

# UF NEUROLOGY HISTORY AND PHYSICAL GUIDELINES

## HISTORY

**Chief Complaint** — A maximally succinct statement of the patient age, handedness, gender, main problem, and its duration (e.g. – 56 year old right-handed woman with a chief complaint of three days of garbled speech and right sided weakness). May specify who the historian was and quality of informant's history if different from usual. Sometimes it is more useful to use patient's own words to describe the chief complaint.

**History of Present Illness** — Each symptom should be analyzed systematically and include the onset, duration, temporal pattern (improving, worsening, fluctuating, etc.), location, quality, severity, ameliorating and aggravating factors, and all pertinent positives and negatives relevant to the potential differential diagnosis, may include pertinent past medical history and family history. Only include information that contributes in an important way to diagnosis or management. Remember to avoid medical jargon. The time course of the illness is helpful to determine etiology (e.g. abrupt vs. gradual onset, static, remittent, intermittent, progressive, improving, etc.).

**Past Medical History** — Include current, treated, and pertinent past medical conditions and surgeries (may optionally list surgical history as it's own category, especially if lengthy or complicated). Also include hospitalizations, accidents (e.g. head trauma), infectious and/or venereal diseases, congenital defects, diet (e.g. vegetarian), and sleeping patterns.

**Allergies and Adverse Drug Reactions** — Should include both type of agent and reaction, severity, and whether dose dependent.

**Medications** — Ideally include name (generic or brand if pertinent), dosage, route of administration (default assumption is oral), frequency, and when started if relevant.

**Birth and early development (if applicable)** — Complications of pregnancy, labor and delivery, birth trauma, birth weight, postnatal illness, health and development during childhood, convulsions with fever, learning ability, school performance.

**Family History** — There is no such thing as a noncontributory family history. If adopted with no knowledge of family, note here. Report presence or absence of neurologic diseases or family risk factors for neurologic diseases (e.g. migraine, epilepsy, cerebrovascular disorders, myopathy, cerebellar diseases). Ages and causes of death of first degree relatives may be relevant, especially in age related diseases (e.g. cancer, DM, HTN, cardiovascular disorders).

**Social History** — Should include marital status, maximum education level achieved, occupational history, hobbies and avocations, previous residencies, and personal habits (e.g. alcohol, tobacco, recreational drugs, coffee, tea, soft drinks and similar substances), and sexual activity as applicable.

**Review of Systems** — Detect health problems of which the patient may not complain, but which require attention in relation to the HPI. Pertinent positives and negatives should go in the HPI. List systems reviewed. For a complete work-up, the requirement is for 10 to 14 systems to have been reviewed from the following categories: Constitutional, Eyes, HEENT,

Respiratory, Cardiovascular, Gastrointestinal, Genitourinary, Integument/breast, Hematologic/lymphatic, Musculoskeletal, Behavioral/Psych, Endocrine, and Allergic/Immunologic.

The Neurologic Review of Systems should include: seizures or unexplained loss of consciousness, headache, vertigo or dizziness, loss of vision, diplopia, difficulty hearing, tinnitus, difficulty with speech or swallowing, weakness, difficulty moving, abnormal movements, numbness, tingling, tremor, problems with gait, balance, or coordination, difficulty with thinking or memory, problems sleeping or excessive sleepiness, depressive symptoms.

*A skillfully taken history will frequently indicate the probable diagnosis, even before the physical exam. Many errors in diagnosis are due to incomplete or inaccurate histories!!!*

## GENERAL EXAMINATION

**Vital Signs** — Blood pressure, heart rate, respiratory rate, and temperature. In the inpatient setting the maximum and minimum vitals for the past 24 hours may be more useful. Note that the vitals may be reported from nursing measures and need not be done by the student.

**General Appearance** — General observations such as whether well nourished, well developed, in distress or not, appearance for stated age.

**Respiratory System** — Auscultate for clearness, crackles, wheezes, and report if increased respiratory effort.

**Cardiovascular** — Auscultate the carotids, heart, palpate peripheral pulses, choosing which one or multiple would be most relevant to the case.

**Abdomen** — Examine softness, tenderness, distension, bowel sounds, and/or masses.

**Extremities** — Check for cyanosis, edema, and palpate pulses.

## NEUROLOGIC EXAM

**Mental Status** — To include at minimum:

- Level of consciousness, orientation to person, place and time
- Language: fluency and content, comprehension, repetition, and naming
- Recent and remote memory
- Attention & Concentration
- Fund of knowledge
- Rest of the higher cortical exam should be limited, focused, and guided by the localization hypothesis you have developed before you start this exam or as may arise on testing. Higher cortical functions can include but is not limited to visuospatial function, neglect (line bisection and line cancellation), construction, calculation, right-left confusion, finger agnosia, praxis, and graphesthesia.

**Cranial Nerves II-XII** — When giving oral report, it is acceptable to summarize as CN II – XII intact, if they are all intact in function and expected to have been from the presentation. If any are abnormal or there was reason to expect them to be abnormal, it is best to report the actual types of testing done in detail, and in written documentations it is best to document type of testing as listed in the outline. **Ophthalmologic exam** — Should attempt and comment upon the appearance of the optic disc at minimum, though blood vessel and other fundoscopic findings of note may be reported. Note that every clinic room, ER room, and hospital floor (ask nursing for this) have ophthalmoscopes available for use, so not having one is not an acceptable excuse for omitting this from examination.

**Motor** — Check all four extremities. Includes strength, drift in the upper extremities and fine motor movement in the hands, muscle tone, bulk (noting any atrophy or fasciculations), and involuntary movements.

**Reflexes** — Check all four extremities for Deep Tendon (biceps, triceps, brachioradialis, patellar, and Achilles) and Pathological Reflexes such as plantar responses (Babinski sign). Also check frontal lobe release signs (e.g. Meyerson sign, snout, grasp, palmomental reflexes).

**Sensory** — Check all four extremities for pinprick (pain) or temperature, touch, vibration, and proprioception. The sensory exam should be limited, focused, and guided by the localization hypothesis you have developed before you start this exam (e.g. don't check every

single dermatome in the body!).

**Coordination** — Include fine finger movements, finger-to-nose maneuver, rapid alternating movements, heel-to-shin testing. May also be useful to assess for Romberg Sign.

**Gait & Station** — Should be performed when level of consciousness, strength, and coordination allows patient to stand safely with assistance. Minimum expected is natural gait noting posture, stance, speed, stride length, arm swing, turns. Younger patients where subtle abnormalities are expected may consider assessing tandem gait, heel walking, and toe walking.

**Data Reviewed** — Summarize in your own words any relevant test results such as imaging, labs, neurophysiology tests, etc. The results should be reported only in terms of their relevance to the case.

*If there is reason to suspect neurologic disease based on the patient's history or the results of any components of the screening examination, a more complete neurologic examination may be necessary.*

**ASSESSMENT AND PLAN** (may start with info from chief complaint if appropriate).

**Localization** — Be as specific as appropriate for the history and physical results, but at the very least should include whether unifocal or multifocal, level of neuroaxis (muscle, neuromuscular junction, peripheral nerve, plexus, spinal cord, brainstem, subcortical structures, cerebrum), lateralization or bilateral, as well as the localization in time (acute, chronic, progressive, fluctuating, etc.). If the case has multiple possible localizations, report them all noting their likelihood in your estimation. If one or more is removed by results of testing, can report those possible based on history and examination and then note to which localization to which the testing has narrowed down.

**Differential Diagnosis** — Should be based upon your localization(s) and the history and examination details, which should be grouped in a neurological syndrome. It is recommended that you list first the most likely diagnosis, then emergent and common diagnoses, and lastly any remaining diagnoses, if extensive, these can be listed by groups (e.g. hormonal, electrolyte, etc.). It is acceptable to list diagnoses that have been ruled out by the history, exam, and work-up to date if it is known or suspected that others may consider those diagnoses but then it should be stipulated why they are ruled out.

**Evaluation** — Recommendations for evaluation should be based on the differential diagnosis. If there is an evaluation item you are considering that can not be associated with a diagnosis on the differential, then you may be missing a diagnosis, or the recommended evaluation is unnecessary.

**Management** — Management refers to interventions such as medications, surgeries, rehabilitation, diet, etc. Management recommendations can be for immediate stabilization of known problems to be implemented immediately, and/or speculative based off of likely diagnosis or diagnoses that can be acted upon once the diagnosis is verified. Any and all management recommendations should be linked to one or more of the diagnoses listed in the differential.

**Counseling** — Counseling is one of the most important items that physicians perform in practice. This section of the assessment and plan should document what the patient and family have been told about the case, or how you recommend they be advised. This often includes explanation in layman's term of what the problem is or might be, what the evaluation process is for, what management options there are, etc.

Any part of the history and physical that cannot be obtained should be listed with the reason as to why it could not be assessed.