NUH Adult Emergency Department C-Spine Assessment Tool

Traumatic neck pain (or “yes” to Box 1) occurring within last 48 hours, EWS <4, & no significant other injury suspected

Not for assessment via this flow chart
Follow usual triage process

Is patient supporting head with own hands* or already immobilised by EMAS or “yes” to Box 1?

Y
Triple immobilise neck if not already & provide analgesia

N
Provide analgesia

Any pelvic or hip pain?

Y
Senior review NOW.
Consider transfer to resus room.

N
Nursing staff to Log-roll off board if already on one

Any new limb weakness?

Y
Any HIGH RISK FEATURES? (box 2)

N
Any Known C-spine problems? (box 3)

Y
C-spine X-ray is indicated.
Consider CT C-spine if CT head being performed.

N
If already immobilised
→ Cat 2, keep immobilised

If not already immobilised
→ Cat 6/7, no collar reqd.

Any LOW RISK FEATURES? (box 4)

Y
Can patient turn head 45 degrees bilaterally?

N

Cat 6/7
Clinically important cervical spine injury excluded.
If C-spine protection was in place, this can be removed.

CAUTION
Beware any cognitive impairment, including those under the influence of alcohol and/or drugs and those with a reduced GCS

Box 1: indirect feature triad
Score yes if all the below are present:
1. Evidence of trauma above clavicles
2. Not ambulatory since accident
3. Any features in Box 2

Box 2: HIGH RISK FEATURES
Score yes if one or more of the below:
• Age 65 years and older
• Limb paraesthesia (tingling/numbness)
• Fall from 3 feet or 5 steps or more
• Axial load to head e.g. Diving
• Motor vehicle collision over 60mph, rollover, ejection, death within vehicle
• Recreational motor vehicle crash (e.g. Quad bike)
• Bicycle collision
• *holding head with hands initially

Box 3: Known C-spine problems
Score yes if one or more of the below:
1. Rheumatoid arthritis
2. Ankylosing spondylitis
3. Cervical canal stenosis
4. Previous C-spine surgery

Box 4: LOW RISK FEATURES
Score yes if one or more of the below:
• Simple rear-end motor vehicle collision – EXCLUDES: hit by bus/large vehicle, rollover, high-speed, pushed in to traffic
• Sitting position in ED – EXCLUDES persons having to support head with hands
• Ambulatory at any time
• Delayed onset of c-spine/neck pain (i.e. not immediate)
• Absence of midline c-spine tenderness

For use by nursing and medical staff within NUH ED. Applies to patients aged over 16 and over with traumatic neck pain. Based on Canadian C-spine Rules and NICE CG176.
Clinical suspicion/opinion over-rides this assessment tool.
Developed by J. Coleman and D. Purnell for NUH ED dept. 08/08/14. Review date 08/08/16.
**NUH Adult Emergency Department C-Spine Assessment Tool for triage**

1. **Traumatic neck pain occurring within last 48 hours, EWS <4, & no significant other injury suspected**
   - **Y**
   - Not for assessment via this flow chart
   - Follow usual triage process

2. **Is patient supporting head with own hands* or already immobilised by EMAS?**
   - **Y**
   - Triple immobilise neck if not already & provide analgesia
   - Provide analgesia
   - **N**
   - Senior review NOW. Consider transfer to resus room.

3. **Any pelvic or hip pain?**
   - **Y**
   - Provide analgesia
   - **N**
   - Triage staff to Log-roll off board if already on one
   - Any new limb weakness?
     - **Y**
     - Senior review NOW. Consider transfer to resus room.
     - Immobilise C-spine. Cat 2 & Senior review NOW.
     - Any HIGH RISK FEATURES? (box 2)
       - **Y**
         - Cat 6 or 3 and await doctor/AP assessment
       - **N**

**Box 2: HIGH RISK FEATURES**
Score yes if one or more of the below:
- Age 65 years and older
- Limb paraesthesia (tingling/numbness)
- Fall from 3 feet or 5 steps or more
- Axial load to head e.g. Diving
- Motor vehicle collision over 60mph, rollover, ejection, death within vehicle
- Recreational motor vehicle crash (e.g. Quad bike)
- Bicycle collision
- *holding head with hands initially

**CAUTION**
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