Mental Status and Cranial Nerve Screening Examination

K. Jeffrey Miller, DC, MBA
Chiropractic Orthopaedist
Why is Mental Status Important?

- Informed Consent
- Mood
- Emotional State
- Pain Identification
- Pain behavior
- Examination findings/coding
  - Bullets
Mental Status

• Orientation
  – Person
  – Place
  – Time
• General Information
• Spelling
  – World-dlrow
• Numbers
  – 100 back by 3’s
  – Seven Digit Number (office #)
Mental Status

- Orientation
  - Person
    - Who are you?
    - Who am I?
  - Place
    - Where are we?
  - Time
    - What is the year, season, month, day?
Mental Status

• General Information
  – Current Event
    • News items
    • Popular songs
    • Current movies
Mental Status

• Spelling
  – Spell the word “world” forward and backward
  – Why backward
Mental Status

• Numbers
  – Use especially if the patient cannot read
  – People who cannot read are often able to use numbers
    • From 100 backward by 3’s
    • Repeat a 7 digit number (office #)
      – Don’t use 867-5309
Mental Status

• Observed Findings in Examination of Mental Status
  – Affect
  – Appearance
  – Attitude
  – Behavior
  – Level of Consciousness
  – Speech Language
Mental Status

- Inquired Findings in Examination of Mental Status
  - Mood
  - Orientation
  - Spelling/The use of Numbers
  - Suicidal-Homicidal
Mental Status

• Observed-Inquired Findings in Examination of Mental Status
  – Thought Process
  – Thought Content
  – Insight and Judgement
  – Attention Span
  – Memory
  – Intellectual Functioning
Mental Status

• Observed Findings in Examination of Mental Status
• Affect
  – Their emotional influence
• Appearance
  – Hygiene, dress
• Attitude
  – Closely related to behavior
Mental Status

• Observed Findings in Examination of Mental Statues

– Behavior
  • Cooperative
  • Uncooperative

– Erratic

– Level of Consciousness
  • Semi and unconscious patients don’t typically initiate chiropractic care
Mental Status

• Observed Findings in Examination of Mental Statues

  – Speech Language
    • Annunciation/Slurred
    • Appropriateness of words
    • Unable to find the correct word
Mental Status

• Inquired Findings in Examination of Mental Status

  – Mood
    • “He is in a good mood” “He is in a bad mood”

  – Orientation
    • Person, Place, Time
Mental Status

• Inquired Findings in Examination of Mental Status
  – Spelling/The use of Numbers
    • Educational level must be considered
  – Suicidal-Homicidal
    • Unless they are holding a gun, knife...you have to ask
Mental Status

- Observed-Inquired Findings in Examination of Mental Status
  - Thought Process
  - Thought Content
  - Insight and Judgement
    - The three functions above are interlinked
  - Attention Span
    - A minute per year
Mental Status

• Observed-Inquired Findings in Examination of Mental Status
  – Memory
    • Short Term
    • Long Term
  – Intellectual Functioning
    – Closely related to Thought process, thought content, insight and judgement
Important as a Vital Sign and a Mental Status Indicator

PAIN
Mental Status & Pain

• Pain Factors
  – Facial expressions of pain and apprehension are good indicators of mental status and mood
Mental Status & Pain

- Wong-Baker Faces
• Blinking Interval Average  25-30 seconds
  – Stoic Individuals May Go 60 seconds
  – “Oh doctor I can take a lot of pain”
  – Watch Their Blinking
    • There is a difference between “I have endured a lot of pain”
      and “I can take a lot of pain”
    • Most stoic patients don’t mention pain because they don’t
      feel it! (Think about this!)
7-15B MUSCLES OF EXPRESSION IN ACTION
Facial Muscles

Frontalis: Fear Surprise

Corrugator Supercilli: Pain

Dental Training
## Miller Pain Scale

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>It don’t hurt</td>
</tr>
<tr>
<td>1</td>
<td>Oh…it ain’t nothing/much</td>
</tr>
<tr>
<td>2</td>
<td>It hurts a tad bit/smidgen</td>
</tr>
<tr>
<td>3</td>
<td>It bothers me some</td>
</tr>
<tr>
<td>4</td>
<td>Somethin’ ain’t right</td>
</tr>
<tr>
<td>5</td>
<td>It hurts right smart</td>
</tr>
<tr>
<td>6</td>
<td>I’m sufferin’ terrible</td>
</tr>
<tr>
<td>7</td>
<td>It hurts like far (fire)!</td>
</tr>
<tr>
<td>8</td>
<td>It’s killin’ me!</td>
</tr>
<tr>
<td>9</td>
<td>I’m ‘bout ta die!</td>
</tr>
<tr>
<td>10</td>
<td>Just shoot me!</td>
</tr>
</tbody>
</table>

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Cranial Nerves

Neurological Testing
Cranial Nerves

• CN 1 – Olfactory Nerve
  – Sensory only - sense of smell
  – Usually not test routinely
  – Why?
Cranial Nerves

• CN 2 – Optic Nerve
  – Sensory only-Sense of Sight
  – Multiple Tests Possible
    • Eye Charts
    • Light Reflexes
    • Peripheral Vision
    • Ophthalmoscope*    *Not Included Here
Optic Nerve

• Rosenbaum Chart
  – Used from 14 inches
  – For Refractive Problems
  – Near Vision

• #Snellen – Far Vision
Optic Nerve

Peripheral Vision
Optic Nerve

Direct Pupillary Light Reflex

Indirect Pupillary Light Reflex

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EYE RESPONSE, NORMAL.

DEER PHYSICALS
Cranial Nerves

• CN 3 – Oculomotor Nerve
  – Motor only-eye movements, pupil reactions and blinking
  – Tests
    • Cardinal Planes of Gaze
    • Papillary Light Reflexes
    • Ptosis
Cranial Nerves

• CN 4 & 6 - Trochlear & Abducens Nerves
  – Motor only-eye movements
  – Tests
    • Cardinal Planes of Gaze
Oculomotor, Trochlear and Abducens Nerves

• Cardinal Planes of Gaze
Cranial Nerves

• CN 5 - Trigeminal Nerve
  – Motor and Sensory
  – Tests
    • Motor
      – Muscles of mastication
    • Sensory
      – Facial sensation
    • Motor/Sensory
      – Jaw Jerk Reflex
Trigeminal Nerve

• Muscles of mastication
Trigeminal Nerve

- Facial Sensation
- Toothpicks
- Tissue
- Many Daily Activities Involve Facial Sensation

- Maxillary is primary 94%
Cranial Nerves

• CN 7 – Facial Nerve
  – Motor and sensory-muscles of facial expression and taste
  – Tests
    • Facial expressions
      – Smile (show teeth), raise eye brows
    • Taste
Facial Nerve

Smile

Raising the brow
Cranial Nerves

• CN 8 - Acoustic Nerve
  – Sensory Only-hearing and balance
  – Tests
    • Watch/Finger Rubbing
    • Webber/Rinne
    • Hum Test
Acoustic Nerve

- Finger Rubbing
Acoustic Nerve

- Humming/Webber
POTENTIAL

Not Everyone Gets To Be an Astronaut When They Grow Up.
Disauditory Phalanges?
The inability to snap your fingers
Cranial Nerves

• CN 9 & 10 – Glossopharyngal & Vagus Nerves
  – Motor and Sensory - muscles of the pharynx and taste
  – Tests
    • Motor
      – Gag reflex
      – Swallowing
    • Sensory
      – Taste
Glossopharyngal & Vagus Nerves

• Gag Reflex
Glossopharyngeal & Vagus Nerves

• Swallowing Test
Cranial Nerves

• CN 11 - Spinal Accessory Nerve
  – Motor only - shoulder and neck muscles
  – Tests
    • Trapezius and SCM strength
Spinal Accessory Nerve

Trapezius Testing

SCM Testing
Cranial Nerves

• CN 12 - Hypoglossal Nerve
  • Motor only - Tongue movements
    – Tests
      • Tongue protrusion (Points to pathological side)
      • Articulation of Speech
Hypoglossal Nerve

Tongue Protrusion Normal

Abnormal