HISTORY TAKING ON NERVOUS SYSTEM

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General points

- History of neurological symptoms should also be taken from patient and close relative or friend
- Memory loss, intoxication, aphasia
- Patient’s cognitive state
- Speech pattern
- Often permits accurate localization and determination of probable cause, even before examination is performed
- Helps to bring a focus to neurologic examination that follows
- History in patient’s words (e.g. numbness)
Various pathologies suggested by clinical pattern

<table>
<thead>
<tr>
<th>Pattern of onset and development</th>
<th>Pathology</th>
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<tbody>
<tr>
<td>Sudden</td>
<td>Traumatic, vascular, psychogenic</td>
</tr>
<tr>
<td>Acute on chronic</td>
<td>Exacerbation of pre-existing pathology (e.g. cervical spondylosis and disc prolapse)</td>
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<tr>
<td>Subacute</td>
<td>Infective, inflammatory</td>
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<tr>
<td>Chronic and progressive</td>
<td>Malignant tumours</td>
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<tr>
<td>Chronic and indolent</td>
<td>Benign tumours, degenerative (e.g. neurodegenerative)</td>
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<tr>
<td>Relapsing-remitting</td>
<td>Inflammatory</td>
</tr>
<tr>
<td>Stepwise</td>
<td>Vasculitic (e.g. multiple strokes)</td>
</tr>
<tr>
<td>Previous episodes in other systems</td>
<td>Multiple sclerosis, hysterical</td>
</tr>
</tbody>
</table>
## Diagnosis in Neurology case

### Onset
1. Catastrophic
2. Sudden
3. Acute
4. Sub-acute
5. Chronic/insidious

### Progression
1. Non-progressive
2. Gradual progression
3. Recovery
4. Relapsing remitting

### Distribution
1. Monoparesis
2. Hemiparesis
3. Paraparesis
4. Quadriparesis

### Localization
1. Upper Motor Neuron
2. Lower Motor Neuron
3. Mixed

### Pattern
1. Motor
2. Sensory – (thickened nerves)
3. Sensori-motor
4. Motor-sensory
5. Autonomic

### Cranial nerves
1. Single
2. Multiple

- Bladder
- Bowel
- Cerebellum

**Mental status** – Sensorium, MMSE

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**Symptoms of other systems**
## Scheme of neurological history-taking

<table>
<thead>
<tr>
<th>Aspect of history</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Region involved</td>
<td>Vision, swallowing, gait</td>
</tr>
<tr>
<td>Temporal aspects</td>
<td>Onset, duration, progression</td>
</tr>
<tr>
<td>Character, severity</td>
<td>Negative symptoms (e.g. numbness) or positive symptoms (e.g. pain)</td>
</tr>
<tr>
<td>Causative and relieving factors</td>
<td>Headache on coughing</td>
</tr>
<tr>
<td>Associated factors</td>
<td>e.g. sweating, diarrhoea</td>
</tr>
<tr>
<td>Disability</td>
<td>Unable to work</td>
</tr>
<tr>
<td>Past history</td>
<td>weight loss, altered mood</td>
</tr>
<tr>
<td>Family history</td>
<td>AD inheritance</td>
</tr>
<tr>
<td>Medication, substance abuse, social</td>
<td>Alcohol, cigarette smoking</td>
</tr>
</tbody>
</table>
Present history

1. Ask leading questions (e.g. tremors)
2. Write +ve data chronologically then – ve data.
3. Symptoms of other system
4. Where is the lesion?
   CNS, PNS, NMJ, Muscle
   Gray matter – cognitive impairment
   White matter – motor pathway
5. What is the lesion?
Past Medical History

Meningitis, trauma, epilepsy, tuberculosis
Risk of CVA- BP/ DM/ Smoking/ AF

- abscess
- toxoplasmosis
- hemorrhage
Drug History
• Present / previous medication, Anticonvulsant, OCP, vitamin A, aminoglycosides

Family History
• Neurological or psychiatric disorder
• Consanguinity

Social History
• Occupation, exposure to toxins
• Smoking, alcohol
Personal history

Age: 1st 3y → Duchenne’s myopathy.
- 2nd – 3rd decade
  - limb pelvis girdle myopathy
  - Fascio scapulohumoral
- 2 – 15y → Fredreich’s ataxia
- 15 – 30y → Syringomyelia.
- 4th – 5th decade → Motor neuron disease

3- Sex: ♀
  - Myasthenia gravis
  - Chorea
  - Meningioma
4- Obstetric: esp. repeated abortions or still birth.

5- Occupation: → Lead → Peripheral neuritis
               Driver → disc prolapse

6- Special habits: - Alcohol → Peripheral neuritis

7- Lt. Handed or Rt. Handed: → Why?

(Broca’s area)

• 94% Rt. Handed – Dominant Left Hemisphere
• Speech center is located in dominant hemisphere.
• The dominant one so: in Rt. handed people it is located in Lt hemisphere and vice-versa.
Aphasia = disturbance in higher neurological and psychological functions of speech.

Receptive (Sensory)
- Auditory (Word deafness)
- Visual (Word blindness)

Expressive (Motor)
- Spoken speech (Broca’s area 44)
- Written speech (agraphia, area 45)

Speech disorders
Speech disorders

Dysarthria: Defective articulation or disturbance in peripheral motor function of Speech

7 → face 9,10 → Voice 12 → tongue

Types

Pyramidal → slow-labored, disturbances of resonance, and phonation, often unintelligible

Multiple sclerosis → staccato, abrupt utterance,

Extra Pyramidal → Slow monotonous

Cerebellar → scanning, slurring, monotonous

9 & 10 → Nasal tone

10 → Hoarseness of Voice
Cranial nerves

1. Olfactory
Anosmia, Hyosmia, hallucinations of smell

2. Optic nerve
Visual acuity, Visual field, visual hallucination

3. Oculomotor, trochlear, abducent
Diplopia, ptosis, squint

5. Trigeminal
Difficulty in mastication

7. Facial
Inability to close eye, dripping of saliva from one side, deviation of mouth to same side of paralysis
Cranial nerves

8. **Vestibulo-choclear**
Deafness, tinnitus, vertigo

9,10. **Glossopharyngeal, vagus**
Nasal tone, regurgitation of food from nose, dysphagia, hoarseness

11. **Accessory**
Can not rotate his face to other side, can not raise his shoulder properly on the diseased side

12. **Hypoglossal**
Difficulty of speech ± difficulty of mastication
<table>
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<tr>
<th><strong>Weakness</strong></th>
<th><strong>Involuntary movement</strong></th>
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<tbody>
<tr>
<td>• Unilateral or bilateral</td>
<td>• Proximal or distal</td>
</tr>
<tr>
<td>• Symmetrical or asymmetrical</td>
<td>• Static or kinetic</td>
</tr>
<tr>
<td>• Distal or proximal</td>
<td>• Rhythmic or jerky</td>
</tr>
<tr>
<td>• Flexor or extensor</td>
<td>• What ( \uparrow ) (emotions)</td>
</tr>
<tr>
<td>• Abductor or adductor</td>
<td>• What ( \downarrow ) (sleep)</td>
</tr>
<tr>
<td>• Trunk muscles, abdominal</td>
<td>• Discreption (Pill rolling)</td>
</tr>
</tbody>
</table>
Sensory system

- Tingling
- Numbness
- Pain
- Temperature
- Touch
- Root pain: occurs at the site of certain dermatome and ↑ by coughing and straining
Sphincteric disturbances

Bladder / bowel

- Desire
- Control
- Retention
- Hesitancy
- Erection
Thank you

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