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5 MINUTE IN OFFICE PHYSIOTHERAPY

Faculty/Presenter Disclosure

- **Faculty:** Angele Skinner

- **Relationships with commercial interests:**
  - **Grants/Research Support:** none
  - **Speakers Bureau/Honoraria:** none
  - **Consulting Fees:** none
  - **Other:** none

Objectives

- Identify access to physiotherapy services (resources and barriers)
- Review the principles of responsible therapeutic exercise prescription
- Demonstrate select exercises for specific musculoskeletal conditions that could be provided in office

Musculoskeletal Conditions

- Eleven million Canadians over the age of 12 years old are affected by MSK conditions annually
- Strong evidence exists to support physiotherapy in the treatment of MSK conditions
- Physiotherapy for MSK conditions reduces disability and increases physical function.

Canadian Orthopaedic Care Strategy Group backgrounder report. 2010.

Barriers to Access

- Access to publically funded outpatient physiotherapy services are limited
- Limited Physiotherapy resources in Primary care setting; role of physio in this setting is slowly growing
- Limited time in clinic for PCP to provide complete MSK assessment, education and exercise recommendations/prescription

Access to Physiotherapy

Private Physiotherapy Clinics:

- Extended health insurance or workplace insurance plans
- WCB and MPI coverage
- Pay out of pocket

Publically funded Physio:

- Outpatient Physiotherapy Services HSC Rehab Hospital
- Quick access for conditions meeting clinical/diagnostic criteria
- My Health Teams – Physiotherapy in Primary Care

“Exercise is Medicine”

- Exercise is the first line of intervention for many clinical presentations and has been shown to outperform pharmacotherapy and surgery to manage a wide range of medical, musculoskeletal and psychological conditions

BMJ 2013;347:f5577

Caution

- Need to be careful when providing exercises to clients
- Be sure to help not harm
- Exercise has been shown to be powerful and helpful but if prescribed improperly it can also cause harm

Responsible Exercise Prescription

- Complete MSK assessment (subjective and objective findings)
- Instruct and observe the client performing exercises
- Appropriate dosing of the exercises
- Education on appropriate response to exercise and modifications

FITT principle

- **F**requency – daily or most days (alternate days), 3-4x/week

- **I**ntensity - Exercise is not an “all or nothing” experience
  - Exercises can be modified so that they may not aggravate the pain – smaller ROM, less repetitions, modifications

FITT principle (continued)

- **T**ime/reps - Start small and gradually increase as able - not an exact science, adjust according to response
- **T**ype – client centered, relevant type of exercises will increase engagement

Exercise and pain

- Some pain during and after exercise is normal (1-2 hours)
- Exercises should not aggravate pain for prolonged periods (unable to participate in regular activities, sleep at night or pain continuing into the next day)
- Modify exercises if experiencing too much pain
- Discontinue exercises if even when performed at minimal levels, symptoms are worsening

5 Minute In-office Exercise Prescription

Shoulder

- Most common issues – impingement syndrome, rotator cuff tendinopathy, adhesive capsulitis
- Education and Exercise:
  - Posture – correct positioning of shoulder
  - Supine AAROM → supine AROM flexion
  - Sidely external rotation
  - Supine arm punch →reverse codmans
  - Wall push ups

Shoulder


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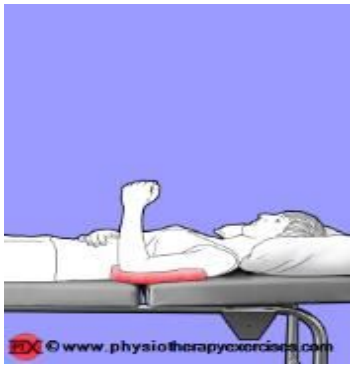
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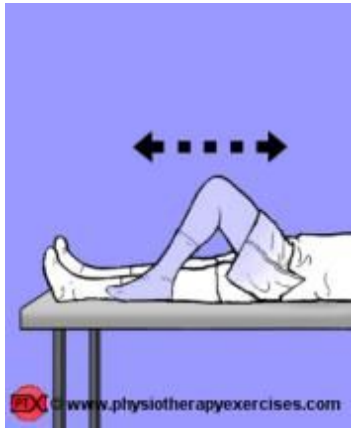
Knee

- Most commonly: OA, biomechanical stress, ligament strain, patellofemoral syndrome

- Education and Exercise:
  - Supine or seated knee flexion and extension
  - Supine SLR
  - Sit to stand – good alignment of knees with toes

Knee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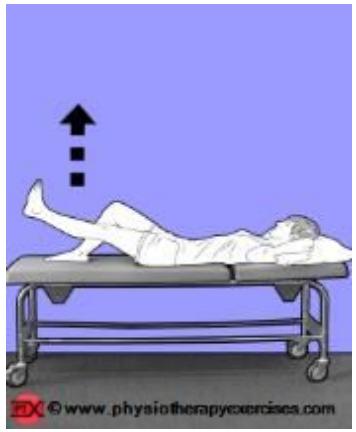
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Hip

- Most commonly: Hip OA, Myofascial/muscular/soft tissue – trochanteric bursitis, gluteal tendinopathy, piriformis syndrome, ITB syndrome. Also consider referred pain from the back and SI joint
- Exercises:
  - Supine or standing hip abduction
  - Bridging
  - Sidely clamshell

Hip


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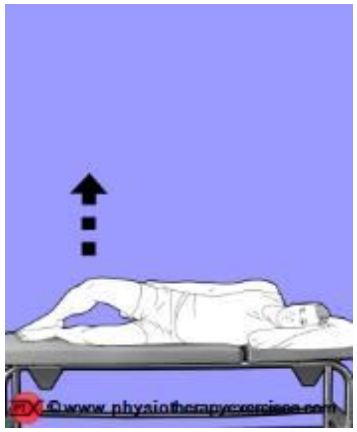
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Low Back Pain

- triage using a clinical assessment
- history-taking, physical examination, and neurological tests
- Screen for ‘red flags’
- Identify yellow flags – psychosocial risk factors for developing chronic pain

Almeida M et al. Med J Aust. 2018; 208(6):272-275
Strudwick K et al. Emerg Med Australas. 2018; 30(1):18-35.

Back Assessment & Management

- No longer do we aim to diagnose a structure at fault and aim our treatment at that particular structure.
- A stratified approach targeting treatment to subgroups of patients based on characteristics to manage low back pain has become popular.
- Centre for Effective Practice Clinically Organized Relevant Exam (CORE) Back Tool

Koes BW, et al. Eur Spine J 2010;19:2075–94 (Level of evidence 1A)
Van Tulder M et al. Eur Spine J 2006;15(Suppl 2):S169–91 (Level of evidence 1A)
Centre for Effective Practice, Gov. of ON

Low Back Pain

- Serious conditions account for 1-2% of people presenting with low back pain
- 5-10% present with specifics causes LBP with neurological deficits (radiculopathy or cauda equina syndrome)
- **Non-specific low back pain** (simple or mechanical) accounts for over 90% of patients presenting to primary care

O'Sullivan, P. Et al. Pain Management Today, 2014, 1(1):8-14
Koes BW et al. BMJ 2006;332:1430–34.

Acute non specific low back pain

- For acute non-specific low back without serious pathology: reassurance, advice to stay active and self-management are best
- Avoid bed rest, and continue with activities as usual.
- Simple self management strategies such as use of heating pad may be suggested

Jorgensen JE et al. BMJ Open. 2018 Jan 23; 8(1):e019742.
Almeida M. Med J Aust. 2018 Apr 2; 208(6):272-275.
NICE guideline November 2016.
O'Sullivan, P. Et al. Pain Management Today, 2014, 1(1):8-14

Acute non specific low back pain

- Reassurance and Education
- There is moderate to high quality evidence that patient education in primary care can provide long term reassurance to patients with acute or subacute LBP.
- Interventions delivered by physicians were significantly more reassuring than those delivered by other primary care practitioners (ie physio or nurse)

Traeger AC, et al. JAMA Intern Med. 2015

Chronic Persistent Low Back Pain

- In chronic low back pain (>12 weeks), exercise therapy has become a first-line treatment and should be routinely used
- All recent clinical practice guidelines endorse exercise therapy in persistent low back pain
- There is no strong evidence available to show that one type of exercise is superior to another

Foster NE et al. Lancet Low Back Pain Series Working Group. Lancet. 2018; 391(10137):2368-2383.
van Middelkoop M. et al. Eur Spine J *2011;20:19–39*

Chronic Persistent Low back pain

- Strong Evidence:
  - Advise people to **stay active**.
  - Advise people with low back pain to **exercise**.
  - Incorporate **individual preferences, needs, and capabilities**

Balagué, Federico, et al. The Lancet 379.9814 (2012): 482-491. Level of evidence 1A
Anthony Delitto et al. Journal of Orthopaedic and Sports Physical Therapy, 2012, 42(4) level of evidence 1A
van Middelkoop M et al. Eur Spine J *2011;20:19–39*

Caution/Good Advice

- Patients should be encouraged to initiate gentle exercise and to gradually increase the exercise level within their pain tolerance.
- Patients should limit/pace any activity or exercise that causes spread of symptoms (peripheralization).

Exercises for Mechanical Low Back Pain

- General conditioning exercise
  - walking, cycling, swimming or other low impact type of activity

- Stretches:
  - Supine knee to chest
  - Supine rotation knees side to side
  - Cat cow

Back Stretches

https://www.wcb.mb.ca/back-to-basics-guide

Exercises for Mechanical Low Back Pain

- Core Stabilization
  - The McGill Top 3 for Core Stability
    - Curl up
    - Side plank
    - Bird-dog

McGill, SM. Back Mechanic: The step by step McGill Method to fix back pain. Backfitpro Inc. 2015 (www.backfitpro.com)
McGill SM. Strength and Conditioning Journal. 2010; 32(3): 33-46

Stabilization exercises

http://www.ahs.uwaterloo.ca/~mcgill/fitnessleadersguide.pdf

Back to Basics Guide
A Guide to Back Injury Prevention and Recovery

- Booklet - WCB and Safe Work Manitoba
- For free copies of this resource, email wcb@wcb.mb.ca
- PDF available at:

https://www.wcb.mb.ca/back-to-basics-0

Thank You

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