Bölüm 6

ARTROJENİK KAS İNHİBİSYONU VE TEDAVİ YAKLAŞIMLARI

Gürkan GÜNAYDIN[1]

GİRİŞ

Kuadriseps kas fonksiyonu, alt ekstremitede uygun yürüyüş paterni ve enerji aktarımı için kritik öneme sahiptir (Hurley, 1999; Torry & ark., 2000). Yürüyüşün ağırlık aktarma fazında diz ekleminin optimal normal eklem hareketinin sağlanması, kuadriseps kasının ekzentrik olarak kasılabilme yeteneğine bağlıdır (Torry & ark., 2000). Kuadriseps disfonksiyonu olan bireylerde kasın ekzentrik kasılma yeteneğinin bozulacağı ve bunun da diz ekleminin mekaniğini negatif yönde etkileyeceği ifade edilmiştir (Harkey, Gribble & Pietrosimone, 2014; Palmieri-Smith & Thomas, 2009). Kuadriseps kasında meydana gelen disfonksiyon, osteoartrit, ön diz ağrısı, menisküs patolojileri ve ön çapraz bağı yaralanması gibi çeşitli diz patolojilerine yol açmaktadır (Hart & ark., 2010; Lewek, Rudolph & Snyder-Mackler, 2004; Mizner & ark., 2005; Suter, Herzog & Bray, 1998). Bu patolojilere sıklıkla kuadriseps kası zayıflığı ve atrofisi eşlik etmekte (Akima, Hioki & Furukawa, 2008; Brandt & ark., 2000; Callaghan & Oldham, 2004) ve bu süreç uzun süre devam etmektedir (Ingersoll & ark., 2008; Palmieri-Smith, Thomas & Wojtys, 2008). Bu tablo rehabilitasyon esnasında hekim ve fizyoterapistler için büyük bir sorun oluşturmaktadır. Çünkü hastaların eski fonksiyonel seviyelerine dönebilmesi kuadriseps kasında oluşturulacak restorasyona bağlıdır (Gabler, Kitzman & Mattacola, 2013).

Hastalarda görülen ısrarlı kuadriseps kas zayıflığı artrojenik kas inhibisyonu olarak adlandırılan bir nöromusküler mekanizmaya bağlanabilir. Artrojenik kas inhibisyonu, başlangıç olarak diz eklemi ve çevresinde meydana gelen hasar sonrası eklemin daha fazla zarar görmesini engellemek adına koruyucu bir mekanizma olarak görev yapan refleks bir yanıttır. Ancak normale dönmesi zaman aldığı için rehabilitasyon sırasında kuadriseps kasının kuvvetlendirilmesi için bir set oluşturur (Hopkins & Ingersoll, 2000). İlginç bir şekilde artrojenik kas inhibisyonunda kassal veya sinirsel inervasyonda yapısal bir hasar olmamasına

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Bantlama

Güvenli ve pratik olarak uygulanabilen bantlama tekniğinin pozitif etkileriyle bütünleyici tedavi yaklaşımlarından biri olduğu gösterilmiştir (Donec & Kriščiūnas, 2014; Oktas & Vergili, 2018; Yuksel, Unver & Karatosun, 2016). Bantlama klinikte ödem ve ağrının azaltılması ve motor fonksiyonun arttırılmasında tercih edilmektedir (Thelen, Dauber & Stoneman, 2008). Kuadriseps fonksiyonunu arttırdığını gösteren çokça çalışma olmasına rağmen (Aktas & Baltaci, 2011; Anandkumar, Sudarshan, & Nagpal, 2014; Aytar & ark., 2011; Kim & Lee, 2013) artrojenik kas inhibisyonundaki etkinliği tartışmalıdır (Sonnery-Cottet & ark., 2018).

Kim ve arkadaşları artrojenik kas inhibisyonlu hastalarda gerçekleştirdikleri çalışmada, bantlamanın vastus medialis H refleksi yanıtı ve maksimum istemli kontraksiyonu değiştirmediğini belirtmiştir (Kim & ark., 2017). Benzer şekilde Oliveira ve arkadaşları da ön çapraz bağ cerrahisi sonrası uygulanan bantlamanın, kuadriseps kası nöromusküler performansını etkilemediğini ifade etmiştir (Oliveira & ark., 2016). Bulunan sonuçlar bantlama tekniğinin artojenik kas inhibisyonunda izole olarak olmasa da destekleyici bir yaklaşım olarak tercih edilebileceği fikrini doğurmaktadır.

Bu bölümde cerrahi ya da yaralanma sonrası sıklıkla karşılaşılan ve rehabilitasyon sürecini sekteye uğratabilen, hastalarda fonksiyon ve ciddi iş gücü kaybı yaratabilen artrojenik kas inhibisyonu ve tedavi yaklaşımları ele alınmıştır. Özetlenen tedavi yaklaşımlarının sonuçlarının izole olduğu, en etkin tedavinin hastanın gereksinimlerine göre hazırlanan bütüncül bir tedavi yaklaşımı olması akıllarda tutulmalıdır. Her patolojide olduğu gibi artrojenik kas inhibisyonunda da en doğru tedaviyi uygulamak için en yeni ve kanıt değeri yüksek literatür bilgisinin takip edilmesi gerekmektedir.

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