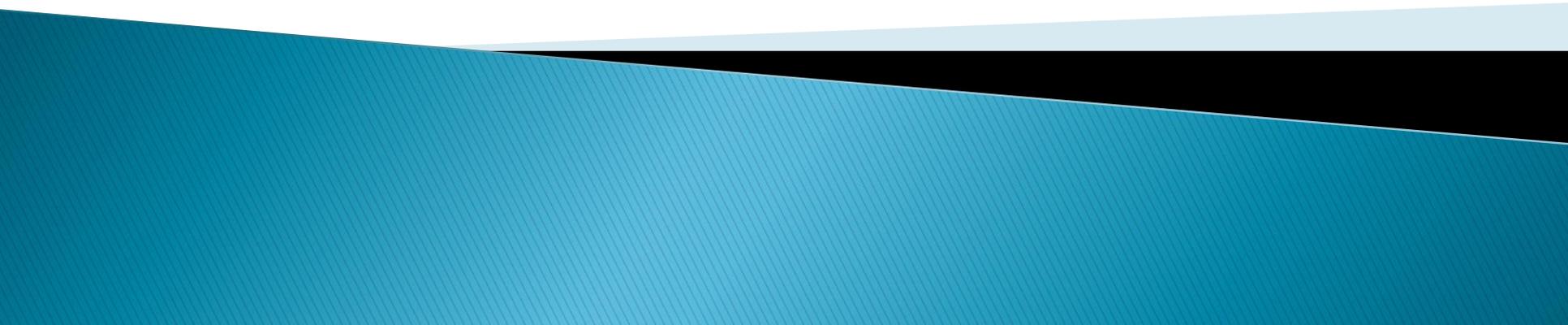


IN THE NAME OF GOD

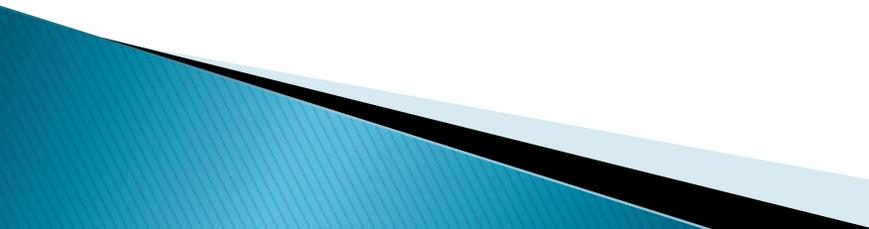
# Neurologic Signs AND Symptoms of Aging

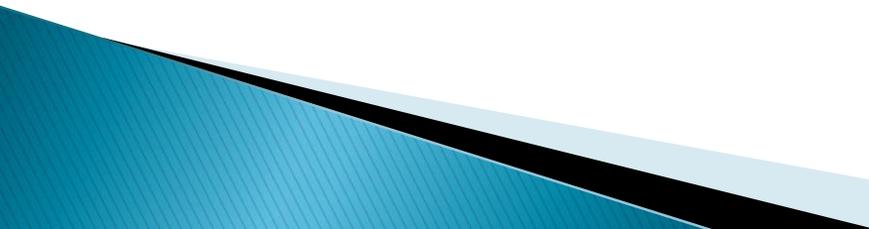
Dr. Leila Poorsaadat Neurologist



- ▶ Normal age\_related changes are defined as progressive and irreversible changes in the finding on neurological examination that develop with advancing age in most individuals without overt disease

## *Neuroophthalmic signs:*

- ▶ *Progressive smallness of pupils*
  - ▶ Decreased reactions to light and accommodation
  - ▶ Hyperopia as a result of impairment of accommodation (presbyopia)
  - ▶ Insufficiency of convergence
  - ▶ restricted range of upward conjugate gaze
  - ▶ Diminished dark adaptation
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- ▶ *Progressive hearing loss (presbycusis), especially for high tones and decline in speech discrimination*
  - ▶ Risk factor: noise exposure, smoking, medication use, HTN, family history
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# *Motor signs*

- ▶ *Reduced speed and amount of motor activity*
  - ▶ Reduced muscular power (legs more than arms and proximal muscles more than distal ones)
  - ▶ Thinness of muscles, particularly the dorsal interossei, thenar, and anterior tibial muscles
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- ▶ Impairment of fine coordination
  - ▶ In exam we see mild bradykinesia and mild incoordination without dysmetria on the finger-to-nose and heel-to shin tests
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- ▶ A depression of tendon reflexes at the ankles in comparison with those at the knees is observed frequently in persons older than 70 years of age
- ▶ The snout or palmomentorial reflexes, which can be detected in mild form in a small proportion of healthy adults, are frequent findings in the elderly (than 60 years of age)

- ▶ The grasp reflex is rare in normal healthy elderly up to 100 years of age
  - ▶ The glabellar reflex has a frequency of 21% in the oldest old(over 84 years)
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- ▶ Senile tremor; postural tremor in advanced age (26.5% in older than 85)
  - ▶ in addition to upper limbs, the head, voice, lower limbs may be affected
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- ▶ steps shorten, walking becomes slower, and there is a tendency to stoop
- ▶ Mild impairment in Romberg sign secondary to diminished sensation for vibration and joint position in lower limbs

# Normal Amount of Cognitive Decline

- ▶ **Memory:** Remote memory or recall of past events that have been stored over many years remains relatively preserved in old age. Recent memory or the formation of new memories, however, is more vulnerable to aging.

- ▶ Attention: Simple or focused attention such as the ability to attend to a television program tends to be preserved in older age. Difficulties may be encountered, however, when divided attention is required such as trying to pay attention to the television and simultaneously talk on the telephone.

- ▶ Language: Verbal abilities including vocabulary are preserved as we age. Common changes have to do with word retrieval or the process of getting words out. It takes longer and is more difficult to find the words one wants when engaged in conversation or trying to recall names of people and objects. The information is not lost but it is more difficult to retrieve.

- ▶ Reasoning and Problem Solving: Traditional ways of approaching solutions are maintained in older persons. Problems that have not been encountered during your life may take extra time to figure out.
  - ▶ Speed of Processing: Aging does affect the speed with which cognitive and motor processes are performed. This does not mean that the activities cannot be performed, but rather that they take longer
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**THANK YOU**

