

# PROTETİK DİŞ TEDAVİSİNDE DİJİTAL TEKNOLOJİLER

## 2. BÖLÜM

Filiz YAĞCI<sup>1</sup>

### GİRİŞ

Bilgisayar destekli tasarım (computer-aided design-CAD) ve bilgisayar destekli üretim (computer-aided manufacturing-CAM) sistemleri ilk kez 1950'lerde havacılık ve otomotiv sanayisinde kullanılmak üzere Amerika Birleşik Devletleri Hava Kuvvetleri tarafından geliştirilmiştir.<sup>1</sup> Dr. Francois Duret ise CAD/CAM sistemlerini diş hekimliğine uygulayan ilk kişidir. Bir CAD/CAM cihazı geliştirerek 1984 yılında patentini almıştır.<sup>1,2</sup> Diş hekimliği kullanımı için üretilen ilk ticari sistem ise CEREC (Dentsply Sirona)'dir. CEREC siteminde optik tarama ile aynı gün seramik bir dental restorasyonun üretilip hastaya teslim edilmesi 1985 yılında Zürih Üniversitesi'nde gerçekleşmiştir.<sup>3</sup> İlk CAD-CAM sistemlerinin kullanımı sadece inley, onley ve tek kronların üretimi ile sınırlıyken, günümüzde implantlar, implant dayanakları, kısmen veya tam dişsiz hastalar için sabit ve hareketli protezler, cerrahi rehber plaklar vb. üretilebilmektedir. CAD/CAM sistemleri ile restorasyon üretiminin geleneksel yöntemlerle karşılaştırıldığında daha hızlı ve pratik olduğu aynı zamanda doğruluğunun da daha yüksek olduğu öne sürülmüştür.<sup>4-6</sup>

<sup>1</sup> Dr. Öğr. Üyesi, Erciyes Üniversitesi Diş Hekimliği Fakültesi Protetik Diş Tedavisi AD. ftesar@erciyes.edu.tr

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