The Neurological Exam

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Dr. Katzman has nothing to disclose

Examination of the Central Nervous System

After this session, participants will be able to:

1. Understand importance of patient examination of Central Nervous System for pain patients.

2. Learn the basics of actual Central Nervous System exam skills.

3. Understand how the examination of Central Nervous System, can help with differential diagnoses of patients suffering from pain.

THE NEUROLOGICAL EXAMINATION OUTLINE

1. Mental Status
   - Attention
   - Orientation
   - Naming
   - Language
   - Abstraction
   - Reading
   - Writing
   - Memory
   - Frontal Lobe Systems Tasks

2. Cranial Nerves
   - I- Olfactory
   - II- Optic
   - III- Oculomotor
   - IV- Trochlear
   - V- Trigeminal (Opthalmic, Maxillary, Mandibular)
   - VI- Abducens
   - VII- Facial
   - VIII- Acoustovestibular
   - IX-Glossopharnyngeal
   - X- Vagus
   - XI-Spinal Accessory
   - XII- Hypoglossal

3. Motor
   - Strength/Power
   - Tone
   - Deep Tendon Reflexes
   - Fine Finger Movements

4. Cerebellar
   - Finger to Nose
   - Heel to Shin
   - Balance “Righting Response”, “Checking” Reflex

5. Sensory
   - Light Touch
   - Pin Prick
   - Vibration
   - Proprioception
   - Temperature
   - Two-point discrimination
   - Romberg

6. Gait
   - Heel to Toe
   - Balance/Antalgia
   - Functional component

Neurological Exam

- Importance of the History
- Patient Centered
- Chief Complaint
- History of the Present Illness
- Psychosocial History
- Functional Goals
- Medications- current, and past (reason for discontinuation)

Neurological Exam (continued)

- Modalities Tried:

1- Interventions
2- Physical Therapy
3- Exercise: how much, what type, how long
4- Massage
5- Yoga
6- Acupuncture
7- TENS unit, biofeedback, hypnosis

Mental Status

- Attention

1- Able to answer questions

2- Follow 3 step commands

3- Spell “WORLD” forwards and backwards

4- Repeat 7-digit number

5- Frontal Lobe Tasks

6- Name last 4 Presidents of the United States

7-Counting back by 7, from 100… 93, 86, 79…

Mental Status (continued)

- Orientation (person, place, situation)
- Naming
- Language (receptive, expressive)
- Abstraction
- Reading
- Writing

Cranial Nerves

- I-Olfactory Nerve
- II- Optic
- III- Oculomotor
- IV- Trochlear
- V- Trigeminal (Opthalmic, Maxillary, Mandibular)
- VI- Abducens
- VII- Facial

Cranial Nerves (continued)

- VIII- Acoustovestibular
- IX- Glossopharyngeal
- X- Vagus
- XI- Spinal Accessory
- XII- Hypoglossal

Motor Exam

- Strength/Power
- Fine Finger Movements
- Deep Tendon Reflexes (reflex hammer)
- Tone/Spasticity

- Differences in motor examination with Upper and Lower Motor Neuron Diseases (examples)

Cerebellar Exam

- Finger to Nose
- Heel to Shin
- “Righting Response”
- Balance
- “Check” Response

- Diseases with Abnormal Cerebellar Exam findings (examples)

Sensory Exam

- Touch: Light Touch, Pin Prick
- Vibration Sense (Tuning Fork)
- Proprioception
- Temperature: Cold/Hot
- Romberg (dorsal columns---NOT cerebellar)

Gait Evaluation

- Heel to Toe
- Tandem Gait
- Antalgia
- Balance
- Functional

Functional Pain Scales

- Brief Pain Inventory (BPI)
- Pain Outcomes Profile
- Pain Tracker

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The mission of Project ECHO® (Extension for Community Healthcare Outcomes) has been to develop the capacity to safely and effectively treat chronic, common, and complex diseases in rural and underserved areas, and to monitor outcomes of this treatment.

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