Guidelines and Protocols

TITLE: CARE OF THE PATIENT WITH SPINAL TRAUMA

PURPOSE:

To optimize the spine evaluation in adult trauma patients

The patient will be provided efficient and quality care when presenting with spinal trauma. Spinal trauma should be suspected and ruled out whenever trauma occurs

PROCESS:

I. Upon arrival to the EC
   A. EC triage nurse should assess
      1. MOI
      2. Pain to back or neck
      3. Paresthesia in extremities/Neurologic deficits
      4. Distracting injuries
      5. Altered mental status/intoxication
      6. Consider application of c-collar and/or spinal immobilization

II. BACKBOARD
   A. The backboard should be removed as soon as possible in the Emergency Department, and routine spine immobilization techniques employed.

III. STEROID USE IN SPINAL CORD INJURY
    A. Insufficient clinical evidence exists to support steroid therapy in patients with acute traumatic spinal cord injuries.

IV. C-SPINE
    A. Criteria for obtaining radiographic studies (C-Spine) for evaluation of cervical spine on a patient arriving to EC should be based on NEXUS or equivalent criteria (presence of any of the following):
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1. Age >65
2. Focal/Midline cervical tenderness
3. Paresthesia in extremities/focal neurologic deficits
4. Altered mental status/intoxication
5. Distracting injury

B. If none of the above criteria are present the c-spine can be cleared clinically without obtaining imaging of the c-spine by the following:
   1. The patient must be awake, alert, and not distracted in order to properly examine the cervical spine.
   2. If unable to do this, proceed to radiographic evaluation.
   3. If the patient is alert and cooperative and exhibits no midline bony tenderness to palpation, next, passively rotate the patients head to right and left.
   4. If there is absence of midline cervical tenderness, the patient is to lift their head off the bed and touch their chin to their chest.
   5. If able to perform all these maneuvers, the collar can be removed.

C. If a patient is obtunded/persistently altered, the c-collar can be removed if an attending radiologist has posted a final negative acute read of a CT C-Spine. The collar should remain in place if ANY of the following are present: any signs of neurologic deficit on exam, or abnormalities on CT scan. If any abnormality is present on CT C-Spine, and the c-collar has been on >12 hours, order a commercial soft collar and proceed to MRI C-Spine without contrast and/or spine consult.

V. OBTUNDED PATIENTS

A. The C collar can be removed in the unconscious or obtunded patients once the following criteria have been met:
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1. The attending radiologist has dictated a final report of the CT scan of the cervical spine – This final report has no cervical spine fracture or acute abnormality.
2. A tertiary survey has been completed and documented.
3. The C collar should remain in place and consider transferring to higher level of care if ANY of the following criteria are present:
   a. Any signs of focal neurologic deficit on physical exam
   b. Any acute abnormal findings on CT scan of the cervical spine -- Please change to a commercial soft collar within 12 hours

REFERENCE / BIBLIOGRAPHY:


Guidelines and Protocols

6. www.east.org/resources/.../cervical-spine-injuries-following-trauma


OFFICE OF PRIMARY RESPONSIBILITY:
LYNDON B. JOHNSON HOSPITAL TRAUMA SERVICES

REVIEW / REVISION HISTORY

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