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
  - 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 seizures < 15 minutes
  - try to obtain history of headache (especially pain) directly from child
  - progressively worse headache may suggest increasing intracranial pressure/space-occupying 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
- Muscular weakness
- Any focal neurological deficit

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

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

References:


Acknowledgements

Written by: Bing Wei Wang
Edited by: Katherine Muir