### Motor, Reflex, Coordination and Sensory Screening Examination

K. Jeffrey Miller, DC, FACO, MBA Chiropractic Orthopaedist

# • "Specializing in Spine and Nerve Rehabilitation"

## **Motor Function**

Lower Motor Neuron Testing

10/01/2018

- Right or Left Handed
- Ambidextrous
- Shoulder Height-levelness

   Dominant side lower
- Grip Strength
  - Dominant side stronger by 10%
  - Female grip strength is 50% of males

- Impairment Rating
  - Non-dominant often rated lower
- Side Posture Adjusting

   Farfan's Torsion Test
   Side of handedness up
- Pseudoambidexterity

### Pseudoambidexterity



### Pseudoambidexterity



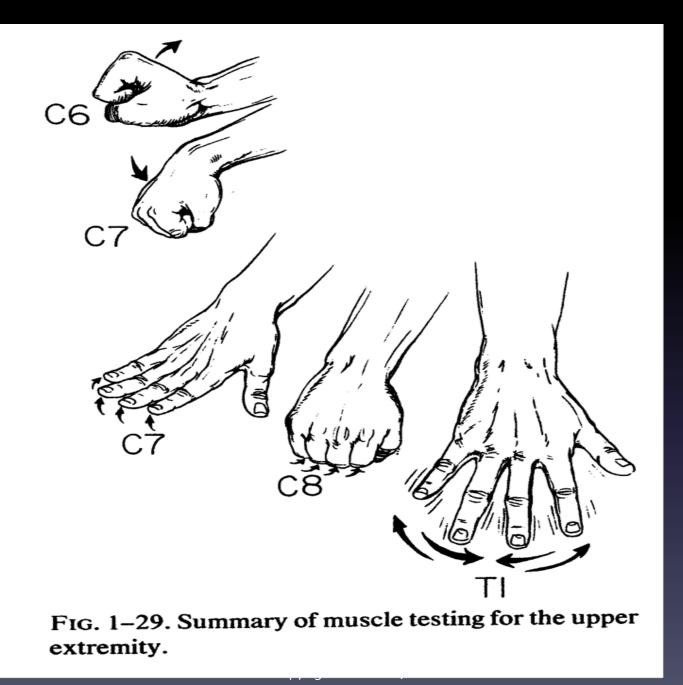
## True Ambidexterity

 Both ambidextrous and multilingual, 20<sup>th</sup> president James Garfield could write Greek with one hand while writing Latin with the other.

# **Bilateral Hand Shake**

- Quick Assessment of
   Lower Cervical and
   Upper Thoracic
   Nerve Root Motor
   Function
- C5-T1





# **Bilateral Hand Shake Test**

- Flexion of the Shoulder-C5
- Extension of The Elbow and Fingers-C7
- Extending the Thumb-C6
- Spreading the Fingers-T1
- Bringing the Fingers Together-T1
- Flexing the Fingers-C8
- Wrist Stabilization-C6/C7
- Shaking (flex and extend the elbow)-C5/C7

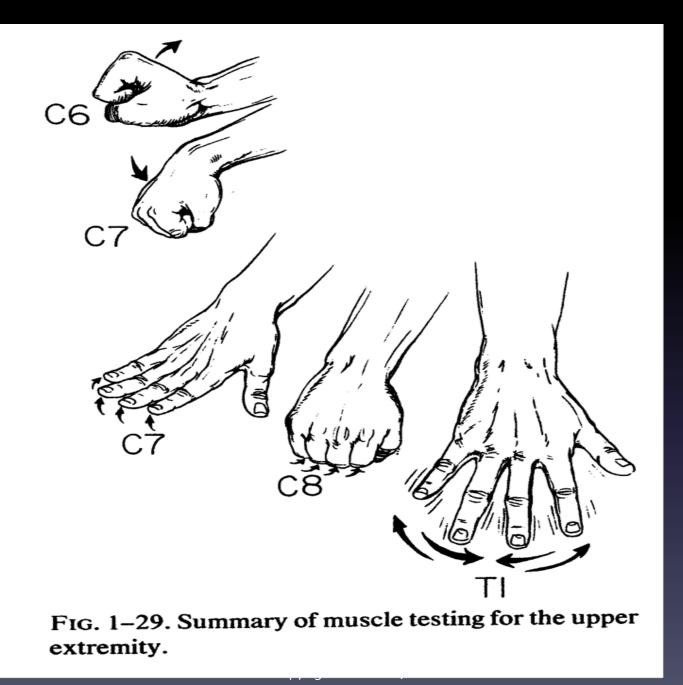


# Riding a Motorcycle

- Shoulder Flexion and Elevation to reach for the Handle Bars-C5
- Spreading and Extending the Fingers Preparing to Grip the Bar-T1/C7
- Bringing the Fingers together and Flexing them to Grip Bar-T<sub>1</sub>/C8
- Using the Throttle-C8/C6
- Using the Clutch or Brake-C7/C8







#### **T1** Finger abduction



### C8 finger flexion



#### **C7 Finger Extension**

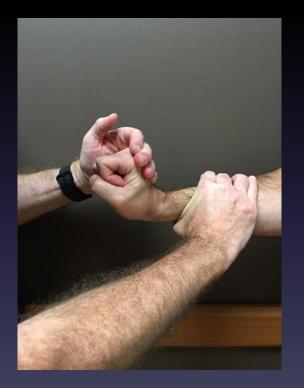


#### **C7 Wrist Flexion**



#### **C6 Wrist Extension**

#### C<sub>5</sub> Arm Flexion





### • C7 Arm Extension



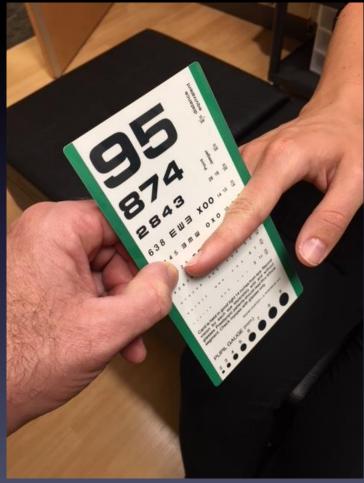
# Muscle Testing Rules

- Test distal to the joint without crossing the next joint
- Hold for 5 seconds
- Do Not pump the muscle/joint
- Grade the contraction
- Differentiate between true weakness and reflexive weakness due to pain

### Fingers Adductors/Abductors

- For adduction...squeeze method could bring finger flexion into play and skew results, use Rosenbaum card or similar
- Note the spring response for abductors

# **Finger Adductors**



10/01/2018

### Medical Research Council Scale of Muscle Strength "Record Keeping"

Grade	Response
0	No contraction
1	A flicker or trace contraction
2	Active movement with gravity eliminated
3	Active movement against gravity
4-	Active movement against gravity with slight resistance
4	Active movement against gravity with moderate resistance
4+	Active movement against gravity with strong resistance
5	Normal power

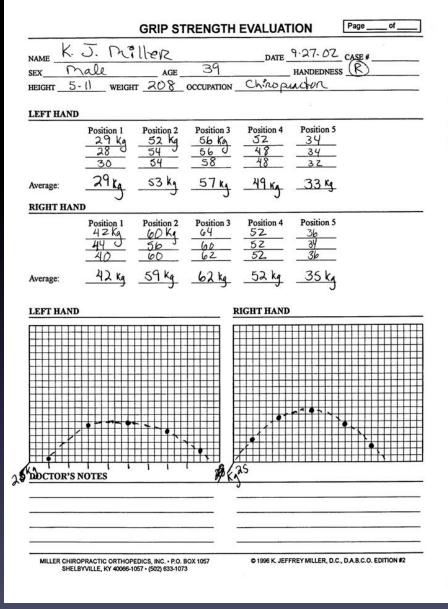
<b>GRIP STRENGTH</b>	I EVALUATION
----------------------	--------------

Page	of
Faye	01

		1.07			TIANDEDNESS	
	WEIGH					
LEFT HAND						
	Position 1	Position 2	Position 3	Position 4	Position 5	
werage:						
UGHT HAN		Position 2	Position 3	Position 4	Position 5	
werage:						
EFT HAND			<u>R</u>	IGHT HAND		
DOCTOR'S	NOTES					
	OPRACTIC ORTHOP 3YVILLE, KY 40066-1			© 1996 K. JEFF	REY MILLER, D.C.,	D.A.B.C.O. EDITION #2

# Grip Strength

Miller 2002 MillerCopyright 2002-2017



Grip Strength

#### Miller 2002 MillerCopyright 2002-2017

### **Quick Test**

- Test for Motor
   Function Of Nerve
   Roots L2-S2 and Lower
   Extremity Range of
   Motion (hip, knee and ankle)
- Alternate Version



### **Quick Test**

Motor innervatio	n for lower extremity movements performed during deep knee bends	9
Movement	Nerve Root Level	
HIP		
flexion	L2-L3	
extension	L4-L5	
KNEE		
extension	L3-L4	
flexion	L5-S1	
ANKLE		
dorsiflexion	L4-L5	
planar flexion	S1-S2	
10/01/2018	MillerCopyright 2002-2017	

# Hoppenfeld

Gluteus Maximus (S1)

 S1 strength is usually WNL if the patient can move from sitting to standing without using the hands to push up

# The IT Band

- Snapping ullet
- Crepitus ullet
  - Repetitive
  - Non-repetitive
- Trochanteric Bursitis ullet
- Ober's and Noble's ulletTests

Tomoor	1	
Tensor	) (	))
fasciae		()
latae /	$\mathbf{N}$	P
	ZY	
	n	MAX 1
	()	(1)//
		YX /
	N	/
		Pectineus
		lliotibial
		tract
(J.)		
2000		1
		1
		1
		\ \
0.jacada		$\sim$
	10	
N N	()	20
	X	$\sim$
	( 5	1
	$\Lambda$	/
		1
		1

# Heel Walking L<sub>4</sub>-L<sub>5</sub>

- Marching in place on the heels
- Stabilize
- Space considerations



### Toe Raises S1-S2

- 25 Bilateral Repetitions
  - McNab
    - 15 unilateral
  - Hoppenfeld
    - Hop on foot
  - Manual?
- Stabilize
- Space Considerations



### **Starting Position**



MillerCopyright 2002-2017

10/01/2018

### Lower Extremity Motor

### **Toe Raises**



### **Heel Standing/Marching**



10/01/2018

# Muscle Testing at the Feet

- Foot Dorsiflexion L4
- Great Toe Extension L5
- Toe Flexion S1-S2









## **Motor Function**

Upper Motor Neuron Testing

10/01/2018

# Hautant's - Drift Test

Miller 2002

- Vertebral Artery Test
- Doctor Should Position
   Patient's Head
- Eyes Must be Closed
- Held 15-30 Seconds Each Side
- Drift
  - Objective
  - Validity by Common Use









- Basic Life Support (BLS)
  - American Heart Association
  - Cincinnati pre-hospital stroke
- Scale (one positive)
  - Facial droop
  - Arm drift
  - Abnormal speech
- Acceptance/Reliability

- F.A.S.T.
  - Face
  - Arms
  - Speech
  - Time

- Names
  - Drift
  - Pronator Drift
  - Spontaneous Drift
  - Barre's Test (some confusion here because there is a Barre's test for the cervical spine)
    - Jean Alexandre Barre' first described the sign

- Positive Indications:
  - One hand rolling from supination to pronation is a positive
  - Typical sign is the hand rolling from supination to pronation with the arm dropping toward the floor
  - The arm drifts laterally (outward) in cerebellar lesions
    - These lesions are unilateral
  - The arm drifts upward in Parietal lesion
    - These lesions are contralateral

- Positive Indications:
  - Movements are slow and may take a few seconds to initiate
  - Tapping the hand or arm may help initiate movement
  - Both arms drifting is not significant

#### Lower Extremity Drift Starting and Normal

- This is a side note
- Confirmatory Test
   to Upper Extremity
   Drift (UMN)



Miller 2002

#### Lower Extremity Drift Abnormal

- This is a side note
- Are the eyes closed?
- Does it matter?



Miller 2002 MillerCopyright 2002-2017

### Arm Rolling & Finger Rolling

- Test for UMN
  - Forward and backward





#### Arm Rolling & Finger Rolling

- Pathological Findings
  - Arm Rolling
    - The pathological arm remains stationary or wobbles a little while the non-pathological arm rotates around it like a satellite.

#### – Finger Rolling

- The pathological finger remains stationary or wobbles a little while the non-pathological finger rotates around it like a satellite.
- Finger Rolling is more sensitive than Arm Rolling

#### Investigative Progression of Physical Examination

<b>Progression</b> → Structure/Function Pathology↓	History	Observation	<b>Baseline Testing</b>	Evolvement of Testing	Further Evolvement of Testing
Lower Motor Neuron Upper Extremity Motor Strength Grip Strength	<ul> <li>Patient reports loss of strength</li> <li>Patient reports dropping items</li> </ul>	<ul> <li>Muscle atrophy of the upper extremity/ha nd</li> </ul>	• Hand shake	<ul> <li>Strength testing individual muscles</li> </ul>	• Dynamomete r testing
Upper Motor Neuron Strength	<ul> <li>Patient reports weakness</li> </ul>	<ul> <li>Possible Spasticity</li> </ul>	<ul><li>Drift</li><li>Arm Rolling</li><li>Finger Rolling</li></ul>	<ul><li>Referral</li><li>EMG</li></ul>	

#### Investigative Progression of Physical Examination

<b>Progression</b> → Structure/Function Pathology↓	History	Observation	<b>Baseline Testing</b>	Evolvement of Testing	Further Evolvement of Testing
Lower Motor Neuron Lower Extremity Motor Strength	<ul> <li>Patient reports loss of strength</li> <li>Patient reports difficulty raising from a chair</li> <li>Patient reports difficulty with climbing/desc ending stairs</li> </ul>	<ul> <li>Muscle atrophy of quad, hamstring, calf musculature</li> </ul>	<ul> <li>Heel and toe walking</li> <li>Heel standing/toe raises</li> <li>Quick test</li> <li>Going from sitting to standing</li> </ul>	<ul> <li>Strength testing individual muscles</li> <li>Sit to Stand Test</li> </ul>	<ul> <li>Dynamometer testing</li> </ul>
Upper Motor Neuron Strength	<ul> <li>Patient reports weakness</li> </ul>	<ul><li>Possible atrophy</li><li>Spasticity</li></ul>	• Drift	<ul><li>Referral</li><li>EMG</li></ul>	

### **Reflex Function**

DTR and Pathological Testing

10/01/2018

#### Hammer Selection





#### Hammer Selection















10/01/2018

#### **Antique Hammers**

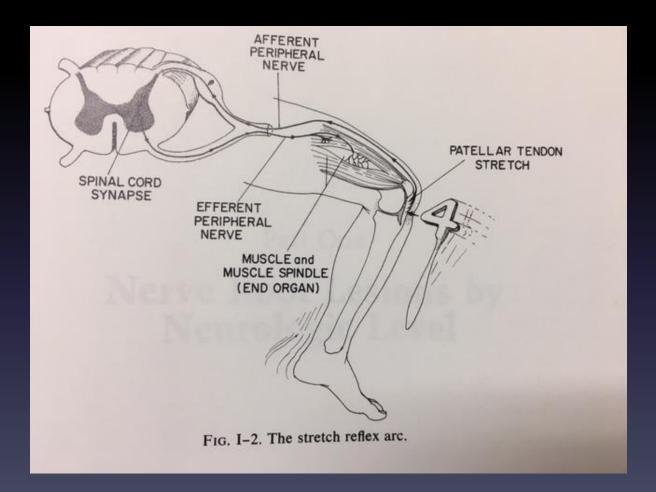
- Dejerine Hammer
- Berliner Hammer
- Queen's Square Hammer
- Taylor Hammer (Looped Handle)
- Queen's Square Hammer
- Traube Hammer
- Taylor Hammer (Solid Handle)



### **Reflex Performance**

- You get what you pay for here
  - Weight and length of the handle
- Practice using both hands-dimes on a desk
- Multiple Taps
- Symmetry vs the Wexler Scale
- Striking the tendon vs the muscle belly
- Jendrassik Maneuver

#### Deep Tendon Reflex Arc



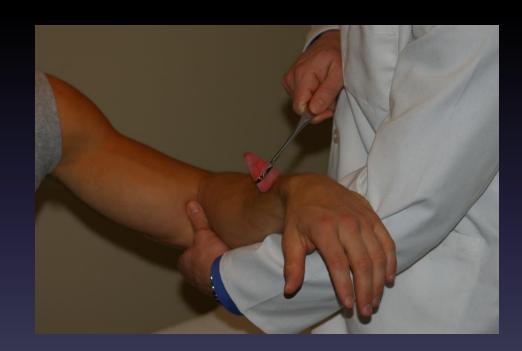
#### **Biceps Reflex**

- **C**5-C6
- Symmetry
- Multiple Taps



#### Brachioradialis Reflex

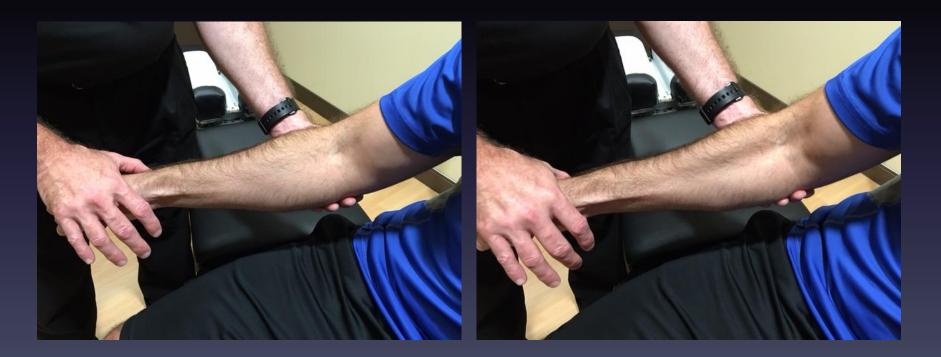
- c<sub>5</sub>-C6
- Symmetry
- Multiple Taps



#### **Brachioradialis Reflex**

Identify the muscle belly

Identify The Muscle Belly



Miller 2002 MillerCopyright 2002-2017

10/01/2018

#### Brachioradialis Reflex

#### • STRIKING THE BELLY



Miller 2002 MillerCopyright 2002-2017

10/01/2018

#### **Triceps Reflex**

- C7
- Symmetry
- Multiple Taps



#### Patellar Reflex

- L2, L3 & **L4**
- Symmetry
- Multiple Taps



#### Achilles Reflex

- **S1-**S2
- Symmetry
- Multiple Taps



#### Wexler's Scale for Grading Deep Tendon Reflexes "Record Keeping"

Grade	Response		
Grade 5+	Sustained clonus		
Grade 4+	Clonus		
Grade 3+	Hyperreflexia		
Grade 2+	Normal		
Grade 1+	Hyporeflexia		
Grade o	No reflex		

#### Deep Tendon Reflex (DTR) Summary

•	Biceps	Musculocutaneous	C5-C6
•	Brachioradialis	Radial	C5-C6
•	Radial	Radial	C5-C6
•	Triceps	Radial	C7
•	Patellar	Femoral	L2-L4
•	Achilles	Tibial	S1-S2

#### Deep Tendon Reflex (DTR) Summary

- Extensor Hallucis Longus Deep Peroneal L4, L5, L6
- Pec Major (Pectoral) Med/Lat Pectoral

- C5-C6 Clavicular Head, C7-C8, T1 Sternocostal head

- Medial Hamstring
   Sciatic
   L5, L6
- Masseter (Jaw Jerk) Trigeminal (CNV)

### Extensor Hallucis Longus



## Hoffman's Reflex

- Test for UMN Lesions
- Upper Extremity Equivalent of Babinski's Sign
- Must Be Firm
  - Fake finger nails
  - Partially amputated fingers

### Hoffman's Reflex







Miller 2002 MillerCopyright 2002-2017

10/01/2018

### Babinski's Reflex

- Test for UMN Lesions
- Most Common UMN Test
- Must Be Firm
- Present or Absent
  - Up Going or Down Going

#### Babinski's Reflex







Miller 2002 MillerCopyright 2002-2017

# Investigative Progression of Physical Examination

<b>Progression</b> → Structure/Function Pathology↓	History	Observation	<b>Baseline Testing</b>	Evolvement of Testing	Further Evolvement of Testing
Deep Tendon Reflexes	NA	NA	<ul> <li>Biceps C5-C6</li> <li>Brachioradialis C5-C6</li> <li>Triceps C7</li> <li>Patellar L4</li> <li>Achilles S1</li> </ul>	<ul> <li>Re- enforcement</li> <li>Additional Reflexes</li> <li>Other types for tests for the same root level</li> </ul>	<ul> <li>Advanced imaging</li> <li>Referral</li> </ul>
Pathological Reflexes	NA	NA	<ul><li>Hoffman's</li><li>Babinski's</li></ul>	<ul> <li>Additional pathological reflexes, upper and lower extremities</li> </ul>	<ul><li>Advanced imaging</li><li>Referral</li></ul>

## **Coordination Function**

Neurological Testing

#### Important Point

- It isn't just the fact that the patient finds/touches his nose...
  - It must be done repeatedly and the movements must be smooth and on target

# Finger to Nose Test

- Cerebellar Test
  - Coordination
- Eyes Closed
- This isn't Just Touching the Nose
  - Fast, Smooth and on Target



#### Finger to Nose Test



#### Coordination

#### Heel to Shin test



#### Tandem Stance

- Cerebellar Test
  - Coordination
- Eyes Closed
- Tandem stance is Harder than Tandem Walking or Romberg's tests due to the testing position having a more narrow base
  - Magee, Dutton
- Also referred to as Sharpened Romberg's Test or Tandem Romberg Test
- You can also grade this = partial tandem



### **Starting Position**

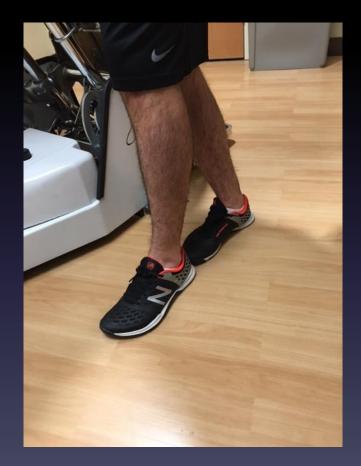


MillerCopyright 2002-2017

10/01/2018

#### Tandem Stance





# Investigative Progression of Physical Examination

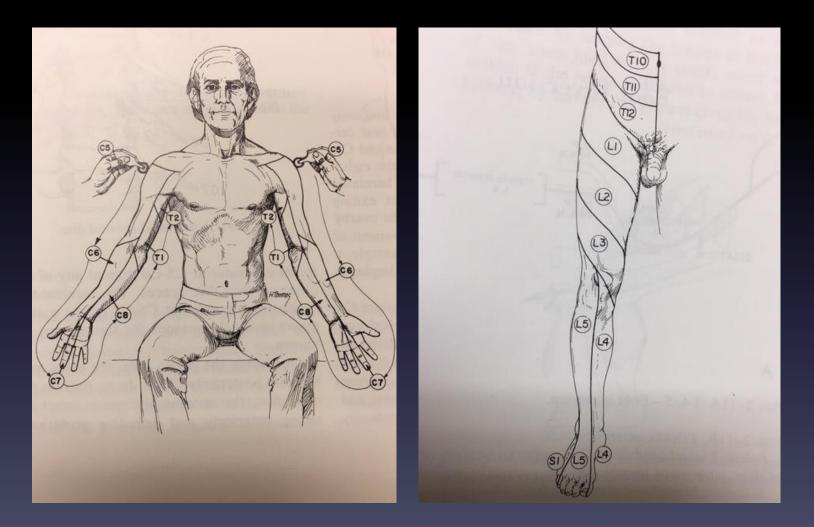
<b>Progression</b> → Structure/Function Pathology ↓	History	Observation	<b>Baseline Testing</b>	Evolvement of Testing	Further Evolvement of Testing
Upper Extremity Coordination	<ul> <li>Patient reports a decrease in hand coordination</li> </ul>	<ul> <li>Poor handwriting</li> <li>Lack of coordination in arm movements</li> </ul>	<ul> <li>Finger to nose</li> <li>Rapid alternating movements</li> </ul>	<ul> <li>Finger to finger test</li> <li>Past pointing test</li> <li>Drift</li> <li>Arm rolling</li> <li>Finger rolling</li> </ul>	<ul><li>Advanced imaging</li><li>Referral</li></ul>
Lower Extremity	• Patient reports a loss of balance	<ul> <li>Ataxic gait</li> <li>Walking with a wide stance</li> </ul>	Tandem Stance	<ul><li>Romberg's Test</li><li>Tandem Walk</li><li>Heel to Shin test</li></ul>	<ul><li>Advanced imaging</li><li>Referral</li></ul>

# **Sensory Function**

Neurological Testing

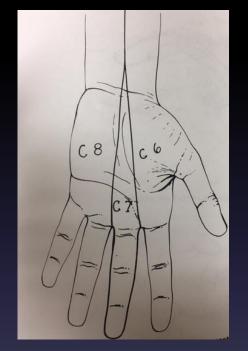
10/01/2018

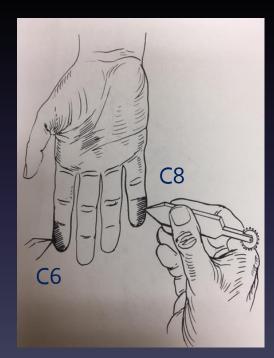
#### Dermatomes



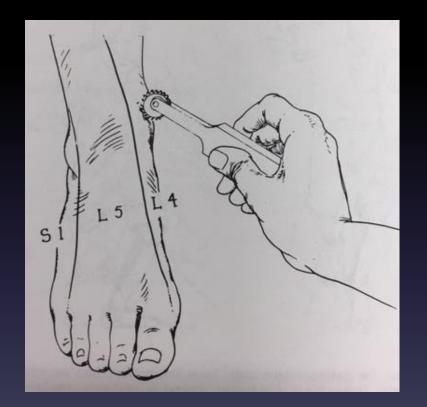
#### Dermatomes







#### Dermatomes



## Sensory Testing Tools

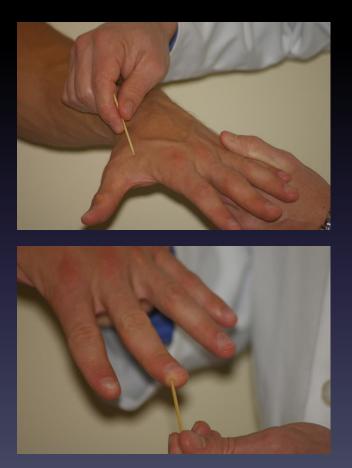


10/01/2018

#### Sensory

- Major Dermatomes and Peripheral Nerves of the Hand and Foot
- Why test these locations?
- Sensory tests are my least favorite neurological tests- subjective
  - Dermatome and Peripheral nerve innervation of the skin is highly variable

## Upper Extremity Sensory







10/01/2018

#### Foot Sensation







# Investigative Progression of Physical Examination

Progression → Structure/Function Pathology↓	History	Observation	<b>Baseline Testing</b>	Evolvement of Testing	Further Evolvement of Testing
Sensation	<ul> <li>Patient reports numbness "dead" areas</li> <li>Patient report an inability to feel his feet</li> </ul>	• NA	<ul> <li>Sensation scan (run hands down arms and legs)</li> </ul>	<ul><li>Tissue</li><li>Tooth picks</li></ul>	<ul> <li>Sharp and dull</li> <li>Light touch</li> <li>Vibration</li> <li>Proprioception</li> <li>Two point discrimination</li> <li>Hot/Cold</li> <li>Graphesthesia</li> <li>Stereognosis</li> <li>Advanced imaging</li> <li>Referral</li> </ul>

# OTHER SENSORY FUNCTIONS AND TESTS

#### Know these Tracts

- Spinothalamic Tract
- Posterior Column

Pain & Temperature

Proprioception

Proprioception & Stereognosis & Light Touch

- Spinocerebellar Tract\*
- Corticospinal Tract
   Motor Function
  - The only tract that does not cross over

# Sharp-Dull



- Test along the course of dermatomes/peripheral nerves
- Wattenberg Pin Wheel
- Problems with safety
  - Sanitation
  - Breaking the skin
- Pointed vs cutting ends

# Sharp-Dull

- Problems with safety
  - Sanitation
  - Breaking the skin
- Pointed vs cutting ends
- Tooth picks

# Light Touch

- Usually spared in unilateral cord lesions
- If pain and proprioception are intact then light will not likely be effected
- So only test light touch if deficiencies of the pain and proprioception are found

# Light Touch





# Light Touch

- Tissues for Light Touch
  - Readily available
  - Cheap
  - Clean-disposable

# Sensory Testing Tips

- Facial Sensation CN 5
  - A lesion will likely effect all three branches of the sensory nerve.
  - Over 90% of lesions effect the maxillary branch
- Tuning form for hot cold comparison
   Near heating/cooling vent if possible

# Vibration

- Use a 128 Hz tuning fork with weighted ends
- Testing locations
  - Great toe
  - Metatarsal heads
  - Malleoli
  - Tibia
  - Anterior superior iliac spine
  - Scrum

- Testing locations continued
  - Spinous processes
  - Sternum
  - Clavicle
  - Radius/ulna styloid processes
  - Finger joints

#### Vibration

- Sensitive test as the nervous system must perceive, transmit and interpret rapidly changing stimulus
- Lack of the sensation indicates peripheral nerve and/or posterior columns

### Proprioception

- Position sense: knowledge of where body parts are in space
- Unilateral dorsal column that crosses over in the brain stem
- Test distally and move proximal if necessary

# Proprioception

- Drift, arm rolling, finger rolling, Romberg's test, tandem stance are depend upon proprioception but also vestibular and cerebellar function
- So...the individual testing isn't always immediately necessary in chiropractic clinical practice. When it is it will usually be for patient's with head injury, cerebral/cerebellar ischemia or the elderly in general







10/01/2018

- The purpose is to access if the patient can differentiate between being touched my one or two different points of contact
- Multiple tools are available
- The test can be performed static and/or moving. Moving is considered more accurate

- Any number of sensory pathologies central or peripheral can cause positive findings. Peripheral pathologies more common
- The most common concern is diabetes
- Posterior columns, medial lemniscus

- Tip of the tongue
- Lips
- Finger tips
- Dorsum of the fingers
- Palm
- Back of hand
- Dorsum of foot

1 mm 2-3 mm 2-4 mm 4-6mm 8-12 mm 20-30 mm 30-40 mm

## Monofilament

- Used frequently with diabetic patients
- Compare to two point discrimination



# Hot and Cold

- Spinothalamic tract with pain
- If pain is intact hot and cold usually will be as well
- Tubes of hot and cold water
  - Cold of warm metal instruments

# Stereognosis

- The ability to identify objects by touch and/or differentiate objects by touch or identify textures
- Palpation/Braille
- Parietal Lobe Function
- Depends on intact lower neurological functions
- Can only be tested at the hand

# Stereognosis





# Stereognosis



## Graphesthesia

- The ability to recognize letters or numbers written on the skin with a pencil, dull pin, or similar object
- Parietal Lobe Function
- Depends on intact lower neurological functions
- Right side up or upside down
- Must use dissimilar numbers and letters

#### Graphesthesia

 Remember – You are not really drawing the letters/numbers



#### Question

 After I published the first edition of *Practical* Assessment I was frequently asked, "What do I do if the patient cannot move or every tests is painful for the patient?"

#### Micro-systems









#### 10/01/2018

Concentrated Neurological Examination Neurological "Microsystem"

- Upper motor
- Lower Motor
- Coordination
- Pathological Reflexes
- Stereognosis
- Graphesthesia

- Sensation
  - Sharp/dull
  - Light touch
  - Hot/cold
- Vibration
- Proprioception

#### SPECIALTY EXAM: NEUROLOGY

Refer to data section (table below) in order to quantify. After reviewing the medical record documentation, identify the level of examination. Circle the level of examination with the appropriate grid in Section 5 (Page 3).

Performed and Documented	Level of Exam
One to five bullets	Problem Focused
Six to eleven bullets	Expanded Problem Focused
Twelve or more bullets	Detailed
At least one bullet in the box with the unshaded border AND every bullet in each box with the shaded borders.	Comprehensive

#### (Circle the bullets that are documented.)

NOTE: For the descriptions of the elements of examination containing the words "and", "and/or", only one (1) of those elements must be documented.

System/Body Area	Elements of Examination			
Cardiovascular	Examination of carotid arteries (e.g., pulse amplitude, bruits)     Auscultation of heart with notation of abnormal sounds and mumurs			
	<ul> <li>Adsolution of heart with rotation of abitemia sounds and manners</li> <li>Examination of peripheral vascular system by observation (e.g., swelling, varicosities) and palpation (e.g., pulses, temperature, edema, tenderness)</li> </ul>			
Constitutional	<ul> <li>Measurement of any three of the following seven vital signs: 1) sitting or standing blood pressure, 2) supine blood pressure, 3) pulse rate and regularity, 4) respiration, 5) temperature, 6) height, 7) weight (May be measured and recorded by ancillary staff)</li> </ul>			
	<ul> <li>General appearance of patient (e.g., development, nutrition, body habitus, deformities, attention to grooming)</li> </ul>			
Eyes	<ul> <li>Ophthalmoscopic examination of optic discs (e.g., size, C/D ratio, appearance) and posterior segments (e.g., vessel changes, exudates, hemorrhages)</li> </ul>			
Musculoskeletal	Examination of gait and station			
(Includes Extremities)	Assessment of motor function including:			
	Muscle strength in upper and lower extremities			
	<ul> <li>Muscle tone in upper and lower extremities (e.g., flaccid, cog wheel, spastic with notation of any atrophy or abnormal movements (e.g., fasciculation, tardive dyskinesia)</li> </ul>			

DATE OF SERVICE

System/Body Area	Elements of Examination			
Neurological	Evaluation of higher integrative functions including:			
	Orientation to time, place and person			
	Recent and remote memory			
	Attention span and concentration			
	Language (e.g., naming objects, repeating phrases, spontaneous speech)			
	Fund of knowledge (e.g., awareness of current events, past history, vocabulary)			
	Test the following cranial nerves:			
	• 2nd cranial nerve (e.g., visual acuity, visual fields, fundi)			
	<ul> <li>3rd, 4th, and 6th cranial nerves (e.g., pupils, eye movements)</li> </ul>			
	• 5th cranial nerve (e.g., facial sensation, corneal reflexes)			
	• 7th cranial nerve (e.g., facial symmetry, strength)			
	8th cranial nerve (e.g., hearing with tuning fork, whispered voice and/or finger rub)			
	9th cranial nerve (e.g., spontaneous or reflex palate movement)			
	• 11th cranial nerve (e.g., shoulder shrug strength)			
	• 12th cranial nerve (e.g., tongue protrusion)			
	<ul> <li>Examination of sensation (e.g., by touch pin, vibration, proprioception)</li> </ul>			
	<ul> <li>Examination of deep tendon reflexes in upper and lower extremities with notation of pathological reflexes (e.g., Babinski)</li> </ul>			
	<ul> <li>Test coordination (e.g., finger/nose, heel/knee/shin, rapid alternating movements in the upper and lower extremities, evaluation of fine motor coordination in young children)</li> </ul>			

Note: The Head/Face; Ears, Nose, Mouth and Throat; Neck; Respiratory; Chest (Breasts); GI (Abdomen); GU; Lymphatic; Sk and Psychiatric systems/body areas are not integral parts of this Neurological exam.

(Enter the number of circled bullets in the boxes below. Then circle the appropriate level of care.)

EXAM	One to Five Bullets	Six to Eleven Bullets	Twelve or more Bullets	Answer the following two questions. If both answers are "yes," the appropriate level of exam is comprehensive. Was at least one bullet documented in the unshaded box?
				documented?   Yes  No
	Problem Focused	Expanded Problem Focused	Detailed	Comprehensive

10221 11/97

1a