Initial assessment of any back pain patient

1. Establish standardized score
   - Ask patient to complete the OSWESTRY 2.0 questionnaire correctly \(^5\) and document score
   - Ask patient to complete the STarT Back Screening Tool (SBST) \(^9\) 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; \textbf{progressive} paraparesis/quadruparesis/neurologic signs \(\rightarrow\) Send to Emergency in your RUIS (McGill RUIS = MGH, JGH)
   - Unexplained weight loss (> 10 pounds over 6 months \(^5\)), fever, chills; saddle anesthesia without new bowel/bladder incontinence or retention; acute pain not eased by recumbent position; incremental non-relenting pain \(\rightarrow\) 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 \(\rightarrow\) Go to Myelopathy Algorithm

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

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

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

### 3. Educate
- 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)
- Advise patients to stay active
- Discourage bed rest
- Promote self management (carry on with normal activities as much as possible)
- Discourage lumbar supports

### 4. Prescribe medication for pain relief (if needed)
- Non-narcotic analgesics
  - Acetaminophen
  - NSAIDs *(refer to the Conseil du Médicament du Québec for the algorithm)*
- An evidence-based approach to prescribing nonsteroidal anti-inflammatory drugs (NSAIDs)
  - From the Third Canadian Consensus Conference
- Muscle relaxants
- 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)
- Active treatments have demonstrated greater efficacy than passive therapies
- Traction, therapeutic ultrasound, laser therapy, interferential therapy, TENS, massage therapy can be used to assist an exercise program but are not recommended alone
- **Spinal manipulation:** consider spinal manipulation for acute NSLBP patients who are not improving 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)*

### 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 2 (12-16 weeks after initial visit)

1. Establish standardized score
   - Ask patient to complete the OSWESTRY 2.0 questionnaire correctly\(^{10}\) and document score\(^6\)
   - Ask patient to complete the STarT Back Screening Tool (SBST)\(^9\) and document score

2. Address yellow flags
   --> 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

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-spondylolisthesis); 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)
Spine Program initial visit

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

1. Pre-visit triage: Triager reviews patient consult and MRI/CT
   - General Practitioner (musculoskeletal expertise)
   - Physiatrist
   - Physiotherapist
   - Spine Surgeon

2. Assess patient and make a decision:
   (Determine next course of care)
   - **Patient re-assurance provided** (tertiary care not required)
   - **Patient needs further non-operative specialized, multidisciplinary care**
     - Psychologist
     - Physiatrist
     - Physiotherapist
     - GP-Sports Medicine
   - **Patient is a surgical candidate** (undergoes surgery)
     - Lumbar fusion
     - Disc replacement

3. Return patient to community with recommendations from the spine team:
   - **Guidance for non-operative care**
   - **Guidance from multidisciplinary group**
     (pain clinic, spine team)
   - **Recommendations and guidance for post-operative care**
     after acute care management has been completed
REFERENCES

8. Fritz JM, Childs JD, Flynn TW. Pragmatic application of a clinical prediction rule in primary care to identify patients with low back pain with a good prognosis following a brief spinal manipulation intervention. BMC Fam Pract 2005;6:29.