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BÖLÜM

1

Ortopedik Rehabilitasyona Giriş ve Temel Kavramlar

Gözde BAŞBUĞ[1]

Ortopedik rehabilitasyon, kas-iskelet sistemini etkileyen travmatik, dejeneratif, inflamatuvar ve konjenital patolojiler sonrasında bireyin fonksiyonel kapasitesini en üst düzeye çıkarmayı hedefleyen, multidisipliner ve bilimsel temellere dayalı bir sağlık hizmeti alanı olarak tanımlanmaktadır. Bu alan, yalnızca yapısal iyileşmenin sağlanmasıyla sınırlı kalmayıp, bireyin günlük yaşam aktivitelerine, sosyal rollerine ve üretkenliğine yeniden katılımını amaçlayan bütüncül bir yaklaşımı temsil etmektedir (1). Ortopedik rehabilitasyonun temelini oluşturan kavramsal çerçeve, biyomekanik, kinezyoloji, doku iyileşmesi ve motor kontrol ilkelerinin klinik uygulamalarla bütünleştirilmesine dayanmaktadır (2).

Kas-iskelet sistemi bozuklukları dünya genelinde en sık görülen fonksiyon kaybı nedenleri arasında yer almakta olup, ağrı, hareket kısıtlılığı ve yaşam kalitesinde belirgin azalma ile ilişkilendirilmektedir (2). Rehabilitasyon süreci, hastalığın veya yaralanmanın akut döneminden başlayarak kronik evreye kadar uzanan

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2

Subjektif Değerlendirme

Hatice GÜL[1]
Suat EREL[2]

Subjektif değerlendirme, hastanın anlatısına ve klinisyen izlenimlerine dayanan, hasta bildirimine dayalı sonuç ölçüm yöntemleri aracılığı ile zenginleşen ortopedik değerlendirmenin ilk basamağıdır. Subjektif değerlendirme ile objektif testlerin yakaladıklarının ötesinde hasta öncelikleri ve tedavi hedefleri belirlenebilir, hasta perspektifinden ilgili sağlık durumunun algılanan sonuçları gözlenebilir. Subjektif değerlendirme, hangi objektif testlerin yapılacağına yönelik bilgiyi üretmek için oldukça kullanışlıdır. Bu nedenle müdahale planının gerçekçi bir biçimde şekillenmesi için önemli bir basamaktır. Subjektif değerlendirme klinik akıl yürütme ve kişi merkezli rehabilitasyonun omurgasını oluşturur (1).

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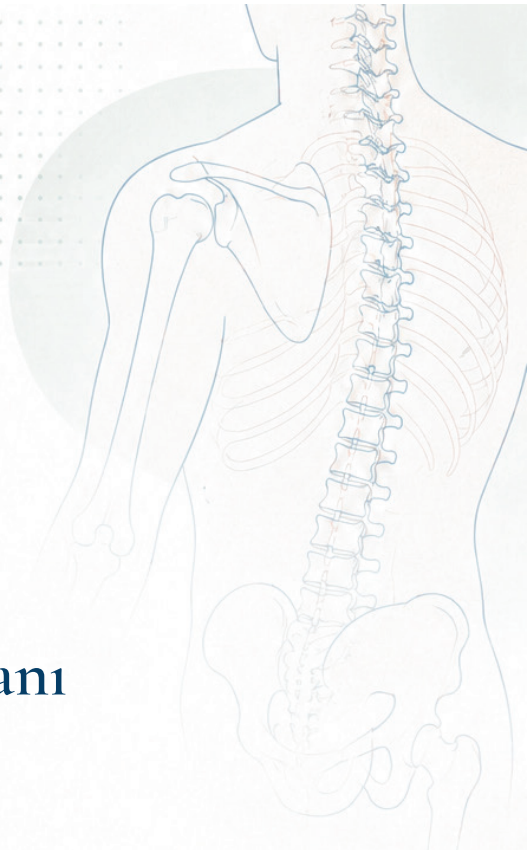
BÖLÜM

3

Ortopedik Değerlendirme ve Tanı Yöntemleri



Gülnihal METİN[1]
Suat EREL[2]

1. Objektif Fiziksel Değerlendirme

Objektif fiziksel değerlendirmeler, fizyoterapistlerin gözlem ve ölçüme dayalı bulgular elde ettiği, subjektif verileri destekleyen değerlendirme yöntemleridir. Bu aşama; gözlem, palpasyon, ölçümler, özel testler ve nörolojik değerlendirme basamaklarını içerir. Gözlem ile postür, eklem dizilimi, deformite varlığı, şişlik ve kas asimetrileri değerlendirilirken (1); palpasyon ile hassasiyet, ısı artışı, ödem ve doku bütünlüğü incelenir. Eklem hareket açıklığı ve kas kuvveti gibi parametreler objektif ölçüm araçlarıyla nicel olarak belirlenir. Elde edilen bulgular, klinik hipotezin doğrulanmasına ve uygun tedavi planının oluşturulmasına rehberlik eder (2).

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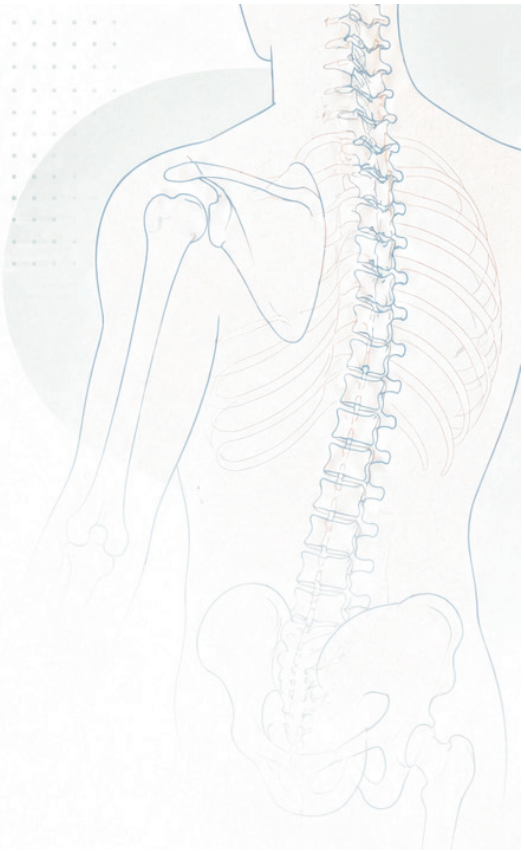

BÖLÜM

4

Fonksiyonel Değerlendirme

İbrahim KARACA[1]
Suat EREL[2]

Ortopedik rehabilitasyonda değerlendirme süreci yalnızca yapısal patolojinin belirlenmesi ile sınırlı değildir. Klinik uygulamada temel amaç bireyin günlük yaşam içerisindeki işlevselliğini, bağımsızlık düzeyini ve toplumsal katılım kapasitesini ortaya koymaktır (1,2). Bu yaklaşım, bireyin sağlık durumunu vücut yapı ve fonksiyonları, aktivite düzeyi ve toplumsal katılım boyutlarıyla birlikte ele alan Uluslararası İşlevsellik, Yetiyitimi ve Sağlığın Sınıflandırılması (ICF) modelinin bütüncül bakış açısı ile uyumludur (2). Bu model doğrultusunda ortopedik değerlendirme yalnızca anatomik veya biyomekanik bozuklukların belirlenmesini değil, bireyin günlük yaşam aktivitelerini gerçekleştirme kapasitesinin ve çevresel etkileşimlerinin de değerlendirilmesini kapsamaktadır (2).

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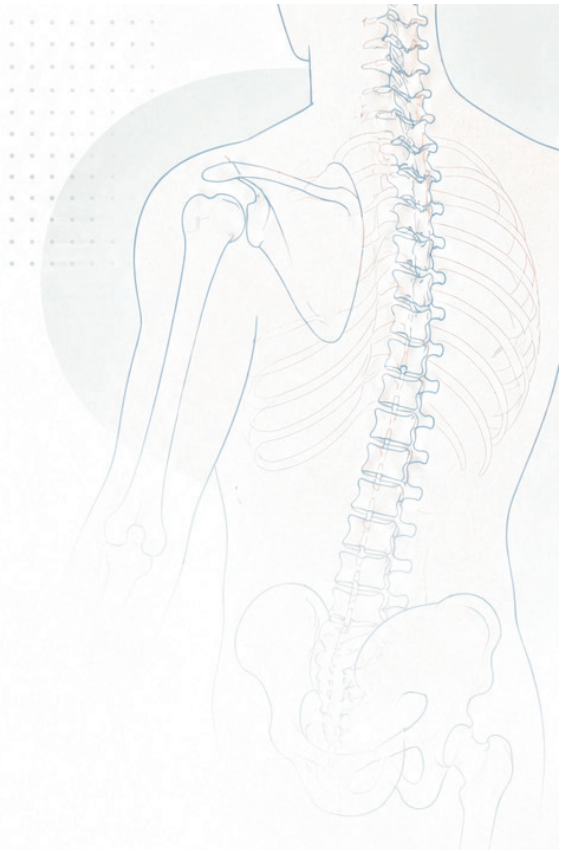
BÖLÜM

5

Görüntüleme Yöntemleri



Pınar ÇAKMAK[1]
Nuran SABİR[2]

1. Radyografi, Manyetik Rezonans Görüntüleme, Bilgisayarlı Tomografi, Ultrasonografi

1.1. Radyografi

X-ışını görüntüleme, kas-iskelet sistemi hastalıklarının değerlendirilmesinde uzun yıllardır kullanılan ve günümüzde de klinik pratiğin temel görüntüleme yöntemlerinden biri olmayı sürdüren bir tekniktir. Kemik yapıların hızlı şekilde değerlendirilebilmesi, düşük maliyetli olması ve sağlık hizmeti sunulan birçok merkezde kolaylıkla uygulanabilmesi nedeniyle çoğu durumda ilk basamak görüntüleme yöntemi olarak tercih edilmektedir. Radyografi; kemikler, eklemler ve kısmen çevre yumuşak dokular hakkında bilgi sağlayarak kırık ve çıkıkların

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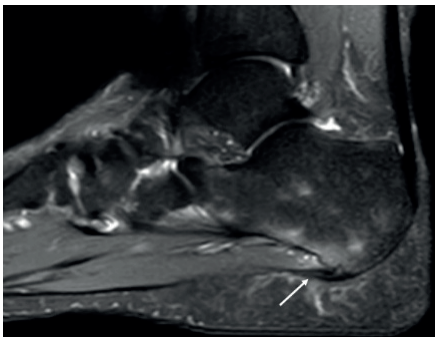

Şekil 43: Sagittal T2 ağırlıklı MR; plantar fasiada kalınlık ve sinyal artışı (beyaz ok)

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BÖLÜM

6

Laboratuvar Testleri: İnflamatuar Belirteçler ve Diğer İlgili Laboratuvar Testleri

Esin AVCI ÇİÇEK[1]

Giriş

Tıbbi biyokimya laboratuvarı; insanlarda, sağlığın değerlendirilmesi, hastalıkların önlenmesi, tanısı, takibi, tedavinin izlenmesi ve prognoz öngörüsü amacı ile insana ait biyolojik numunelerin veya dolaylı olarak ilişkili olduğu numunelerin incelendiği, sonuçların raporlandığı, gerektiğinde yorumlandığı ve ileri incelemeler için önerileri de içeren hizmetlerin sunulduğu laboratuvarları ifade eder (1,2).

Ortopedik değerlendirmede tıbbi biyokimya laboratuvar testleri, fiziksel muayene ve görüntüleme yöntemlerinin sağladığı veriler ile birleşerek tanının kesinleşmesinde kritik bir rol oynar. Tıbbi laboratuvar testleri biyolojik örneklerde gerçekleştirilen deneyler ile analiz edilmektedir. Bu biyolojik örnekler; venöz kan örneğinden elde edilen serum ve plazma, tam kan, idrar ve vücut sıvılarından oluşmaktadır. Bu örneklerde yapılan analizler ile ayırıcı tanı da yapılabilmektedir (3, 4).

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verilerinin klinik bulgularla entegre edilmesi, iyileşme hızını artırmanın yanı sıra komplikasyon riskini azaltarak rehabilitasyon başarısını optimize eder (1-4).

7. Gelecek Perspektifi ve Yeni Biyobelirteçler

Laboratuvar tıbbındaki teknolojik gelişmeler, gelecekte ortopedik rehabilitasyonun çok daha kişiselleştirilmiş bir yapıya bürünmesini sağlayacaktır. Günümüzde rutin pratikte sınırlı olsa da, kıkırdak yıkımını erken dönemde gösteren moleküler belirteçler, mikroRNA analizleri ve ileri genomik testler, bireylerin cerrahiye veya egzersiz protokollerine vereceği biyolojik yanıtı önceden tahmin etmemize olanak tanıyacaktır.

Ayrıca, giyilebilir teknolojilerle entegre edilebilen "point-of-care" (hasta başı) test cihazlarının yaygınlaşması, biyokimyasal takibin sadece hastane ortamında değil, rehabilitasyonun her aşamasında gerçek zamanlı olarak yapılabilmesinin önünü açacaktır. Bu yenilikler, "akılcı laboratuvar kullanımı" prensipleriyle birleştiğinde, ortopedik rehabilitasyonda kanıta dayalı tıp uygulamalarını daha ileri bir seviyeye taşıyacaktır (1-8).

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BÖLÜM

7

Ortopedik Rehabilitasyonda Tedavi Yaklaşımları ve Teknikler

Meryem AKÇAL[1]
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Giriş

Ortopedik rehabilitasyon, kas-iskelet sistemi yaralanmaları, cerrahi girişimler ve dejeneratif hastalıklar sonrasında bireyin fonksiyonel kapasitesini yeniden kazandırmayı amaçlayan kapsamlı bir tedavi sürecidir. Bu süreçte uygulanan tedavi yaklaşımları; ağrının azaltılması, eklem hareket açıklığının korunması veya artırılması, kas kuvvetinin geliştirilmesi ve fonksiyonel bağımsızlığın yeniden sağlanması gibi temel hedeflere yöneliktir. Fizyoterapötik egzersiz uygulamaları, manuel terapi teknikleri, fizik tedavi modaliteleri, ortez ve protez kullanımı ile yardımcı cihaz ve adaptasyonlar ortopedik rehabilitasyon programının önemli bileşenlerini oluşturmaktadır. Bu bölümde, ortopedik rehabilitasyon alanında yaygın olarak kullanılan tedavi yaklaşımları ve klinik uygulama teknikleri güncel literatür ışığında ele alınmaktadır.

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karın ve sırtın derin kaslarını aktive ettiğini ve pelvik ve gövde stabilizasyon eğitimi için etkili olduğunu doğrulamıştır (87).

Subakut spesifik olmayan bel ağrılı hastalarda kor egzersizleri ile güçlendirme egzersizleri karşılaştırılmış ve ağrıyı azaltmada her ikisi de benzer etkiyi gösterse de kor egzersizleri; propriyosepsiyonu, dengeyi ve transversus abdominis (TrA) ile lumbal multifidus (LM) kaslarının kalınlığındaki yüzde değişimi iyileştirmede ve fonksiyonel yetersizliği ve hareket korkusunu azaltmada daha üstün olduğu tespit edilmiştir (88). Kor egzersizlerinin vücudun merkezinde olduğunu bu nedenle hem sağlıklı hem de bozukluğu olan her birey için seviyesine uygun ve semptomlarına cevap verecek bir egzersiz programı uygulanmalıdır.

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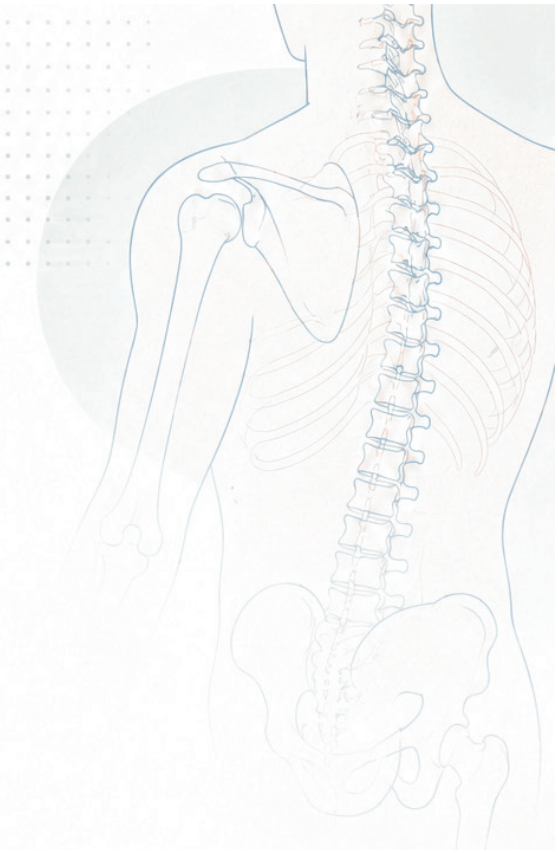
BÖLÜM

8

Manuel Terapi Teknikleri



Oğulcan ÇALIŞKAN[1]

1. Giriş

Manuel terapi, Uluslararası Ortopedik Manipülatif Fizyoterapistler Federasyonu (IFOMPT) tarafından "nöromusküloskeletal durumların yönetimine yönelik, klinik akıl yürütmeye dayanan ve manuel teknikler ile terapötik egzersizleri içeren oldukça spesifik tedavi yaklaşımlarını kullanan, fizyoterapinin özelleşmiş bir alanıdır." olarak tanımlanır (1).

Manuel terapi mekanik, nörofizyolojik ve biyopsikososyal faktörleri içeren kanıta dayalı uygulamalar bütünüdür (1-3). Bu doğrultuda manuel terapi yöntemleri egzersiz, hasta eğitimi ve diğer yaklaşımlarla beraber kullanılarak tedavinin etkisi ve kalıcılığı arttırılmalıdır (4, 5).

Bu tekniklerin amaçları ağrıyı azaltmayı, kas tonusu ve propriosepsiyonu, eklem hareket açıklığını, biyomekaniği, postür ve hareket paternlerini düzenleyerek

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hareketleri iyileştirmek, kas spazmı ve yumuşak doku restriksiyonlarını azaltmak, dolaşım ve doku mobilitesini artırmak, propriosepsiyon ve motor kontrolü desteklemek, postür ve hareket paternlerini geliştirmek, fonksiyonel kapasiteyi artırmak ve hastanın aktif rehabilitasyon sürecine katılımını kolaylaştırmaktır (1,20,26). Güncel literatür, manuel terapinin özellikle kısa dönem için etkili olduğunu göstermektedir (1,5). Bununla birlikte uzun dönem etkiler büyük ölçüde egzersiz, hasta eğitimi ve ergonomik düzenlemeler gibi diğer tedavi bileşenleri ile entegrasyona bağlıdır (1,4). Bu entegre yaklaşım hem yapısal bozuklukları hem de biyopsikososyal bileşenleri dikkate alır (2,3). Etkili sonuçlar; doğru değerlendirme ve endikasyon, uygun teknik seçimi ve bireyselleştirilmiş tedavi planlaması ve iyi eğitimli terapistler ile mümkündür (6).

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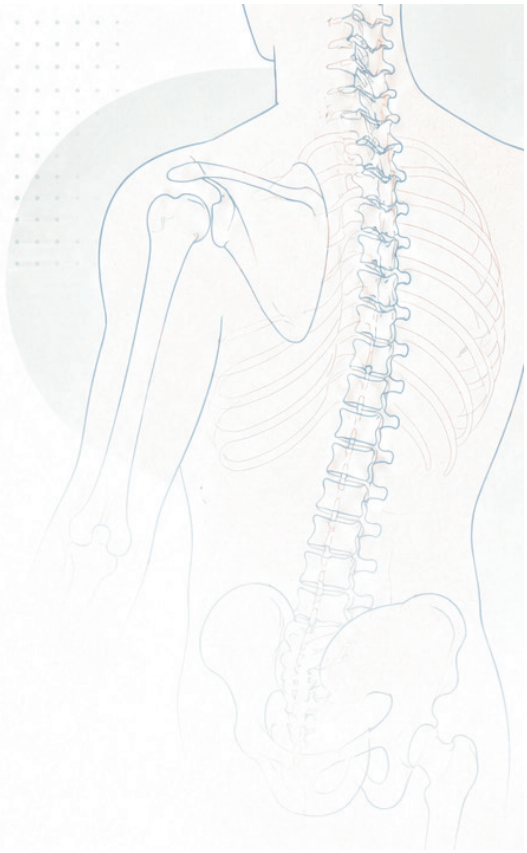
BÖLÜM

9

Fizik Tedavi Modaliteleri



Elif Gül ÇAL[1]
Muharrem Gökhan BEYDAĞI[2]

Fizik tedavi modaliteleri, ortopedik rehabilitasyonda ağrı kontrolü, doku iyileşmesinin desteklenmesi ve fonksiyonel iyileşmenin hızlandırılması amacıyla kullanılan yardımcı tedavi yöntemleridir. Isı ve soğuk uygulamaları, elektroterapi yöntemleri, ultrason, lazer ve şok dalga tedavisi gibi modaliteler farklı biyofiziksel mekanizmalar aracılığıyla kas-iskelet sistemi dokularında terapötik etkiler oluşturur. Bu yöntemler çoğunlukla egzersiz ve manuel terapi uygulamaları ile kombine edilerek tedavi programının etkinliğini artırır. Bu bölümde ortopedik rehabilitasyonda sık kullanılan fizik tedavi modaliteleri ve klinik uygulama alanları incelenmektedir.

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Gebelik, kalp pili, pıhtılaşma bozukluğu, akut enfeksiyon durumlarında kullanılmamalıdır. Ayrıca tedavi bölgesinde malign hastalık varlığında ve epifiz bölgelerine doğrudan uygulama kontrendikedir (55).

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BÖLÜM

10

Ortez ve Protez Kullanımı, Yardımcı Cihazlar ve Adaptasyonlar

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Ortezler, nöromüsküler ve iskelet sistemlerinin işlevini değiştirmek veya desteklemek amacıyla dışarıdan uygulanan cihazlardır; protezler ise eksik bir uzvun ya da vücut bölümünün bütününü veya bir kısmını ikame eden cihazlardır. Ortopedik rehabilitasyonda en uygun ortez–protez reçetesi; biyomekanik hedefler (stabilizasyon, hizalama, koruma, yükün azaltılması, hareket kontrolü), doku toleransı ve hasta bildirimli sonuçlar temelinde belirlenir. Çoğu ortez, düzeltici bir moment oluşturmak üzere birincil ve karşı kuvvetlerin dengelendiği *üç nokta prensibine* dayanır; bu yaklaşım çoğu zaman *tam temas (total contact)* ilkeleri ve *kaldıraç kolunun* optimize edilmesiyle birleştirilir.

Bu bölüm, ortopedik uygulamada yaygın kullanılan başlıca ortez gruplarını (alt ekstremite, üst ekstremite ve spinal ortezler) özetlemekte ve alt ile üst ekstremite protezlerine kısa bir bakış sunmaktadır. Ayrıca, ortopedik rehabilitasyon süreçlerinde kullanılan ortezlerin başlıca endikasyonları ve etkinliklerine ilişkin temel kanıtları kısaca tartışmaktadır.

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Ev Güvenliği ve Yardımcı Cihaz Kullanımına Yönelik Uygulama Kontrol Listesi (Ortopedik Rehabilitasyon Odaklı)

Düşme riski ve çevresel faktörleri değerlendirin: Ev içindeki potansiyel tehlikeleri belirleyin; özellikle banyo ve merdiven güvenliğini önceliklendirin. Uygun durumlarda yazılı planlar oluşturun ve bakım verenlere eğitim verin.

Yardımcı cihazı bireye ve aktiviteye uygun seçin:. Hastanın fonksiyonel durumu ve yapacağı aktivitelere göre uygun yardımcı cihazı belirleyin. Cerrahi sonrası dönemde, yalnızca geleneksel yaklaşımlar yerine fonksiyonel değerlendirmelere dayalı ekipman seçimi yapın; kas kuvveti ve eklem hareket açıklığı (ROM) düzeldikçe cihaz kullanımını yeniden değerlendirin ve gerektiğinde sonlandırın.

Eğitim ve kullanımın doğrulanması: Hastanın yardımcı cihazı güvenli şekilde kullanabildiğinden, takıp çıkarabildiğinden ve bakımını yapabildiğinden emin olun. Mümkünse gerçek yaşam ortamında; transferler, mutfak aktiviteleri ve tuvalet kullanımı gibi günlük yaşam aktivitelerini uygulamalı olarak çalıştırın.

Sonuçların izlenmesi ve yeniden değerlendirme: Günlük yaşam aktivitelerinde bağımsızlığı (örneğin Barthel Endeksi ve Lawton IADL ölçekleri ile), düşme sıklığını ve hastanın bildirdiği efor/ağrı düzeyini düzenli olarak takip edin. Elde edilen sonuçlara göre yardımcı cihaz seçimini ve kullanımını güncelleyin.

Günlük yaşam aktivitelerine yönelik uyarlamalar; yardımcı cihaz temini, beceri eğitimi ve hedefe yönelik ev modifikasyonlarıyla bir bütün olarak ele alınmalıdır. İş ve uğraşı terapisi liderliğinde yürütülen bu programların, ortopedik iyileşme süreciyle paralel giden aşamalı egzersizler ve zamanla cihaz kullanımının azaltılması stratejileriyle desteklendiğinde maksimum etkinlik sağladığı göz önünde bulundurulmalıdır.

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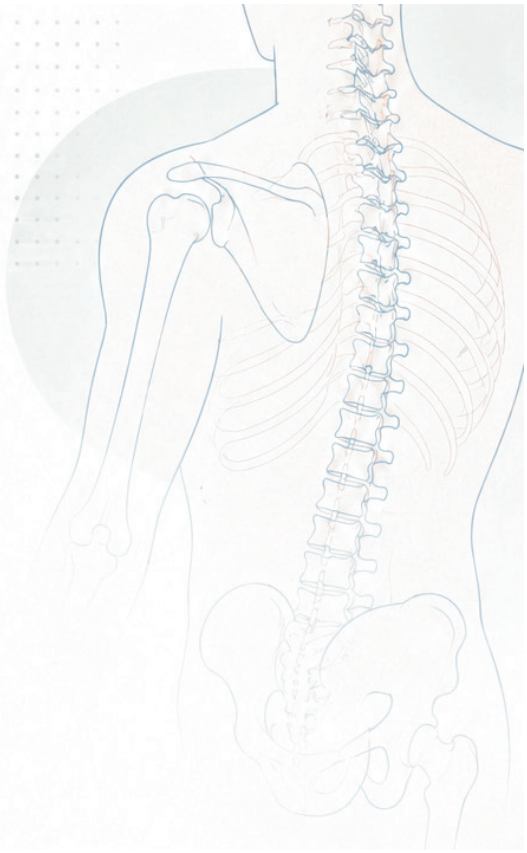
BÖLÜM

11

Bölgesel Ortopedik Rehabilitasyon



Eylem KÜÇÜK[1]
Ertuğrul Deniz KÖSE[2]

Ortopedik hastalıklar, bireyin hareket kabiliyetini, fonksiyonel bağımsızlığını ve yaşam kalitesini doğrudan etkileyen, çok boyutlu klinik problemlerdir. Bu problemlerin değerlendirilmesi ve tedavisinde yalnızca patolojik bölgeye odaklanan yaklaşımlar çoğu zaman yetersiz kalmakta; hareket sisteminin bir bütün olarak ele alındığı, fonksiyonel ve biyomekanik temelli rehabilitasyon stratejilerine olan gereksinim giderek artmaktadır. Bölgesel ortopedik rehabilitasyon yaklaşımı, omurga, üst ve alt ekstremiteyi kapsayan yapılar arasındaki kinetik zinciri esas alarak, ağrının azaltılması, fonksiyonel kapasitenin artırılması ve tekrar yaralanmaların önlenmesini hedefler. Bu bağlamda fizyoterapi ve rehabilitasyon uygulamaları; bilimsel kanıta dayalı değerlendirme yöntemleri, bireye özgü egzersiz programları ve fonksiyonel geri kazanımı merkeze alan müdahaleler ile ortopedik rehabilitasyonun temel yapı taşını oluşturmaktadır. Bu bölümde, omurga ve alt

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Radyolojik değerlendirme yük verdirilerek çekilen ön-arka ve lateral grafilerle yapılır (131).

Tedavi ve Rehabilitasyon:

Metatarsalji tedavisinde ilk basamak konservatif yaklaşımdır. Yük dağılımını düzenlemek ve plantar basıncı azaltmak temel hedeftir. Gastroknemius germe egzersizleri, posterior kas zincirini uzatarak ön ayağa binen yükü azaltabilir

Ayakkabı modifikasyonları - geniş burunlu, düşük topuklu ve rocker-bottom tabanlı ayakkabılar - basınç dağılımını iyileştirebilir

Kişiye özel tabanlıklar ve retrocapital pedler metatars başları altındaki basıncı proksimale kaydırarak ağrıyı azaltır.

Kallus debridmanı geçici rahatlama sağlar; ancak altta yatan biyomekanik neden düzeltilmezse nüks kaçınılmazdır. Kortikosteroid enjeksiyonları seçilmiş vakalarda kullanılabilir; ancak tekrarlayan uygulamalar plantar yağ yastıkçığı atrofisine yol açabileceğinden dikkatli olunmalıdır. Cerrahi tedavi konservatif yaklaşımların başarısız olduğu durumlarda gündeme gelir (131).

Rehabilitasyon sürecinde hedef, yalnız ağrıyı azaltmak değil; yük aktarımını normalize etmek, kas kuvvet dengesini sağlamak ve tekrar eden plantar aşırı basıncı önlemektir. Çünkü metatarsalji, çoğu zaman bir kemik problemi değil yük problemidir.

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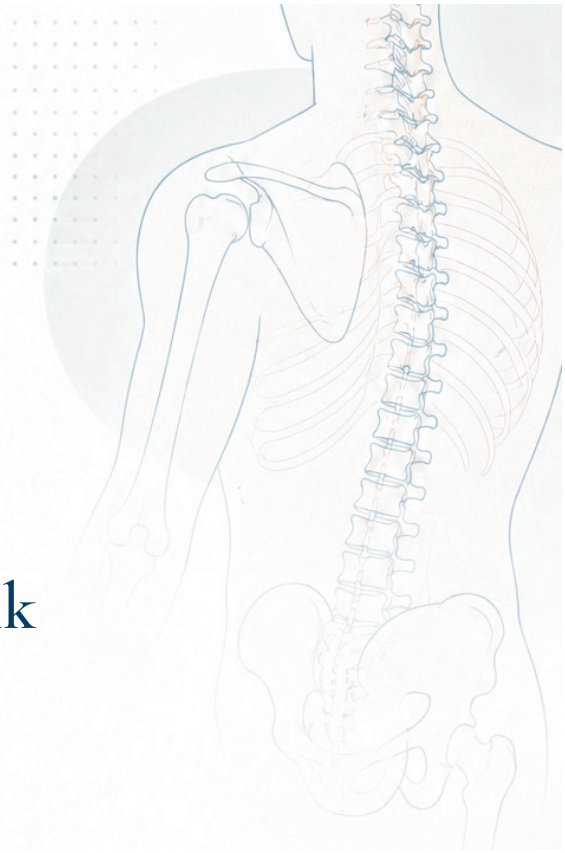
BÖLÜM

12

Pediatrik Ortopedik Rehabilitasyon



Gülsena UTKU UMUT[1]

1. Tanım, Önem ve Multidisipliner Yaklaşım

Pediatrik ortopedi; doğumdan adölesan döneme kadar kas-iskelet sistemini etkileyen doğumsal, gelişimsel veya edinsel bozuklukların fonksiyonel etkilerini minimize etmeyi amaçlayan bir uzmanlık alanıdır. Bu disiplin, yetişkin ortopedisinden iskelet sisteminin dinamik gelişim ve olgunlaşma sürecini temel almasıyla ayrılır (1). Dünya Sağlık Örgütü (DSÖ)'nün İşlevsellik, Yetiyitimi ve Sağlığın Uluslararası Sınıflandırması (ICF) çerçevesinde süreç; yalnızca anatomik yapıların düzeltilmesini değil, çocuğun oyun, eğitim ve sosyal hayata katılımının en üst düzeye çıkarılmasını hedefler (2).

Pediatrik ortopedik rehabilitasyon; epifiz plak aktivitesi ve nöroplastisiteye dayanır. Erken müdahale, gelişmekte olan eklemlerdeki kalıcı deformite ile sekonder bozukluk gelişimini önlerken motor beceri kazanımını destekleyerek günlük yaşam bağımsızlığını artırır (3).

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belirgin şekilde ayrılmaktadır. Rehabilitasyon sürecinde temel hedef; sadece kemik bütünlüğünü korumak değil, çocuğun günlük yaşamına, okuluna ve oyun aktivitelerine en kısa sürede, ağrısız ve güvenli bir şekilde dönüşünü sağlamaktır. Bu süreçte büyüme plaklarının hassasiyetinin gözetilmesi, hareket açıklığının nazik yaklaşımlarla geri kazandırılması ve egzersiz programlarının oyun temelli kurgulanması esastır. Müdahale stratejilerinin etkinliği; ailenin immobilizasyon aşamasında ekstremite dolaşımını ve ödem belirtilerini yakından izlemesi, remobilizasyon aşamasında ise çocuğu doku hasarına yol açabilecek zorlayıcı pasif germelerden koruyarak fonksiyonel kullanımı oyun yoluyla teşvik etmesiyle optimal klinik sonuçlara ulaşmaktadır.

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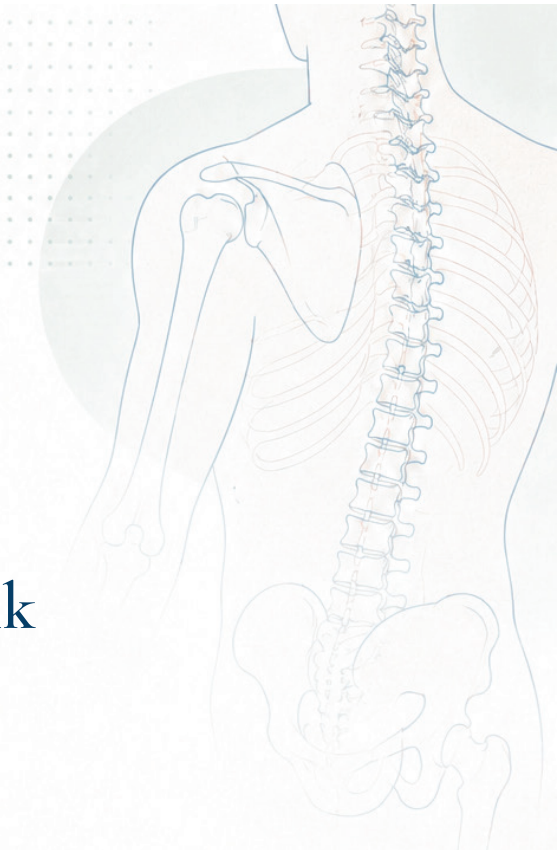
BÖLÜM

13

Geriatrik Ortopedik Rehabilitasyon



Begüm KARA KAYA[1]

Giriş

Yaşam süresinin uzamasıyla birlikte yaşlı nüfus oranı artmakta, buna paralel olarak kas-iskelet sistemi hastalıklarının prevalansı yükselmektedir. Kronik kas-iskelet sistemi bozuklukları, 65 yaş ve üzeri bireylerde frajilite, mobilite kaybı ve bağımsızlığın azalması ile yakından ilişkilidir (1).

Yaşlanma; hücresel yaşlanma, kronik inflamasyon, mitokondriyal disfonksiyon ve rejenerasyon kapasitesinde azalma ile karakterize çok boyutlu bir süreçtir. Bu biyolojik değişimler kemik, kıkırdak ve kas dokusunda yapısal ve fonksiyonel kayıplara yol açar. Osteoporoz, osteoartrit ve sarkopeni, yaşlı bireylerde mobilite kısıtlılığının başlıca nedenlerindendir (1).

Geriatrik ortopedik rehabilitasyonun temel amacı doku patolojisinin ötesine geçerek fonksiyonun korunması, düşmelerin önlenmesi, bağımsızlığın sürdürülmesi

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BÖLÜM

14

Spor Yaralanmalarında Rehabilitasyon

Berivan Beril KILIÇ[1]

Giriş

Spor yaralanmaları, antrenman ve müsabakalardan uzak kalmaya neden olabilen, performansta bozulmanın yanı sıra emosyonel ve sosyal boyutlarda da her yaştan ve düzeyden sporcuyu etkileyen önemli sorunlar arasındadır. Yüksek fiziksel performans talepleri doğrultusunda, bu tür yaralanmaların sporcular arasındaki insidansının genel popülasyondan daha yüksek olduğu epidemiyolojik araştırmalarla ortaya konmuştur (1). Özellikle diz ve omuz yaralanmaları sporcularda en çok maliyet ve zaman kaybına neden olan yaralanmalar arasında gösterilmektedir (2). Bu yaralanmaların neden olduğu fiziksel performans kaybı, yalnızca profesyonel sporcunun bireysel ekonomik durumunu değil, aynı zamanda spor kuruluşlarını da önemli ölçüde etkilemekte olup, bazı çalışmalara göre 74,7 milyon sterlin gibi önemli bir ekonomik kayba ulaşabilmektedir (1). Spor yaralanmalarının ortaya çıkmasında, yaş ve cinsiyet gibi sporcu merkezli intrinsik

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ve fonksiyonel performans kriterlerine dayandırılması, sporcu rehabilitasyonunda klinik başarının en temel anahtarıdır. Ancak unutulmamalıdır ki; her sporcu ve her yaralanma kendine özgü dinamikler barındırır. Bu nedenle, kanıta dayalı protokolleri her sporcunun bireysel ihtiyaçlarına, branşının gerekliliklerine ve psikolojik hazır bulunuşluğuna göre uyarlamak hem başarılı bir iyileşme sağlamanın hem de etkin bir yaralanma önleme yönetiminin en önemli bileşenidir.

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BÖLÜM

15

Romatizmal Hastalıklarda Rehabilitasyon

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1. Romatoid Artrit

Romatoid artrit (RA); etiyolojisi tam olarak bilinmeyen, esas olarak sinovyumu ve periartiküler dokuları etkileyen, kronik, ilerleyici, sistemik ve otoimmün inflamatuar bir hastalıktır. Hastalık, periferik eklemlerde simetrik tutulum gösteren sinovit ile karakterizedir (1). Kronik inflamasyon, zamanla eklem çevresindeki kıkırdak, ligament ve kemik yapılara zarar vererek eklem bütünlüğünün bozulmasına, erozyonlara ve kalıcı deformitelere yol açar. RA, sadece eklemleri değil, akciğerler, kalp ve sinir sistemi gibi birçok sistemi de etkileyen multisistem organ tutulumunun olduğu bir hastalıktır (2).

1.1. Prevalans ve İnsidans

Yapılan bir çalışmada Türkiye'deki RA prevalansı %0,56 olarak tespit edilmiştir. Kadınlarda prevalans %0,89 iken, erkeklerde %0,10 seviyesindedir. Türkiye'deki en yüksek vaka oranının Karadeniz Bölgesi'nde olduğu bildirilmiştir (3).

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Yatış ve uyku pozisyonlarında doğru hizalanmayı sağlamak üzere havlu ruloları veya yastık kullanımı hakkında spesifik yönlendirmeler yapılabilir. Hastaların tüm geceyi tek bir pozisyonda geçirmesi beklenmese de uygun eğitimle birlikte pozisyon değiştirme ve destek materyallerini yeniden yerleştirme alışkanlıkları zamanla uyku rutininin bir parçası haline getirilebilir (79).

AS tanısının getirdiği kısıtlılıklar dikkate alınarak hastanın çalışma ortamı değerlendirilmeli ve bireye uygun ergonomi prensipleri hakkında bilgi verilmelidir (70).

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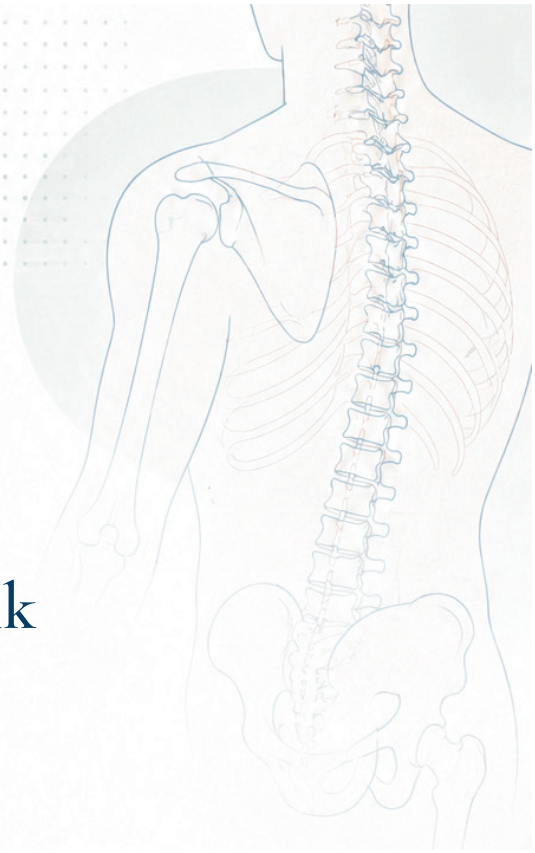
BÖLÜM

16

Travmatik Ortopedik Rehabilitasyon



Masoud AMIR RASHEDI BONAB[1]

1. Multiple Travma Hastalarında Rehabilitasyon

1.1.Giriş

Multiple travma (politravma), aynı anda birden fazla anatomik bölgeyi veya organ sistemini etkileyen, yaşamı tehdit eden yaralanmalarla karakterize karmaşık bir klinik durumdur ve modern travma sınıflandırmalarında yüksek mortalite ve morbidite ile ilişkilendirilmektedir (1,2). Travma bakımındaki cerrahi, anestezi ve yoğun bakım alanındaki gelişmeler sayesinde sağkalım oranları belirgin şekilde artmış, buna karşın hayatta kalan bireylerde uzun süreli fonksiyonel kayıplar, aktivite kısıtlılıkları ve katılım problemleri daha belirgin hâle gelmiştir (3-5). Bu bağlamda rehabilitasyon, multiple travma yönetiminin tamamlayıcı bir unsuru değil, travmanın erken döneminden itibaren entegre edilmesi gereken temel bir tedavi bileşeni olarak kabul edilmektedir. Rehabilitasyonun temel amacı yalnızca

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2.8.Sonuç

Erken ve yapılandırılmış ampute rehabilitasyon programlarının fonksiyonel bağımsızlığı artırdığı ve yaşam kalitesini iyileştirebildiği göz önünde bulundurulmalıdır. Bu bağlamda rehabilitasyon sürecinin başarısı, multidisipliner ekip yaklaşımı, hasta merkezli hedeflerin belirlenmesi ve uzun dönemli izlem ile yakından ilişkilidir. Dolayısıyla, amputasyon sonrası rehabilitasyonun yalnızca erken dönemi kapsayan bir müdahale olarak değil, bireyin fonksiyonel kapasitesini ve toplumsal katılımını sürdürülebilir biçimde destekleyen bütüncül ve süreklilik gösteren bir süreç olarak ele alınması önem taşımaktadır.

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BÖLÜM

17

Ortopedik Rehabilitasyonda Güncel Yaklaşımlar ve Gelecek

Dilara KARA[1]

1. Kanıta Dayalı Uygulamalar (Evidence-Based Practice)

Kanıta dayalı uygulama (KDU), klinik karar verme sürecinde en iyi mevcut bilimsel kanıtların klinisyenin deneyimi ve hastanın tercihleri ile birlikte kullanılması olarak tanımlanmaktadır (Şekil 1) (1).

Ortopedik rehabilitasyon; kas-iskelet sistemi yaralanmaları, cerrahi sonrası iyileşme süreçleri ve fonksiyonel kapasitenin yeniden kazanılması gibi çok boyutlu hedefleri içeren bir alandır. Bu nedenle klinik kararlar çoğu zaman farklı tedavi seçenekleri arasında seçim yapmayı gerektirir. KDU yaklaşımı, fizyoterapistlerin bu seçimleri bilimsel araştırmaların sonuçlarını dikkate alarak yapmasına olanak tanır. Bu yaklaşım sayesinde tedavi stratejileri daha sistematik bir şekilde değerlendirilmekte ve hasta sonuçlarının iyileştirilmesi hedeflenmektedir. Klinik karar verme sürecinde kanıtların etkili bir şekilde kullanılması, hastaların gereksiz, etkinliği kanıtlanmamış veya etik olmayan tedavilerden korunmasını sağlarken zaman ve finansal kaynak israfının önüne geçer (2).

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etmektedir. Robotik rehabilitasyon, sanal gerçeklik ve yapay zekâ gibi dijital sağlık teknolojileri, ortopedik rehabilitasyonda verilen tedavinin hassasiyetini, hızını ve erişilebilirliğini artırmak adına umut vadetmektedir. Bu teknolojik dönüşüm, sadece klinik verimliliği artırmakla kalmamakta; sanal gerçeklik tabanlı gerçek zamanlı geri bildirim sistemlerinde olduğu gibi, hatalı postür ve biyomekaniğin uygulama anında düzeltilmesine imkan tanıyarak birincil korumayı güçlendirmektedir. Sonuç olarak bu dönüşüm, ortopedik rehabilitasyonu salt bir iyileşme sürecinden; veri odaklı, önleyici ve sürekli izlemeye dayanan kapsamlı bir kas-iskelet sağlığı yönetimi anlayışına dönüştürmektedir. Klinik uzmanlığın teknolojik yetkinlikle buluştuğu bu yeni anlayış, yalnızca tedavi sonuçlarını iyileştirmekle kalmayıp aynı zamanda sağlık sistemleri üzerindeki yükü hafifletme ve bireyin yaşam kalitesini kalıcı biçimde yükseltme potansiyeli taşımaktadır.

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