BÖLÜM 5

ENDODONTİDE KONİK IŞINLI BİLGİSAYARLI TOMOGRAFİNİN (CBCT) KULLANIMI

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GİRİŞ

Radyografik inceleme, genel endodontik tanı ve tedavi planlama sürecinin önemli bir bileşenidir. Yıllar boyunca, periapikal ve panoramik görüntüleme yöntemleri bu radyolojik bilgiyi sağlamıştır. Bu görüntüleme yöntemleri değerli bilgiler sağlamasına rağmen, 2 boyutlu görüntü oluşturması bunların kullanımını sınırlandırır. Anatomik oluşumların çakışmasının sonucu olarak anatomik varyasyonların veya patolojik lezyonların görüntülenmesi engellenebilir.[1]

Konik ışınlı bilgisayarlı tomografi (CBCT) cihazı 1982'de anjiyografi için üretilmiştir ve bu cihazların gelişimi günümüzde de devam etmektedir.[2] Diş hekimliği kullanımı için 1997 yılında ilk CBCT cihazı üretilmiştir.[3] Diş hekimliğinde CBCT'nin tanıtılması, bize geleneksel görüntüleme tekniklerinin limitasyonlarının üstesinden gelen görüntüleme yöntemini sunmuştur. Son 15 yılda, CBCT teknolojisi hızla gelişerek, klinisyenlerin nispeten düşük radyasyon dozları kullanarak dişlerin ve maksillofasiyal kemiklerin yüksek çözünürlüklü görüntülerini elde etmelerini sağlamıştır. CBCT görüntülemesi, endodontik tanı ve tedavi planlaması, implant tedavi planlaması, cerrahi ve ortodontik tedavi planlaması, paranazal sinüslerin değerlendirilmesi, temporomandibular eklemler, intraosseöz patoloji, gömülü dişler gibi dentomaksillofasiyal teşhislerde kullanılmaktadır.[1]

Apikal Periodontitis'in Teşhisi

Endodontik tedavi öncesi hastanın ilk değerlendirmesinde intraoral radyografiler kullanılmalıdır. 2 boyutlu görüntüleme yöntemleri, kolay ulaşılabilirliğiyle, nispeten ucuz olmasıyla düşük radyasyon dozlarında değerlendirmeye olanak sağlar. Fakat bu görüntüleme yöntemlerinde anatomik oluşumların üst üste binmesi, geometrik bozulmaların görülmesi ve bazı anatomik yapıların yanlış yorumlanması bu görüntüleme yöntemlerinin dezavantajlarıdır.[4] Önceki dönemlerde yapılan çalışmalarda kemikteki lezyon boyutunun kortekse kadar ulaşmadığı zaman,

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bu da sonrasında daha uygun tedavi planlaması yapılmasına olanak sağlamıştır.[81] Daha yakın tarihli klinik çalışmalarda da benzer sonuçlar bulunmuştur.[82–85] Konvansiyonel radyografilerin sınırlı bilgi sağladığı durumlarda, CBCT kök rezorpsiyonların doğasını değerlendirmek için ek bir yöntem olarak düşünülmelidir ve böylece kök rezorpsiyonlarına doğru tanı koyulmasına ve doğru tedavi yönteminin uygulanmasına yardımcı olur.[59]

SONUÇLAR

CBCT ile elde edilen görüntülerin, doğru tanıya ulaşmada kolaylık sağlayacağı, tedavi planlamasında daha güvenli ve doğru yaklaşımlara yönlendirebileceği ve aynı zamanda tedavi sonucuna olumlu bir etkisi olabileceği aşikardır. Bununla birlikte, CBCT görüntüleme artan radyasyon dozu anlamına gelmektedir ve bu nedenle, CBCT üç boyutlu bir değerlendirme ihtiyacının şart oluğu zamanlarda düşünülmelidir. Hasta mümkün olan en az miktarda radyasyona maruz bırakılmadır. CBCT incelemesine karar verdiğimizde, faydası risklerinden daha fazla olmalıdır.

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