Management of suspected or confirmed spinal injury in adults (16 years and older)

# **Purpose**

The purpose of this clinical practice guideline (CPG) is to review best evidence and generate expert consensus on recommendations for the management of suspected spinal injury in adult patients (age  $\geq 16$ ) in B.C.

# **Key management questions**

#### I. INITIAL MANAGEMENT

- 1. What are the key considerations in the initial assessment and management of patients with suspected injury to the spine (without suspected neurological deficit)?
- 2. What are the key considerations in the initial assessment and management of patients with suspected injury to the spine and with suspected neurological deficit?
- **3.** What is the appropriate management of the cervical spine in awake, evaluable and symptomatic patients?
- **4.** What is the appropriate management of the cervical spine in obtunded or otherwise unevaluable patients?

### II. DIAGNOSTIC IMAGING – WITHOUT NEUROLOGIC DEFICIT

- 5. What are the indications for imaging of the cervical spine in alert and evaluable patients? What is the imaging modality of choice in these patients?
- **6.** What are the indications for imaging of the cervical spine in obtunded or unevaluable patients? What is the imaging modality of choice in these patients?
- 7. What are the indications for imaging of the thoraco-lumbar spine in patients with suspected spinal injury? What is the imaging modality of choice in these patients?
- **8.** Under what circumstances would it be appropriate to transfer the patient to another site without definitive care for a CT or MRI?

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#### III. DIAGNOSTIC IMAGING - WITH SUSPECTED OR CONFIRMED NEUROLOGIC DEFICIT

- 9. What are the indications for imaging of the cervical spine in alert and evaluable patients with suspected or confirmed neurological deficit? What is the imaging modality of choice in these patients?
- **10.** What are the indications for imaging of the cervical spine in obtunded or unevaluable patients? What is the imaging modality of choice in these patients?
- 11. What are the indications for imaging of the thoraco-lumbar spine in patients with suspected or confirmed neurological deficit? What is the imaging modality of choice in these patients?
- **12.** Under what circumstances would it be appropriate to transfer the patient to another site without definitive care for a CT or MRI?

#### IV. TRANSFER TO HIGHER LEVEL OF CARE

- 13. What are the indications for and timing of transfer of patients with confirmed or suspected spinal injury without neurological deficit to a higher-level trauma centre?
- 14. What are the indications for and timing of transfer of patients with confirmed or suspected spinal injury with suspected or confirmed neurological deficit to a higher-level trauma centre?
- **15.** What are the indications for local (remote) management of spinal fractures (fractures not requiring transfer)?

## V. PRE-TRANSFER CARE

- **16.** What is the optimal pre-transfer management and preparation of patients with suspected or confirmed spinal injury without neurological deficit?
- 17. What is the optimal pre-transfer management and preparation of patients with suspected or confirmed spinal injury with neurological deficit?

### VI. LOCAL MANAGEMENT OF STABLE SPINAL FRACTURES

**18.** What is the appropriate local (remote) management of stable spinal fractures (fractures not requiring transfer)?