

# **Güncel Pedodonti Çalışmaları II**

**Editör**  
**M. Cem DOĞAN**

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**Akademisyen Kitabevi A.Ş.**

Halk Sokak 5 / A

Yenişehir / Ankara

Tel: 0312 431 16 33

siparis@akademisyen.com

## ÖNSÖZ

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**Akademisyen Yayınevi A.Ş.**



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## Bölüm 1

# ÇOCUK DİŞ HEKİMLİĞİNDE KULLANILAN GÜNCEL VE ALTERNATİF LOKAL ANESTEZİ YÖNTEMLERİ

Sema AYDINOĞLU<sup>1</sup>  
İpek ARSLAN<sup>2</sup>

## GİRİŞ

Çocuk diş hekimliğinde ağrı yönetimi kritik konular arasında yer almaktadır. İğne penetrasyonunu görme veya dene-yimleme sonucu gelişen korku, yumuşak dokularda şişme hissi ve uzun süreli uyuşukluk kadar anestezik ilaçlara karşı gelişen alerjik reaksiyonlar, hasta ve hekimleri lokal anestezi kullanımı ile ilgili endişe duymaya sevk eden en yaygın faktörlerdir. Yeni alternatif ve atravmatik yöntemlerin keşfedilmesi ile birlikte çocuk diş hekimliğinde gerçekleştirilen dental tedavinin kalitesi artmaktadır.

Anestezik ajanlar, lokal anestezide kullanılan cihazlar ve teknikler ile ilgili son gelişmeler; artmış ağrı kontrolü, azaltılmış enjeksiyon ağrısı ve daha az yan etkinin görülmemesini sağlamıştır. Bu konuda yaşanan mevcut ilerleme yeni ajan ve ekipmanların geliştirilmesine, tekniklerin modifiye edilmesine öncülük etmiştir.

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<sup>1</sup> Dr. Öğr. Üyesi, Recep Tayyip Erdoğan Üniversitesi Diş Hekimliği Fakültesi, sema.aydinoglu@erdogan.edu.tr

<sup>2</sup> Dr. Öğr. Üyesi, Recep Tayyip Erdoğan Üniversitesi Diş Hekimliği Fakültesi, ipek.arslan@erdogan.edu.tr

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## Bölüm 2

# ÇOCUK HASTADA EROZİV DİŞ AŞINMASINA YOL AÇAN NEDENLER VE TEDAVİ YAKLAŞIMINA GÜNCEL BAKIŞ: BİR LİTERATÜR DERLEMESİ

Aslı SOĞUKPINAR<sup>1</sup>

## GİRİŞ

Geçmiş yıllarda ‘diş erozyon’ tanımı yüzeyin yumuşamasıyla birlikte aynı zamanda mekanik etkeni de içeren diş aşınması olarak ifade edilmektedir. Günümüzde ise ‘diş erozyonu’ demineralizasyon ve asitlere maruz kalmayla (kimyasal etki) diş yüzeyi kaybı olarak belirtilirken, ‘eroziv diş aşınması’ kimyasal-mekanik işlemlerin sonucuyla görülmektedir (1).

Dental erozyon diş çürüğünün aksine bakteri olmaksızın kimyasal faktörlerle dişteki geriye dönüşümsüz sert doku kaybı olarak tanımlanmıştır (2,3). Mineralize diş yapısında meydana gelen çözünme, iç ve diş kaynaklardan ağız boşluğununa gelen asitlerle ilişkilidir (4). Tekrarlayan asit atakları yalnızca diş yüzeyinde yumuşamaya yol açmayıp, diş yüzey kaybına da neden olmaktadır. Diğer taraftan dişlerin işlevsel kaybıyla sonuçlanan faktörler; atrizyon, abrazyon ve abfraksiyondur (5). Eroziv diş aşınması yetişkinleri olduğu kadar, adölesan ve çocukların da etkilemektedir. Diş yüzeyi kaybı sonrasında fonksiyonel, estetik, beslenme, dişte hassasiyet, ağrı ve psikolojik sorunlar gözlenmektedir. Bu nedenle eroziv diş aşınmasının çözümü için multidisipliner bir yaklaşım

<sup>1</sup> Dr. Öğretim Üyesi, Kahramanmaraş Sütçü İmam Üniversitesi Diş Hekimliği Pedodonti Anabilim Dalı, aslisdt@gmail.com

## Sonuç

Süt dişlenme dönemindeki çocuklarda görülen erozyon daimi dentisyon için risk faktörü olup, dişlerin zarar görmesini önlemek amacıyla erken tanı ve tedavi önemlidir. Çocuklarda görülen eroziv diş aşınması; diş hassasiyeti, ağrı, okluzyonda değişiklik, beslenme problemleri, estetik, pulpa perforasyonu veya abse bulgusuna kadar birçok klinik probleme neden olabilmektedir (3,10). Eroziv diş aşınması kimyasal, mekanik ve davranışsal faktörlerin neden olduğu multifaktöriyel etkenlerin sonucu görülen bir rahatsızlıktır. Bu amaçla çocuk hastanın erozyona yol açan faktörleri dikkatli bir şekilde değerlendirmeli, ailelerin farkındalığı özellikle arttırmalı, beslenme alışkanlıklarını düzenlemeli, koruyucu önlemler alınmalı, ağız ve diş sağlığı bakımı düzenli kontrollerle gerçekleştirilmelidir. Koruyucu önlemler arasında diyet alışkanlıklarını düzenlemelidir. Hastanın asidik yiyecek ve içecekleri tüketim sıklığı azaltılarak, ana yemeklerle birlikte tüketilmesi önerilmektedir. Hastanın aldığı öğünü ağız içinde tutma alışkanlığından vazgeçirmeye teşvik edilmeli, asidik gıdanın sonra ağız suyla çalkalanmalı ya da su tüketilmeli, ağız içindeki asidik pH'ı nötralize etmek amacıyla peynir gibi alkalen yiyecekler tercih edilmeli, hastanın kullandığı ilaçlardan tablet formunda olanlar ağızda bekletilmeden direkt yutulmalı, gece uyumadan önce asidik gıdaların tüketilmesinden kaçınılmalıdır. Yukarıda saydığımız etkenler ölçüsünde ailelere, çocuk doktorlarına ve çocuk diş hekimlerine büyük görev düşmektedir.

**Anahtar Kelimeler:** Reflü, eroziv diş aşınması, çocuk diş hekimliği

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## Bölüm 3

### DİŞ HEKİMLİĞİNDE ZİRKONYA

Zekkiye EFE<sup>1</sup>

#### ZİRKONYA

Zirkonyum, periyodik cetvelde 4B grubunda bulunan sembolü 'Zr' olan atom numarası 40, atomik ağırlığı ise 91.22 olan geçiş metallerindendir. 1789 yılında Martin Heinrich Klaproth tarafından bulunmuş olup 1824' de Jons Jakob Berzelius tarafından izole edilmiştir (1, 2).

Doğada saf halde bulunmayan zirkonyumun en çok bilinen bileşikleri arasında zirkonyum silikat (Zirkon) ve zirkonyum oksit (Zirkonya) bulunmaktadır. Bu bileşiklerin çeşitli işlemler sonucunda ayırtırılıp saf zirkonyumun elde edilmesinin ardından biyomateryal olarak kullanılabilmektedirler. Zirkonyanın, kimyasal - boyutsal stabilitesinin yanı sıra fiziksel dayanımı ve sertliğinin oldukça iyi olması, paslanmaz çelik alaşımlarına benzer elastik modülünün olması ve biyoyumlu olması biyomateryal olarak tercih edilmesini sağlamaktadır (2, 3). Tıbbi amaçla ilk kez 1969 yılında ortopedi alanında kalça protezlerinde titanyum ve alüminyumun yerine kullanılmıştır. (2). Aşınmaya karşı olan direnci, sertliği, üstün estetik ve optik özellikleriyle birlikte biyoyumlu olması 1990' lardan itibaren diş hekimliği alanında da kullanım yeri bulmasını sağlamıştır (4).

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<sup>1</sup> Uzman Diş Hekimi, Erciyes Üniversitesi Diş Hekimliği Fakültesi Pedodonti A.D., Kayseri, Türkiye, zekiyehidayet@hotmail.com

lacak olan çalışmalar, zirkonyanın kullanım alanının ve şeklinin daha iyi belirlemesine katkı sağlayacaktır.

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## Bölüm 4

### KRON KÖK KIRIKLARI

Tuğba YİĞİT<sup>1</sup>

#### TERMİNOLOJİ, PREVELANS VE ETİYOLOJİ

Kron kök kırıkları mine, dentin ve sementi içermektedir. Kırıklar pulpayı içerme durumuna göre komplike olmayan ve komplike olarak ikiye ayrılmaktadır. Bazı araştırmacılar, sadece kron veya kök kırığına dahil edebilmektedir. Bu nedenle, kron kök kırığı, daimi dişlerde %5 süt dişlerinde %2 oranında görülmektedir. En sık karşılaşılan etiyolojik faktörler düşme, bisiklet ve otomobil kazaları, yabancı cisim yaralanmalarıdır.<sup>(1)</sup>

Ön bölgede direkt travmalar, arka bölgede indirekt travmalar nedeni ile kron kök kırıkları oluşabilmektedir. Arka bölgede bukkal veya oral tüberküllerde fraktür meydana gelebilmekte, sıklıkla pulpa içermeden gingival ataçmanın altına kadar uzanmaktadır. Etkileyen kuvvetin doğrultusu kırık tipini belirlemektedir.<sup>(2)</sup>

Kron kök kırıkları iatrojenik nedenlerle de oluşabilmektedir. Özellikle premolar, molar bölgelerinde, kök kanal dolgusu sonucu oluşan lateral basınç, post simantasyonu, post korozyonu ve uygun olmayan dolgular vertikal kron kök kırıkları oluşturabilmektedir. Bu nedenle radyolojik ve klinik semptomlar iyi bir şekilde tanımlanmalıdır.<sup>(3)</sup>

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<sup>1</sup> Doktor Öğretim Üyesi, Uşak Üniversitesi Diş Hekimliği Fakültesi, tugba.yigit@usak.edu.tr

Diş 3-4 hafta sonra endodontik tedavi, 1-2 ay sonra post destekli kron planlanabilmektedir.<sup>(16)</sup>

Cerrahi ekstrüzyon uygulanmış 5 yıl takipli çalışmalarında, kök rezorpsiyonu görülmemiş veya sınırlı boyutta tamir ile ilişkili rezorpsiyon rastlanmıştır.<sup>(17)</sup> Başka bir çalışmada, 19 cerrahi ekstrüze dişin 10 yıl takibi yapılmış, sadece bir dişte servikal rezorpsiyon görülmüştür.<sup>(18)</sup> Yapılan bazı çalışmalarda ve iki sistematik derlemede, yöntemin hızlı ve güvenli olduğu vurgulanmıştır. Ancak pulpa vitalitesi korunamamaktadır.<sup>(19,20)</sup>

## **5. VİTAL KÖKÜN BIRAKILMASI**

Restorasyonun uygun olmadığı vakalarda, apikal parçanın çelmesi alveol kemiğin genişliği ve yüksekliğinde önemli kayıplara neden olmaktadır.<sup>(4)</sup> Büyüme ve gelişimi devam eden hastalarda, dental implantların çenelerin büyümeye bağlı olarak yer değiştirebileceği ve uygulandığı bölgedeki büyümeyi olumsuz etkileyeceği nedeni ile kullanımını uygun olmadığı için<sup>(21)</sup> vital kökün bırakılması alveol hacminin korunması açısından ideal bir tedavi yöntemi olarak görülmektedir.<sup>(4)</sup>

## **6. DİŞİN ÇEKİMİ**

Çekim sonrası alveol kemiğin hızlı bir şekilde rezorbe olacağı unutulmamalıdır. Vital kökün bırakılması daha iyi bir alternatifdir. Büyüme gelişimin devam ettiği hastalarda, ortodontik olarak yerin kapatılması<sup>(4)</sup> veya ototransplantasyon<sup>(4,22)</sup> çekim sonrası planlanabilmektedir.

**Anahtar Kelimeler:** Dental travma, kron kök kırıkları

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## Bölüm 5

# SENDROMİK OLMAYAN DİŞ AGENEZİSİNİN GENETİK ETİYOLOJİSİ

**Burcu GÜÇYETMEZ TOPAL<sup>1</sup>**  
**Mehmet ÜNAL<sup>1</sup>**

## GİRİŞ

Diş agenezisi en sık görülen konjenital dental anomalilerden biridir ve diş hekimliği için multidisipliner yaklaşım açısından önemlidir. Diş agenezisinin etiyolojisinde radyoterapi, ilaç uygulamaları, enfeksiyon hastalıkları, travmalar, endokrin ve intrauterin rahatsızlıklar ve genetik yatkınlık gibi birçok etkenin rol oynadığını inanılmaktadır (1). Diş agenezisi olguları genetik olarak, “sendromla ilişkili olmayan” ya da “sendromla ilişkili” olarak sınıflandırılmıştır (2,3).

Sendromik olmayan diş agenezisi vakalarının genetik olarak incelemelerinde Wingless-tip MMTV İntegrasyon Ailesi (WNT) yolunda; Dickkopf WNT Sinyal Yolu Inhibitörü 1 (DKK1), Kringle Transmembran Proteini 1 (KREMEN1), WNT Üyesi 10A (WNT10A), WNT Üyesi 10B (WNT 10B), Düşük Yoğunluklu Lipoprotein Reseptörü ile İlişkili Protein 6 (LRP6), Axis İnhibitor Protein 2 (AXIN2), Msh Homeobox 1 (MSX1) genlerinde, Transforming Growth Factor-  $\beta$  (TGF $\beta$ ) yolunda; Paired Box 9 (PAX9), Gremlin 2 (GREM2), Kemik morfogenetik proteini 4 (BMP4), Latent transforme edici büyümeye faktörü beta bağlayıcı protein 3 (LTBP3) genlerinde, Ektodisplazin A (EDA) yolunda;

<sup>1</sup> Dr. Öğr. Üyesi, Afyonkarahisar Sağlık Bilimleri Üniversitesi, Diş Hekimliği Fakültesi, Pedodonti Anabilim Dalı

bilmektedir. Bundan yola çıkarak, diş hekimlerinin diş agenezisi olgularında hastanın oral rehabilitasyonunun yanı sıra, ilişkili genler vasıtasiyla diş agenezisine eşlik edebilecek olası patolojilerre odaklanmaları da önem arz etmektedir.

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