


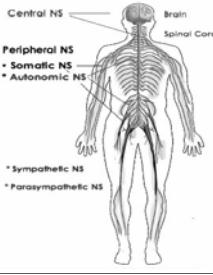
Neurological Assessment



Paula Deibel, RN, BSN, MBA/HCM
Clinical Nurse Educator for Neurosciences
St. Anthony Hospital

Quick A & P Review

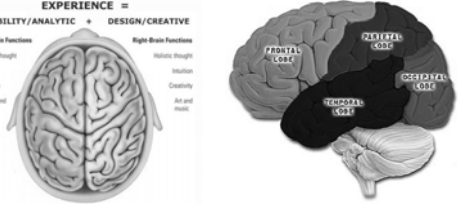
- Central Nervous System
 - Brain and Spinal Cord
- Peripheral Nervous System
 - Somatic (voluntary)
 - Autonomic (involuntary)
 - Sympathetic
 - Parasympathetic



Quick A & P Review

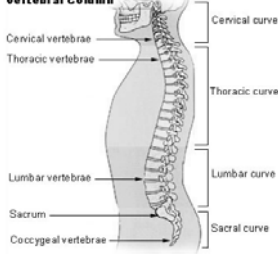
EXPERIENCE =
USABILITY/ANALYTIC + DESIGN/CREATIVE

<p>Left-Brain Functions</p> <p>Analytic thought Logic Language Science and math</p>	<p>Right-Brain Functions</p> <p>Relative thought Intuition Creativity Art and music</p>
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Quick A & P Review

Vertebral Column

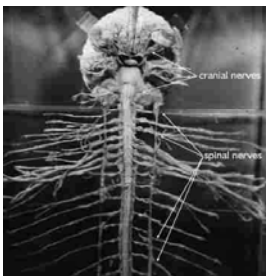


Cervical vertebrae
Thoracic vertebrae
Lumbar vertebrae
Sacrum
Coccygeal vertebrae

Cervical curve
Thoracic curve
Lumbar curve
Sacral curve


Neuro Assessments; What are we doing?

- What are we assessing?
- What are we looking for?
- Is it too late to change careers?



The Mistakes

- We don't know HOW to assess
- We neglect to look at the H & P
- We do not dare to compare
- We do not recognize subtle clues
- We are not aggressive enough



Mental Status: LOC

- Alert
- Lethargic
- Obtunded
- Stuperous
- Comatose

Mental Status: Orientation

Awake, Alert and Oriented to:

- Person
- Place
- Time
- Situation

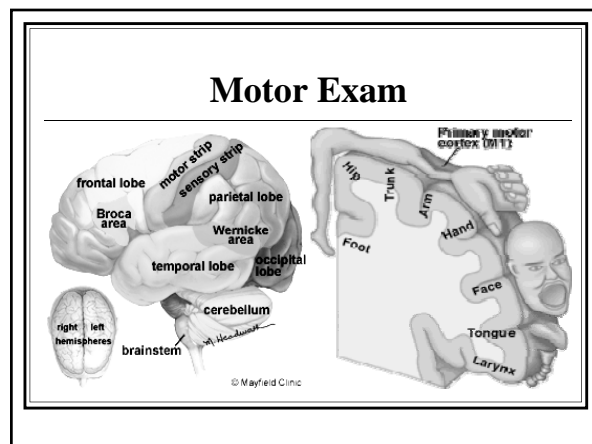
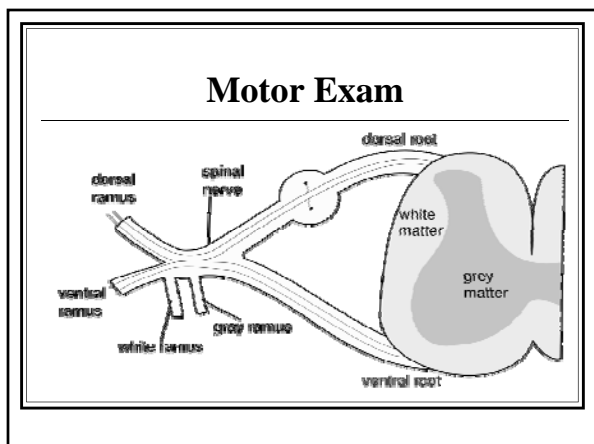
Mental Status: Glasgow Coma Scale

<p>Best Eye Opening Response</p> <ul style="list-style-type: none"> • Spontaneous (4) • To voice (3) • To Pain (2) • None (1) <p>Best Motor Response</p> <ul style="list-style-type: none"> • Obeys Commands (6) • Localizes / Purposeful (5) • Withdraw / Non purposeful (4) • Abnormal Flexion (3) • Abnormal Extension (2) • None (1) 	<p>Best Verbal Response</p> <ul style="list-style-type: none"> • Oriented (5) • Confused (4) • Inappropriate (3) • Incomprehensible Sounds (2) • None (1) <p>■ Maximum stimulus for Maximum results</p> <p>■ GCS score = 3-15</p> <p>■ “I” or “T” can be used in some situations</p>
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To Cranial Nerve or Not to Cranial Nerve...That is the question

- Some facilities don't perform a full CN assessment
- The CN's that we ALWAYS check in a neuro assessment and may not know it, are CN II and CN III

- Diplopia
- PERRLA



Motor Exam

- 5) Normal Strength
- 4) Cannot Overcome Resistance (or "moves" against resistance)
- 3) Overcomes gravity
- 2) Cannot overcome gravity
- 1) Flicker of muscle (movement)
- 0) None



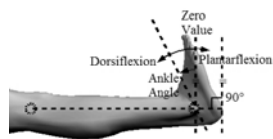
Motor Exam

- Deltoid
- Biceps
- Triceps
- Wrist Extensor
- Grip

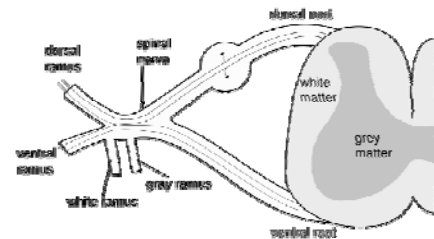


Motor Exam

- Leg Elevation
- Hip adduction
- Hip abduction
- Knee Extension
- Knee flexion
- Plantar Flexion
- Dorsi Flexion

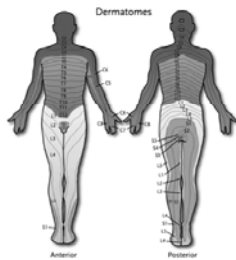


Sensory Exam



Sensory Exam

- Some hospitals tend to do a general exam vs. comprehensive
- Compare both sides
- Documented as:
 - Intact
 - Present but diminished
 - Numbness/tingling
 - Absent



Sensory Exam

- Quick Sensory exam
 - Clavical C4
 - Nipple T4
 - Belly Button T10
 - Groin L2
 - Perianal S1-S5



Cerebellar Exam



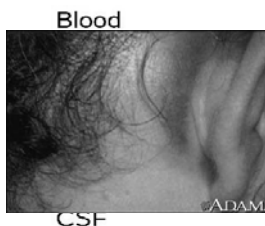
Abnormal Reflexes

- Brudzinkski's sign
- Babinski's Reflex
- Negative Oculocephalic
- Negative Oculovestibular



Special Reminders

- Change in LOC / Behavior
- If you don't know, grab a buddy
- For the comatose pt., assess GCS, pupils, cough & gag, and corneal reflex
- If your patient has a cervical injury, doll's eyes may not be assessed
- Is it CSF?
- Battle signs = Basilar Skull Fx



References

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