

# McGill Scoliosis and Spine Program

## Acute/Subacute non-specific low back pain

**Definition**<sup>3,11</sup>  
Pain occurring primarily in the back between the 12<sup>th</sup> rib and the gluteal folds  
**AND** no signs of:

- A serious underlying condition (such as cancer, infection, or cauda equina syndrome),
- Spinal stenosis,
- Radiculopathy,
- Another specific spinal cause (such as vertebral compression fracture or ankylosing spondylitis) or
- Specific proven patho-anatomic cause.

**Types of Pain:**

- **Acute back pain** is any pain that has occurred for less than 6 weeks.
- **Sub acute back pain** is pain that is present between 6-12 weeks.
- **Chronic back pain** is any pain that has been present for more than 12 weeks.
- **Recurrent back pain** is recurring pain with pain-free intervals.

### Initial assessment of any back pain patient

**1. Establish standardized score**

- Ask patient to complete the OSWESTRY 2.0 questionnaire correctly<sup>10</sup> and document score<sup>6</sup>
- Ask patient to complete the STarT Back Screening Tool (SBST)<sup>9</sup> and document score

**2. Assess your patient (diagnostic triage)**

- Conduct a focused history and physical examination
- Review the standardized questionnaire scores
- Classify your patient into one of five broad categories:

**A. Presence of red flags**

- New bowel/bladder incontinence or retention; recent severe trauma; **progressive** paraparesis/quadraparesis/neurologic signs → Send to Emergency in your RUIS (McGill RUIS = MGH, JGH)
- Unexplained weight loss (> 10 pounds over 6 months<sup>5</sup>), fever, chills; saddle anesthesia without new bowel/bladder incontinence or retention; acute pain not eased by recumbent position; incremental non-relenting pain → page Spine Resident in the Emergency department of your RUIS (McGill RUIS = MGH; (514) 934-1934 ext. 53333, ask for Spine Resident, JGH; (514) 340-8222)

**B. Unsteadiness of gait, weakness, numb/clumsy fingers → Go to Myelopathy Algorithm**

**C. Unilateral leg pain below the knee (with/without numbness and weakness) → Go to Radiculopathy Algorithm**

**D. Back pain associated with intermittent leg pain that is aggravated by standing or walking and relieved by sitting → Go to Claudication/Spinal Stenosis Algorithm**

**E. Non-specific low back pain (NSLBP)**

### 3. Educate<sup>2</sup>

- Reassure patients on the favourable prognosis (if available, provide adequate printed information regarding the nature of NSLBP with emphasis that the majority of cases resolve within 6 weeks<sup>1</sup>)
- Advise patients to stay active
- Discourage bed rest
- Promote self management (carry on with normal activities as much as possible).<sup>12,13</sup>
- Discourage lumbar supports

### 4. Prescribe medication for pain relief (if needed)

- Non-narcotic analgesics
  - Acetaminophen
  - NSAIDs<sup>7,14</sup> (refer to the Conseil du Médicament du Québec for the algorithm) and "An evidence-based approach to prescribing nonsteroidal antiinflammatory drugs" From the Third Canadian Consensus Conference<sup>1</sup>
- Muscle relaxants<sup>1</sup>
- Narcotic analgesics (may provide short course)

### 5. Prescribe physiotherapy (re-assess after 10 sessions)

- For patients who have had pain for 2-4 weeks
- For patients whose pain is made worse by physical activity or exercise (these patients may benefit from therapeutic exercise recommendations<sup>1</sup>)
- Active treatments have demonstrated greater efficacy than passive therapies<sup>15</sup>
- Traction, therapeutic ultrasound, laser therapy, interferential therapy, TENS, massage therapy can be used to assist an exercise program but are not recommended alone<sup>12,13,15</sup>
- **Spinal manipulation:** consider spinal manipulation for acute NSLBP patients who are not improving<sup>1,3,12,15</sup> with the present treatment program.
  - Specialists include: physiotherapist, chiropractor, osteopath
  - The patient has to agree to this treatment
  - Inform the patient to maintain therapy if there is continued functional improvement after 2 sessions (≥ 50% improvement in the OSWESTRY score considers the intervention as successful<sup>8</sup>)

### 6. Avoid the following investigations:

#### a) Diagnostic imaging

- Radiological imaging is not recommended for acute NSLBP for patients < 50 years of age
- Plain radiographs are optional for patients > 50 years of age
- EMG is not recommended for acute NSLBP

**b) Laboratory testing** is not recommended unless specific illness is suspected

## Follow-up Visit 1 (4-6 weeks after initial visit)

*Purpose: Keep the Diagnosis under review*

- Re-assess patient status 4-6 weeks after initial visit if symptoms fail to resolve:
  - Exclude serious pathology (*Red Flags*)
  - Review psychosocial risk factors (*Yellow Flags*)
  - Manage accordingly (*medication, therapy*)

**1. Establish standardized score**

- Ask patient to complete the OSWESTRY 2.0 questionnaire correctly<sup>10</sup> and document score<sup>6</sup>
- Ask patient to complete the STarT Back Screening Tool (SBST)<sup>9</sup> and document score

**2. Address yellow flags<sup>4,9</sup>** --> If present, send to a Comprehensive Multidisciplinary Program (seek a centre that can provide mental health, occupational therapy and physical therapy services)

**3. Prescribe exercise**

- Prescribe adjunctive conservative treatment (up to 10 treatments to determine if it helped)
  - Therapeutic exercise guidelines from specialist (PT)

**4. Consider imaging**

- X-rays

**Follow-up visit 2 (12-16 weeks after initial visit)**

**1. Establish standardized score**

- Ask patient to complete the OSWESTRY 2.0 questionnaire correctly<sup>10</sup> and document score<sup>6</sup>
- Ask patient to complete the STarT Back Screening Tool (SBST)<sup>9</sup> and document score

**2. Make a decision**

**A. Patient has shown improvement**  
→ keep going; transition to home exercise program, (a few patients may still require sessions with the physiotherapist) with the judgement of the treating physiotherapist

**B. Patient remains symptomatic and:**

- **OSWESTRY score < 40%** → Refer to a non-surgical multidisciplinary spine team in your community
- **OSWESTRY score > 40%** → Send the **McGill Consult Referral Form** to the McGill Spine Program
- **Consider Imaging** (MRI- degenerative disc disease; CT- spondylolysis); patient may be a candidate for an intervention

**3. Maintain intermittent communication with patient while awaiting imaging results and consultation replies:**

- Advise patients to stay active
- Discourage bed rest
- Promote self management (carry on with normal activities as much as possible)

## SPECIALIZED TREATMENT (WITHIN SPINE PROGRAM)

### Triage

#### 1. Pre-visit triage: Triager reviews patient consult and MRI/CT

- General Practitioner (musculoskeletal expertise)
- Physiatrist
- Physiotherapist
- Spine Surgeon

### Spine Program initial visit

*Keep the diagnosis under review, looking for pathoanatomical causes related to low back pain*

#### 1. Establish standardized score

Ask patient to complete the [Spine Program Survey](#) (includes OSWESTRY 2.1, Lifestyle questionnaires and SF36) and compare to latest score from referring physician's office

### 2. Assess patient and make a decision:

(Determine next course of care)

- A. Patient re-assurance provided** (tertiary care not required)
- B. Patient needs further non-operative specialized, multidisciplinary care**
- Psychologist
  - Physiatrist
  - Physiotherapist
  - GP-Sports Medicine
- C. Patient is a surgical candidate** (undergoes surgery)
- Lumbar fusion
  - Disc replacement

### 3. Return patient to community with recommendations from the spine team:

- A. Guidance for non-operative care**
- B. Guidance from multidisciplinary group**  
(pain clinic, spine team)
- C. Recommendations and guidance for post-operative care**  
after acute care management has been completed

## REFERENCES

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