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Spinal Pain Protocol: Reducing Chronic Degenerative Lumbar Disc Pain

Introduction

According to the American Chiropractic Association, low back pain is one of the most common reasons for visits to a health care practitioner, the single leading cause of disability worldwide, and a leading cause of work-related disability.[1]

Assessment

For lumbar disc-related pain, history and physical exam should include:

1. A complete examination of the pelvis and lower extremities, a neurologic examination (i.e., sensation, strength, reflexes, ankle and toe dorsiflexion, ankle plantar flexion), as well as provocative tests, such as the straight-leg-raise test and crossed-straight-leg test.[2]
2. Laboratory assessments should be considered, including erythrocyte sedimentation rate (ESR), complete blood count (CBC), and C-reactive protein level (CRP), urinalysis, alkaline phosphatase, and serum calcium if red flag symptoms are present, to help rule out less common etiologies. Some red flag symptoms include fever, unexplained weight loss, history of fracture or cancer, etc.

General Recommendations

1. Monitor progress of patients using:
   a. Quebec Back Pain Disability Scale: **www.physio-pedia.com/Quebec_Back_Pain_Disability_Scale**
   b. Numeric Back Pain Rating Scale: **www.physio-pedia.com/Numeric_Pain_Rating_Scale**
   c. Oswestry Low Back Pain Scale: **www.orthopaedicscore.com/scorepages/oswestry_low_back_pain.html**
2. Radiological studies: CT; MRI; X-ray if needed. Given the overlap of structural abnormalities among people with and without back pain, as well as the insensitivity of plain radiographs, practitioners should refer to guidelines for advanced imaging indications.[3]
3. The vast majority of low back pain does not have a definitive cause, but lifestyle factors such as obesity, sedentary behaviour, smoking, etc., are thought to contribute. Additionally, pain perception is influenced by many factors including psychological, socioeconomic, and pain-processing mechanisms, suggesting that a broad approach to pain management is indicated.[4]

Specific Treatment Plan

	Mild	Moderate	Severe
Chronic	• Spinal manipulation[5,6] • Lumbar stabilization and dynamic lumbar strengthening exercises[7] • Pilates and/or yoga[8,9] • Kinesiotaping[10] • **Vitamin D** therapy: 2000 IU QD[11,12] • **Dolor Ease™:** 1 capsule BID *OR* **Theracurmin® 2X:** 1 capsule QD • **PEA:** 1 capsule BID[17]	• Spinal manipulation[5,6] • Lumbar stabilization and dynamic lumbar strengthening exercises[7] • Pilates and/or yoga[8,9] • Interferential current electro-therapy • Low-level laser with exercise[14] • Cognitivebehavioural therapy or mindfulness-based stress reduction[15] • **Dolor Ease:** 2 capsules BID *OR* **Theracurmin 2X:** 1 capsule QD • Neuropathic pain: **Magnesium Bisglycinate:** 200 mg TID with meals[16] • **PEA:** 1 capsule TID[17]	• Refer to imaging guidelines • Individualized and integrated care as needed • Prescriptive or other therapies as needed

QD: daily; BID: two times per day; TID: three times per day; PEA: palmitoylethanolamide

Re-Assessment

Repeat clinical and laboratory measurements as indicated.

These protocols are recommendations and do not supercede federal and provincial regulations.

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