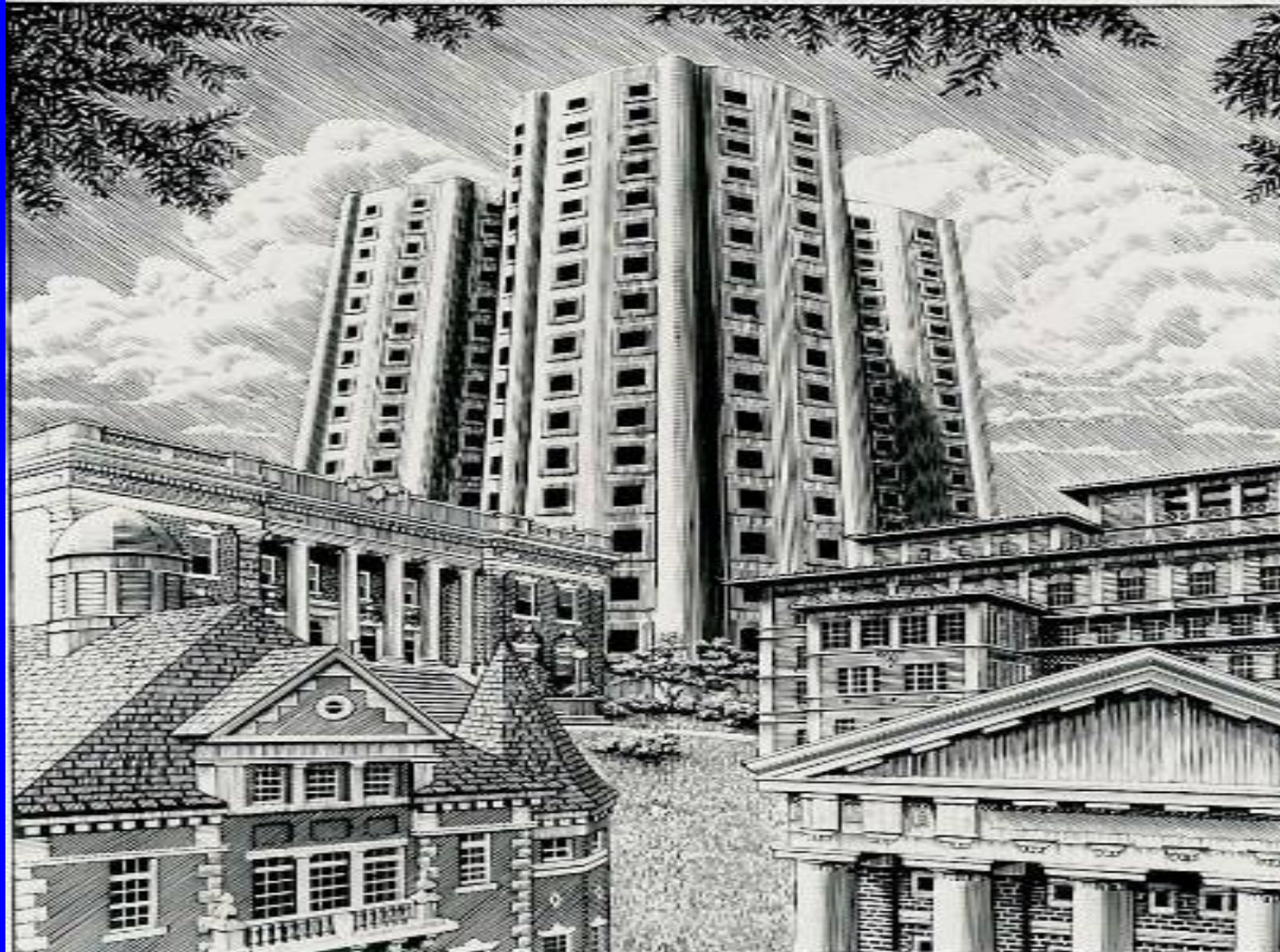




The Brigham Department of Neurology

Martin A. Samuels, M.D., Chair Emeritus



Brigham & Women's Hospital, Boston, Massachusetts

The Neurological Examination

No disclosures

Overview of the Neurological Examination

- Mental Status
 - Psychiatric
 - Neurological
- Cranial Nerves
- Motor
- Sensory
- Coordination
- Reflexes

The Psychiatric Mental Status Examination for Non-Psychiatrists

- Affect
- Mood
- Thought
 - Content
 - Process

The Neurological Mental Status

- Level of consciousness
 - Attentive, confused/delirious, stuporous, comatose
- Language
 - Fluency, comprehension, repetition
- Memory
 - Episodic, semantic, working, procedural
- Visuo-spatial skills
 - Representations of extra-personal space

Cranial Nerves

- I. Olfaction
- II, III, IV, VI, VIII. Eyes, pupils, lids
- V. Facial sensation
- VII. Facial movement
- VIII. Hearing/vestibular function
- IX, X. Swallowing, palatal sensation
- XI. Sternocleidomastoid and Trapezius
- XII. Tongue

Motor Exam

- Power
 - Patterns of weakness; symmetry
- Tone
 - Increased tone (e.g. spasticity), decreased
- Bulk
 - Neurogenic atrophy

Sensory Exam

- Primary modalities
 - Noxious (e.g. temp); non-noxious (e.g. proprioception)
- Secondary modalities
 - Graphesthesia, two-point discrim., stereognosis
- Screening test for axial proprioception
 - Romberg test

Coordination and Gait

- Hypotonicity
 - Passive limb movement, overshoot
- Dysmetria
 - Finger-nose, heel-shin, mirror test
- Dysdiadochokinesia
 - Rapid alternating movements
- Fine motor tasks
 - Finger on thumb tapping
- Gait
 - Wide-based

Reflexes

- Proprioceptive
 - Muscle stretch (aka tendon jerks)
- Nociceptive
 - Plantar, corneal, abdominal, cremasteric, anal
- Anti-gravity
 - Four limb (decerebration), two limb (decortication)
- Release
 - Sucking, rooting, grasping, palmomental

Key Points

- The neurological exam is the most cost effective test for neurological diseases.
- The entire examination does not need to be performed on every patient.
- The elements of the examination that are performed depend on the history.

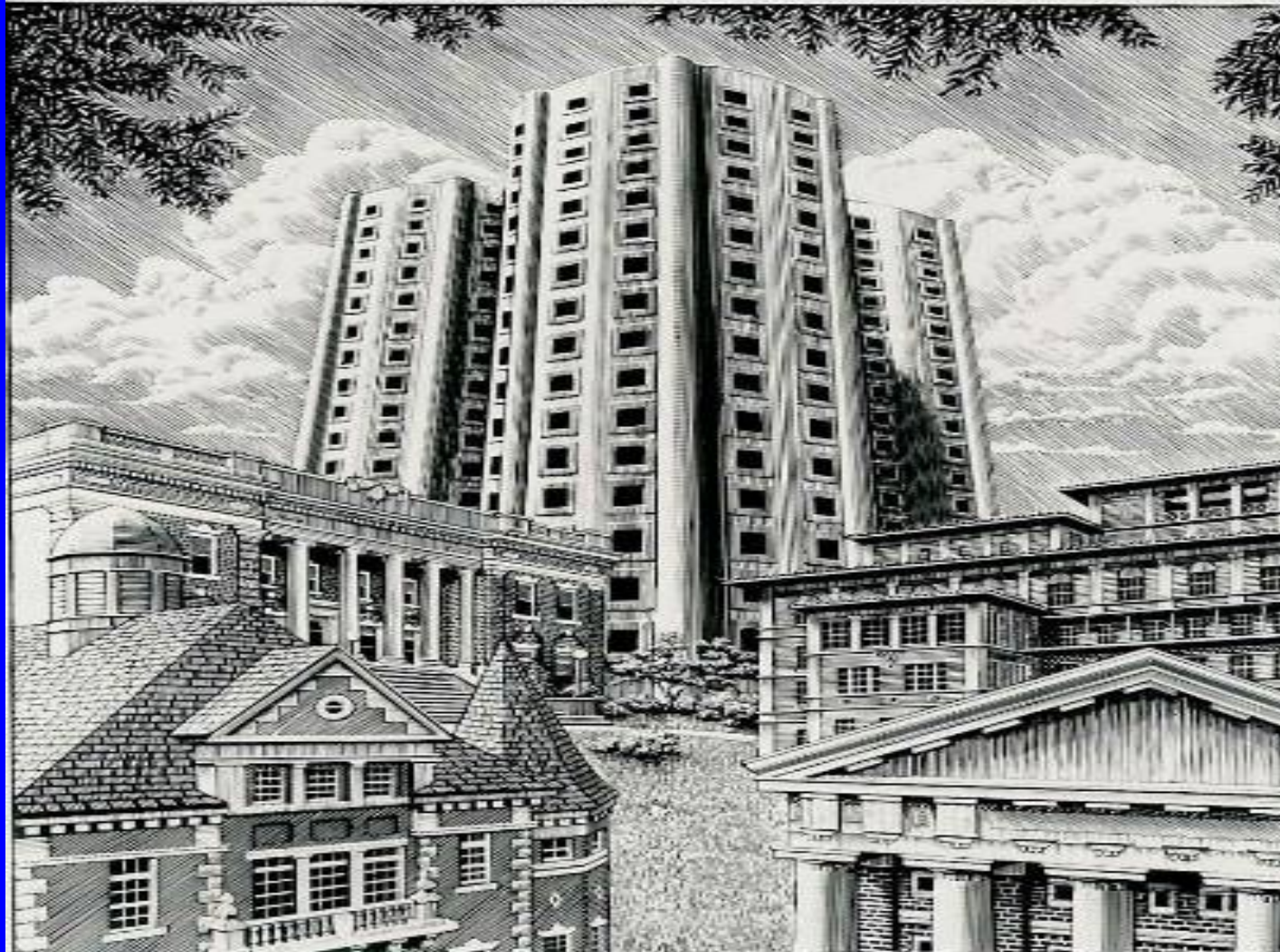
Next Best Steps

- Appropriate laboratory investigations depending upon the results of the examination.
- Referral to a neurologist.



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