

Approach to "Weakness"

Pt complains of "Weakness"

(check muscle strength to confirm)

True "weakness": gradual loss of strength on exam, due to neurological cause
(Localize weakness to upper or lower motor neuron, or both)

No true loss of muscle power on physical exam:

- Infection (flu-like sx)
- Arthritis (pain ↓ strength)
- Cardio-pulmonary issues
- Anemia (fatigue)
- Malignancy
- Depression (poor sleep)
- Deconditioning (↓ stamina)
- Fibromyalgia (poor sleep)
- Poor moral fiber, giving in to temptations

Signs of Upper Motor Neuron (UMN) Disease

(Generally due to loss of UMN inhibition on LMN activity)

- Hyper-reflexia (4+), may see clonus
- Spasticity (↑ed muscle tone when moved really fast)
- Positive (upgoing) Babinski test
- Muscle bulk remains normal

Mixed UMN and LMN features (Motor Neuron diseases)

Signs of Upper Lower Neuron (LMN) Disease

(Generally due to loss of LMN stimulation of skeletal muscle)

- Hypo-reflexia (more UMN inhibition of reflexes)
- Flaccidity (↓ muscle tone, floppy noodle)
- Fasciculations (spontaneous muscle twitching)
- Muscle atrophy

Hemiplegia
(Weakness/paralysis on one side of the body)

Quadriplegia
(Weakness/paralysis is in all 4 limbs)

Paraplegia
(weakness/paralysis from legs down)

Amyotrophic Lateral Sclerosis (ALS)

Other inherited conditions

No sensory loss

Accompanying Sensory Loss

Myopathy

Neuromuscular Junction disease

Peripheral neuropathy

- Cortex dx
- Subcortex dx
- Brainstem dx

→ Cervical spinal cord dx

→ Thoracolumbar spinal cord dx