



# Back Pain



## History

- Age
- Past medical history
- Past surgical history
- Medications
- Onset of pain / injury
- Previous back injury
- Traumatic mechanism
- Location of pain
- Fever
- Improvement or worsening with activity

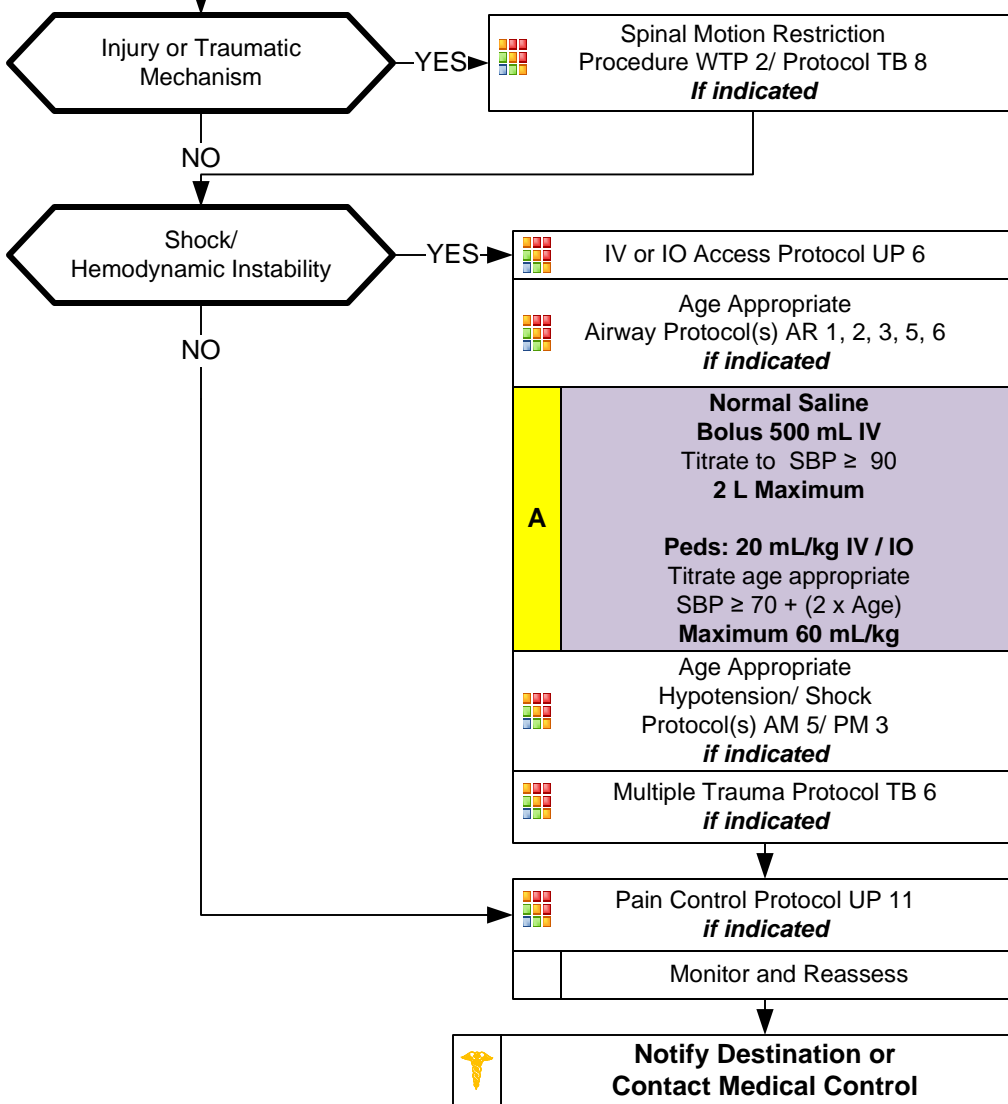
## Signs and Symptoms

- Pain (paraspinous, spinous process)
- Swelling
- Pain with range of motion
- Extremity weakness
- Extremity numbness
- Shooting pain into an extremity
- Bowel / bladder dysfunction

## Differential

- Muscle spasm / strain
- Herniated disc with nerve compression
- Sciatica
- Spine fracture
- Kidney stone
- Pyelonephritis
- Aneurysm
- Pneumonia
- Spinal Epidural Abscess
- Metastatic Cancer
- AAA

<b>B</b>	Consider Cardiac Etiology 12 Lead ECG Procedure <i>if indicated</i>
<b>P</b>	Cardiac Monitor <i>if indicated</i>
	Age Appropriate Cardiac Protocol(s) <i>if indicated</i>





# Back Pain



Back pain is one of the most common complaints in medicine and effects more than 90% of adults at some point in their life.

Most often it is a benign process but in some circumstances can be life or limb threatening.

**Associated symptoms that are worrisome for complicated back pain:**

- Fever, chills and night sweats.
- Symptoms outside the musculoskeletal system like urinary, gastrointestinal, or pulmonary.
- Abnormal vital signs.

**Non-traumatic back pain:**

Most important signs/ symptoms of bowel and bladder function, sexual function, weakness, numbness, especially saddle anesthesia (numbness in the inner thighs, buttocks and perineum – what would sit in a horse saddle), as this increases suspicion of cauda equina syndrome.

**Pearls**

- **Recommended Exam: Mental Status, Heart, Lungs, Abdomen, Neuro, Lower extremity perfusion, Back**
- Back pain is one of the most common complaints in medicine and affects more than 90% of adults at some point in their life. Back pain is also common in the pediatric population. Most often it is a benign process but in some circumstances can be life or limb threatening.
- **Consider pregnancy or ectopic pregnancy with abdominal or back pain in women of childbearing age.**
- **Consider abdominal aortic aneurysm with abdominal pain especially in patients over 50 and/ or patients with shock/ poor perfusion. Patients may have abdominal pain and/ or lower extremity pain with diminished pulses. Notify receiving facility early with suspected abdominal aneurysm.**
- **Consider cardiac etiology in patients > 35, diabetics and/ or women especially with upper abdominal complaints.**
- **Red Flags which may signal a more serious process associated with back pain:**
  - Age > 50 or < 18
  - Neurological deficit (leg weakness, urinary retention, or bowel incontinence)
  - IV Drug use
  - Fever
  - History of cancer, either current or remote
  - Night time pain in pediatric patients
- **Cauda equina syndrome is where the terminal nerves of spinal cord are being compressed (Symptoms include):**
  - Saddle anesthesia (numbness between the genitalia and rectum)
  - Recent onset of bladder and bowel dysfunction. (Urine retention and bowel incontinence)
  - Severe or progressive neurological deficit in the lower extremity.
  - Motor weakness of thigh muscles or foot drop
- **Back pain associated with infection:**
  - Fever/ chills.
  - IV Drug user (consider spinal infection)
  - Recent bacterial infection like pneumonia.
  - Immune suppression such as HIV or patients on chronic steroids like prednisone.
  - Meningitis.
- **Spinal motion restriction in patients with underlying spinal deformity should be maintained in their functional position.**
- Kidney stones typically present with an acute onset of flank pain which radiates around to the groin area.