The Pediatric Neurological History

1. Establishing rapport

- Parents and guardians are often very worried about the seriousness of their child's illness.
- It is important to put the child and caregiver at ease and present an empathetic demeanor.
- Establish expectations, understanding and fears regarding the child's presentation.

2. General Pointers

- History is crucial for evaluation of a child with a suspected neurologic problem.
- Children 3 or older should be encouraged to participate in providing the history.
- History in children is always a composite of the parent/guardian and the child's input.
- Be sure to confirm and clarify symptoms ie. dizziness could be lightheadedness, confusion, vertigo, weakness, etc.

Chief complaint

• Elicit a succinct reason that prompted the parents and child to seek medical attention

History of presenting illness

- detail the onset, duration, frequency, character, palliating and provoking factors, and associated symptoms
- Focused review of systems relevant to chief complaint
 - o Hypotonia
 - Infection: fever, nuchal rigidity, rash, seizures
 - Family history of muscular disorders, consanguinity
 - Progressive hypotonia?
 - Limbs affected
 - Developmental milestones

Seizures

- Duration, frequency
- Infection: Fever, rash, diarrhea, vomiting, sore throat, nasal discharge, cough
- Changes in consciousness, focal vs generalized
- Underlying medical conditions
- Timing of seizure relative to fever (if present)
- Presence of a postictal phase?
 - Paralysis
 - Breathing difficulties
 - Cyanosis
 - Aspiration
- Headache
 - Infection: fever, nuchal rigidity, rash, nausea, vomiting, diarrhea
 - Severity and impact on function (absence from school?)
 - Worst headache ever experienced?
 - Migraine symptoms
 - · Presence of an aura
 - Triggers
 - Changes in consciousness
 - Personality changes, visual disturbances,

- If seizure lasts > 30
 minutes without child
 regaining
 consciousness =
 status epilepticus and
 should be managed
 accordingly
- Benign febrile seizures15 minutes
- try to obtain history of headache (especially pain) directly from child
- progressively worse headache may suggest increasing intracranial pressure/spaceoccupying mass

General review of systems

- The review must include all of the organ systems because neurological function is adversely affected by dysfunction of many systems, including the liver, kidney, gastrointestinal tract, heart, and blood vessels
- Include sleep habits, diet, bowel and bladder habits, activity level, personality, and mood

Alarm symptoms

- Failure to thrive
- Altered/decreased
 level of consciousness
- Seizures
- Weight loss
- Persistent vomiting
- Severe headache
- o Muscular
- weakness
- Any focal neurological deficit

Past medical history

- General medical conditions
- Past surgeries, emergency visits, hospitalizations

TABLE Screening Scheme for Developmental Delay: Upper Range

AGE (month)	GROSS MOTOR	FINE MOTOR	SOCIAL SKILLS	LANGUAGE
3	Supports weight on forearms	Opens hands spontaneously	Smiles appropriately	Coos, laughs
6	Sits momentarily	Transfers objects	Shows likes and dislikes	Babbles
9	Pulls to stand	Pincer grasp	Plays pat-a-cake, peek-a-boo	Imitates sounds
12	Walks with one hand held	Releases an object on command	Comes when called	1–2 meaningful words
18	Walks upstairs with assistance	Feeds from a spoon	Mimics actions of others	At least 6 words
24	Runs	Builds a tower of 6 blocks	Plays with others	2–3 word sentences

References:

- 1. Berstein D, Shelov SP, editors. Pediatrics. Baltimore: Williams and Wilkins;1996.
- 2. Behrman RE, Jenson HB, Kliegman RM, Stanton BF. Nelson Textbook of Pediatrics. 18th ed. Elsevier; 2007.
- 3. Bradley WG, Daroff RB, Fenichel G, Jankovic J. Neurology in Clinical Practice. 5th ed. Butterworth-Heinemann; 2008.

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