

BÖLÜM 17

YÜZ ESTETİĞİNDE LAZER UYGULAMALARI



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GİRİŞ VE TARİHÇE

Lazer kelime olarak radyasyon emisyonu ile uyarılmış ışık amplifikasyonu (Light Amplification by the Stimulated Emission of Radiation) kelimele-
rinin İngilizce kısaltmasıdır ve lazerin çalışma prensibini tanımlamakta-
dır(1).

Lazer teknolojisinin teorik temelleri ilk olarak 1917 yılında Einstein ve daha sonra 1950'lerde kuantum fiziğiyle ilgili çalışmaları ile 1964 yılında Fizik Dalında Nobel Ödülü alan Townes, Gennadiyevich ve Mikhailovi-
ch tarafından tanımlanmıştır(2). İlk lazer cihazı ise 1960 yılında Maimen tarafından geliştirilmiştir ve Maimen lazer ortamı için yakut (ruby lazer) kullanmıştır(3). 1961 yılında Neodmiyum-doped (Nd): glass lazer geliştiri-
lmıştır(1). Flocks ve Zweng(4) ruby lazeri insanlarda göz tedavisi için kul-
lanmaya başlamışlardır. 1964 yılında argon iyon (Ar) ve neodmiyum-do-
ped yttrium-aluminyum-garnet (Nd:YAG) lazerler geliştirilmiştir(1).

1965'de ise karbondioksit (CO₂) lazer geliştirilmiştir ve 1968 yılında Polanyi(5) CO₂ lazerin hedefe transferini sağlamak amacıyla eklemli kol olarak adlandırılan bir teknik geliştirmiştir. Böylece Polanyi ve Jako CO₂ lazeri vokal kord papillomatozisini ablate etmek için kullanmışlar(5, 6). Bu tarihten itibaren lazerler Otolaringoloji ve baş boyun cerrahisinde kul-
lanılmış ve daha spesifik alanlarda da zaman içerisinde kullanımı yaygın-
laşmıştır.

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uygun koruyucu gözlük kullanmalıdır. Hastanın gözleri de aynı şekilde korunmalıdır(2).

SONUÇ

Lazer son yıllarda estetik cerrahi işlemlerin önemli bir parçası haline gelmiştir. Lazer teknolojisi, 1960 yılında ruby lazer ve 1965 yılında CO₂ lazerin geliştirilmesinden itibaren çok yol katetmiştir. Cilt yenilemede ablatif lazerlerden, nonablatif sistemlere ve son olarak da fraksiyonel cilt yenilemeye hızlı bir geçiş olmuştur. Özellikle nonablatif ve fraksiyonel ablatif cilt yenileme yöntemleriyle cilt yaşlanması sonucu ortaya çıkan birçok problem güvenli ve etkili bir şekilde tedavi edilmektedir. Klinik kullanımında her lazer hedeflenen biyolojik kromofora bağlı olarak bir aktivite spektrumuna sahiptir. Bu yüzden de cilt yaşlanması ile ilgili daha fazla problemi çözebilmek adına lazer tedavisi uygulayan hekimlerin birçok lazer tipine ve bunların klinikte kullanımına hakim olması gereklidir.

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