43. BÖLÜM

GLENOHUMERAL İNTERNAL ROTASYON DEFİSİTİ (GIRD)

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GİRİŞ

Glenohumeral iç rotasyon defisiti (GIRD), atış eylemi gerçekleştiren genellikle beyzbol, softbol, tenis ve yüzme sporcularında omuzun internal rotasyon (IR) kaybı yaşadığı adaptif bir süreçtir (1-3). Bugün için GIRD, kontralateral omuzla karşılaştırıldığında >20° IR kaybı şeklinde tanımlanabilir (3). Bununla birlikte, tüm GIRD'ler patolojik değildir ve omuzların total rotasyonel hareketi (TRM) simetrik olduğunda, eşlik eden omuz patolojisi olmaksızın diğer omuza göre azalmış IR görülebilir (4). Bu durum kısmen, hareket yayını daha posteriora kaydıran artmış humerus retroversiyonuna bağlıdır ve yapılan spora karşı omuz eklemindeki adaptasyon olarak tanımlanır (5). Aksine patolojik GIRD, kontralateral omuza kıyasla TRM' de >5° kayıp olduğunda mevcuttur. Bu 5°'lik değişiklik, sporcularda azalmış omuz kuvveti ve artmış yaralanma oranları ile ilişkilendirilmiştir (6).

İlk olarak artmış eksternal rotasyon (ER) ve azalmış IR› nin fiziksel muayene bulguları 1969 yılında atıcılık sporcularının omuzlarında tanımlanmıştır (7). Bennett, bugün için inferior GH ligamentinin (IGHL) avülziyonuna bağlı geliştiği bilinmekte olan ve baş üzeri hareket gerçekleştiren sporcuların posteroinferior glenoid-kemik çıkıntısında gözlenen "Bennett lezyonu" isimli patolojik bulguyu tanımlayan ilk kişiydi (8). Davidson ve ark. baş üzeri hareket gerçekleştiren sporcularda omuz artroskopisi sırasında saptanan eklem içi patolojiyi tanımlamak için iç sıkışma anlamına gelen "internal impingement" terimini tanımladı (9). Burkhart ve ark.'nın hasar görmüş fırlatma hareketini gerçekleştiren omuzla ilgili üç vakalık serisinden sonra GIRD'deki patolojik süreç ayrıntılı tanımlandı. Bu seri, kinetik fırlatma zinciri ve skapular diskinezi dahil olmak üzere halihazırda atıcılık sporcularının tedavisine rehberlik etmek için kullanılan birçok kavramı açıklığa kavuşturdu (10).

GIRD'de önde gelen patolojik süreç, baş üstü fırlatma hareketi ile ortaya çıkan tekrarlayan itme nedeniyle posterior kapsül ve rorator manşet gerginliğidir. Maksimum abduksiyonda artmış ER elde etmenin fırlatma hızının artmasına yardımcı olduğu düşünülmektedir. Atış sırasında, biyomekanik çalışmalar omuz ER'nin 160°'yi, IR ivmesinin 6.000°/ saniyeyi ve IR torkunun 60 N/m'yi geçebileceğini göstermiştir. Bu kinematik aşırılıklar, rotator manşet, eklem kapsülü ve labrum dahil olmak üzere omzun statik ve dinamik stabilizatörlerine yüksek miktarda baskı uygular (11, 12). Tek bir travmatik olay omuz yaralanmasına yol açabilse de çoğu durumda etken posterior labral yırtıklar, kısmi eklem taraflı posterosuperior rotator manşet yırtıkları ve superior labral anterior-posterior (SLAP) yırtıklardır. Omuz patolojisine ek olarak, hastalar ayrıca skapular

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omuzda TRM' nin karşı omuza göre azalmasıdır ve tedavisi tartışmalıdır. Patolojik GIRD oluşumunu engellemek için posterior germe egzersizlerinin önemi vurgulanmıştır. Cerrahi tedavi seçeneklerinde SLAP ve Rotator manşet yırtıklarının onarımı tartışmalıyken artroskopik posterior kapsül gevşetme spora geri dönüş oranları açısından önerilebilmektedir (29).

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