1.0 SCOPE
1.1. Care of the Trauma Services Patient at CCHMC.

2.0 DEFINITIONS
2.1. Unreliable Exam: A patient who meets any of the following criteria cannot undergo clinical clearance of the cervical spine:
   2.1.1. Altered mental status
   2.1.2. Intubated patient
   2.1.3. ETOH/Drug intoxication
2.2. Clinical clearance of the cervical spine may be performed if ALL of the following criteria are present:
   2.2.1. Normal neurologic exam; and
   2.2.2. No tenderness to palpation of the cervical spine; and
   2.2.3. No cervical spine pain with active range of motion; and
   2.2.4. No distracting injuries

3.0 GUIDELINE
3.1. Complete primary and secondary surveys per CCHMC guidelines
3.2. If patient is found to be unreliable:
   3.2.1. Cervical collar should be placed
   3.2.2. C-spine radiographs should be obtained in the ED (minimum: cross table/lateral)
3.3. Cervical spine radiographs are abnormal:
   3.3.1. Maintain cervical collar
   3.3.2. Obtain neurosurgical consult
   3.3.3. Treatment as indicated
3.4. Cervical spine radiographs are normal, and:
   3.4.1. Reliable exam
      a. Exit pathway; refer to reliable c-spine algorithm
   3.4.2. Remains unreliable
      a. Maintain cervical collar
      b. Strongly consider CT cervical spine (skull base through T1) within 24 hours (for severe TBI GCS <8)
3.5. Cervical CT abnormal:
   3.5.1. Maintain cervical collar
   3.5.2. Obtain neurosurgical consult
   3.5.3. Treatment as indicated
3.6. Cervical spine CT normal:
   3.6.1. Patient now reliable
      a. Exit pathway
   3.6.2. Patient remains unreliable:
      a. Maintain cervical collar
      b. MRI cervical spine within 72 hours when stable for transport
3.7. Cervical spine MRI normal:
   3.7.1. Document radiographic findings
   3.7.2. Remove cervical collar
3.8. Cervical spine MRI abnormal:
   3.8.1. Maintain cervical collar
   3.8.2. Obtain neurosurgical consult
   3.8.3. Treatment as indicated
Cervical Spine Clearance
UNRELIABLE Exam Algorithm

Does the patient have any:
- Altered mental status
- Endotracheal tube
- Drug/ETOH intoxication

Yes → Apply Cervical Collar

Yes → Diagnostic Imaging

Cervical Radiographs
- Minimum lateral view in ED (skull base to T1)

Strongly consider Cervical CT
- Severe TBI, GCS ≤ 8
Consider Cervical CT
- Inadequate plain films

Normal → Maintain collar 24/7

Reliable exam within 24 hours?
Yes → Maintain cervical collar 24/7
No → Consider CT c-spine within 24 hours if not already obtained

Normal

Abnormal → Neurosurgery Consult

- Maintain collar 24/7
- Treatment as indicated

Patient remains unreliable?
Yes → Cervical MRI within 72 hours if patient is stable for transport

No → Document radiographic findings and remove collar
4.0 REFERENCES


5.0 APPROVALS

All revisions of this guideline are approved by the Trauma Service Department. This guideline is reviewed every three years or sooner if deemed necessary. Authority for this document resides with the Trauma Service Department. This guideline is approved by the Trauma Services Manager and the Director of Trauma Services.