

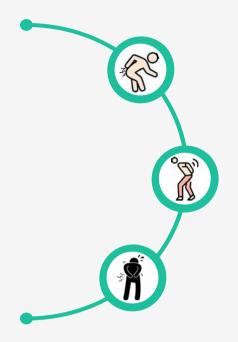




# **Standard Treatment Workflow (STW)**

# **LOWER BACK PAIN**

ICD-10-M54. 2



#### **HISTORY**

- · Lower back pain-acute or chronic
- · Severity of pain
- · Site and onset of pain
- Radiation of pain
- Associated features such as fever. trauma, weight lifting, associated tingling or numbness
- History related to Pelvic Inflammatory disease (PID)- if positive-refer to Gynecologist
- Anticonvulsants and steroids intake

#### **RED FLAG SIGNS**

- Features of Cauda Equina Syndrome including sudden onset of loss of bladder/bowel control, saddle anesthesia and weakness of lower limbs
- · Severe worsening pain, especially at night or when lying down
- · Significant history of trauma
- Weight loss, history of cancer, fever
- Use of prolonged steroids or intravenous drugs
- First episode of severe pain in patient over 50 years of age

#### Conduct a full assessment including

- · History taking
- · Physical and neurological examination
- · Evaluation of red flags
- · Psychosocial risk factors



Acute and Sub acute-duration less than 12 weeks

#### Consider analgesics for short duration

- Acetaminophen
- NSAIDs
- Short course muscle relaxants
- Use opioids (short duration) if not responding to above analgesics
- Recommend back strengthening exercises and/ or physical activity (when pain becomes bearable), avoid heavy weight lifting activities

# · Prescribe self-care strategies

- Alternating cold and heat therapy
- Continuation of Activities of Daily Living as tolerated
- · Encourage early return to work
- · Educate patient that low back pain usually resolves with time

Re-assess at 2-6 weeks (including Red Flags) if patient is not returning to normal function or symptoms are worsening

# Consider lab test and imaging\*

Physical therapist

**Consider Referral** 

- Orthopeadic surgeon (for unresolving radicular symptoms)
- Multidisciplinary pain program (if not returning) to work)

### Chronic-duration greater than 12 weeks

- Consider lab test and imaging (X -rays)
- Prescribe back strengthening exercises or therapeutic exercise

#### Analgesic options

- Acetaminophen
- NSAIDs
- Short term muscle relaxant for flare-ups

# Pain not responding to above

- Opioids for short term in severe pain
- Low dose antidepressants for short duration

# Other modalities

- Physiotherapy
- TENS as adjunct to active therapy etc
- If pain still does not subside then consider Referral

# Modalities at Referral centre

- Multidisciplinary chronic pain program/ clinic
- Epidural steroids (for short-term relief of radicular pain)
- · Surgery in carefully selected patients after expert opinion and based on indications

# \*Based on provisional diagnosis - Lab and imaging Test

- Lab tests
  - Hemogram with ESR and CRP
- Imaging
  - X rays LS Spine- Anteroposterior (AP) and lateral
  - MRI LS spine
  - DEXA Scan- suspected osteoporosis

# **ABBREVIATIONS**

**CRP**: C-reactive Protein **DEXA**: Dual-energy X-ray Absorptiometry LS: Lumbo-Sacral

**ESR**: Erythrocyte Sedimentation Rate MRI: Magnetic Resonance Imaging NSAIDs: Non-Steroidal Anti-inflammatory Drugs PID: Pelvic Inflammatory Disease **TENS**: Transcutaneous Electrical Nerve Stimulation

# REFERENCES

- 1. Oliveira CB, Maher CG, Pinto RZ, Traeger AC, Lin CC, Chenot JF, van Tulder M, Koes BW. Clinical practice guidelines for the management of non-specific low back pain in primary care: an updated overview. Eur Spine J. 2018 Nov;27(11):2791-2803. doi: 10.1007/s00586-018-5673-2. Epub 2018 Jul 3. PMID: 29971708.
  - Arnau JM, Vallano A, Lopez A, Pellisé F, Delgado MJ, Prat N. A critical review of guidelines for low back pain treatment. Eur Spine J. 2006 May;15(5):543-53. doi:
- 10.1007/s00586-005-1027-y. Epub 2005 Oct 11. PMID: 16217664; PMCID: PMC3489347. Verhagen AP, Downie A, Popal N, Maher C, Koes BW. Red flags presented in current low back pain guidelines: a review. Eur Spine J. 2016 Sep;25(9):2788-802. doi:
- 10.1007/s00586-016-4684-0. Epub 2016 Jul 4. PMID: 27376890. Koes BW, van Tulder M, Lin CW, Macedo LG, McAuley J, Maher C. An updated overview of clinical guidelines for the management of non-specific low back pain in primary
- care. Eur Spine J. 2010 Dec;19(12):2075-94. doi: 10.1007/s00586-010-1502-y. Epub 2010 Jul 3. PMID: 20602122; PMCID: PMC2997201. Ladeira CE. Evidence based practice guidelines for management of low back pain: physical therapy implications. Rev Bras Fisioter. 2011 May-Jun;15(3):190-9. doi:
- 10.1590/s1413-35552011000300004. PMID: 21829982. Dagenais S, Tricco AC, Haldeman S. Synthesis of recommendations for the assessment and management of low back pain from recent clinical practice guidelines. Spine J.
- 2010 Jun;10(6):514-29. doi: 10.1016/j.spinee.2010.03.032. PMID: 20494814

Mirovsky Y. [Guidelines for the prevention of low back pain]. Harefuah. 2007 Apr;146(4):272-3, 318. Hebrew. PMID: 17476933.

Murphy AY, van Teijlingen ER, Gobbi MO. Inconsistent grading of evidence across countries: a review of low back pain guidelines. J Manipulative Physiol Ther. 2006 Sep;29(7):576-81, 581.e1-2. doi: 10.1016/j.jmpt.2006.07.005. PMID: 16949948.

# KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES