Increasing Intracranial Pressure

-Warning Signs to Report to the Provider
(Campellone & Kent Turley, 2020)

- Mental status changes*
- Constant headache
- Blurred vision
- Cheyne-Stokes respirations
- Vomiting
- Seizures

-Important Patient Teaching for Prevention
(Altun Ugras et al., 2018)

- Avoid Valsalva maneuvers
  - Coughing
  - Holding breath
  - Bearing down during bowel movement
- Relaxation techniques to relieve stress
  - Breathing
  - Guided imagery
- Lie still on back
  - No abrupt movements
  - Avoid bending of the neck
- Body cooling techniques
  - Light bedding
  - Minimal clothing layers
- Immediately report any of the indicators above

- References


- Advanced Nursing Neurological Assessment: Post-Operative

St. Vincent’s Medical Center Medical/Surgical ICU

Kelsey Gibbs S.N. & Ben Olsen S.N. Sacred Heart University

April 2020

*The earliest indicator
Orientation & Memory
(NeuroCritical Care Society, 2020)

✓ Ask patient to state full name, current location, and the current date
  ▪ Documentation
    “Alert & oriented to person, place, and time” or “A&O x 3”
✓ Recent memory
  ▪ Name 3 items
  ▪ Ask the patient to recall the 3 items after a delay of 3-5 minutes
✓ Remote memory
  ▪ Ask patient about historical or verifiable personal events

Glasgow Coma Scale (GCS)
(Seng et al., 2017)

<table>
<thead>
<tr>
<th>Component</th>
<th>Response</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>Eye opening response</td>
<td>Spontaneous</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>To voice/sound</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To pressure/pain</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>Verbal response</td>
<td>Orientated</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Confused</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Words</td>
<td>3</td>
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<tr>
<td></td>
<td>Sounds</td>
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</tr>
<tr>
<td></td>
<td>None</td>
<td>1</td>
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<tr>
<td>Motor response</td>
<td>Obey commands</td>
<td>6</td>
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<tr>
<td></td>
<td>Localizing</td>
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</tr>
<tr>
<td></td>
<td>Flexion withdrawal</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Abnormal flexion</td>
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</tr>
<tr>
<td></td>
<td>Extension</td>
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<tr>
<td></td>
<td>None</td>
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</tbody>
</table>

- Documentation: ≤ 15
- GCS ≤ 8 - closely monitor intracranial pressure

Cranial Nerves Assessment: Part 1
(NeuroCritical Care Society, 2020)

- Cranial Nerve I: Olfactory
  ▪ Identify a smell
  ▪ Coffee, peppermint, soap
- Cranial Nerve II: Optic
  ▪ Visual acuity testing
  ▪ Snellen Chart
  ▪ Funduscopic exam
  ▪ Optic disc and blood vessels
  ▪ Visual field testing
  ▪ Confrontation from periphery
- Cranial Nerve III: Oculomotor
  ▪ PERRLA
    - Pupils equal round and reactive to light *use size chart below
    - Extraocular movements (EOMs)
      - Medial, upward (in & out), downward (out)

Pupil Assessment
(Jennilee St., 2015)

- Normal findings
  - PERRLA
  - Size: 2-6 mm

Academic Festival, Event 53 [2020]

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