilir.<sup>26</sup>

Şarap, kahve, çay, portakal, meyan kökü, çikolata gibi diyet alışkanlıklarından elde edilen kromojen kaynaklar, tütün ürünleri, ağız gargaraları ve diş yüzeyindeki plaklar temel dış kaynaklı nedenlerdir.<sup>26,27</sup>

<sup>1</sup> Dr.Öğr.Uyesi, Erciyes Üniversitesi Endodonti Anabilim Dalı, dtsalihduzgun@gmail.com

(SEM) rezin porozitesinin arttığı gösterilmiştir.<sup>89</sup> Bu durum ağartılmış dişlerde acil estetik restorasyonu gerektiği zaman klinik problem yaratır. Bu nedenle kompozit rezin restorasyonlar yapılmadan önce artık H<sub>2</sub>O<sub>2</sub> 'in tamamen kaldırılması önerilir. Bir çalışma 3 dakika boyunca çözücü uygulamasının pulpa odasındaki artık H<sub>2</sub>O<sub>2</sub> 'in tamamen ortadan kaldırıldığı rapor etmiştir.<sup>90</sup>

İnternal ağartma prosedürleri sonrası eksternal kök rezorbsiyonunun meydana gelmesi ciddi bir komplikasyondur. Klinik raporlar<sup>91,92,101,93-100</sup> ve histolojik çalışmalar<sup>102-104</sup> mevcut koşullar altında intrakoronal ağartma yöntemlerinin eksternal kök rezorbsiyonuna sebep olabileceğini göstermiştir. Buna bu vakalarda kullanılan yüksek konsantrasyonlu ajanlar, özellikle 30%'dan %35' e kadar olan konsantrasyonlardaki H<sub>2</sub>O<sub>2</sub> muhtemelen neden olmuştur. Ağartma işlemindeki periodonsiyum ve semente zarar veren mekanizma tam olarak net değildir. Muhtemelen zarar verici kimyasallar korunmasız olan dentin tübüllerine ve sement defektlerine nüfuz eder. Bu da semetin nekrozuna, periodonsiyumun inflamasyonuna ve takiben kök rezorbsiyonuna neden olur.<sup>105-107</sup> Bu süreç ısı uygulaması<sup>108</sup> ve ya bakteri girişi<sup>109</sup> varsa artar. Önceden geçirilmiş travma ve yaş ayrıca predispozan faktör olarak rol oynayabilir.<sup>91</sup> Uzun dönem sonuçları değerlendiren bir çok çalışma, ağartma tedavisi uygulandıktan yıllar sonra bile, kök rezorbsiyonuyla devital dişlerdeki ağartma arasındaki ilişkiyi göstermiştir.<sup>91,110-115</sup>

## SONUÇ

Potansiyel komplikasyonlar ağartma işlemi sırasında gerekli tedbirler alınırsa engellenebilir. Ayrıca ağartma vakalarının rutin takiplerinin yapılması, istenmeyen sonuçların erken dönemde fark edilmesine ve potansiyel komplikasyonların risklerinin azalmasına olanak sağlar. Endodontik tedavi sonrası renklenmiş dişlerde, eğer doğru teşhis konulup, doğru ağartma ajanı ve yöntemi seçilirse hastaları memnun edici estetik sonuçlar elde etmek mümkün olabilir.

**Anahtar Kelimeler:** Devital diş, Ağartma ajanları, Ağartma yöntemleri, Estetik

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