



# 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



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

# 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

**Symptoms of other systems**

# Scheme of neurological history-taking



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

# Present history



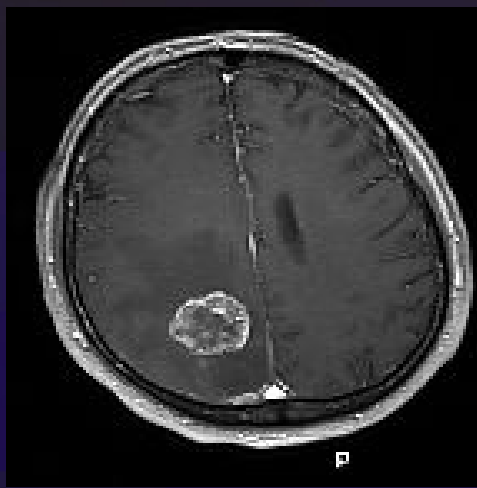
1. Ask leading questions (e.g. tremors)
2. Write +ve data chronologically then –ve data.
3. Symptoms of other system
4. Where is the lesion?
  - CNS, PNS, NMJ, Muscle
  - Gray matter – cognitive impairment
  - White matter – motor pathway
5. What is the lesion?

# 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:** - 1<sup>st</sup> 3y → Duchenne's myopathy.

- 2<sup>nd</sup> – 3<sup>rd</sup> decade → limb pelvis girdle myopathy  
→ Fascio scapulohumoral

- 2 – 15y → Fredreich's ataxia

- 15 – 30y → Syringomyelia.

- 4<sup>th</sup> – 5<sup>th</sup> decade → Motor neuron disease

**3- Sex:** ♀ → Myasthenia gravis  
→ Chorea  
→ Meningioma

# Personal history



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.

# Speech disorders



**Aphasia** = disturbance in higher neurological and psychological functions of speech.

## Aphasia

**Receptive**

(Sensory)

Auditory (Word deafness)

Visual (Word blindness)

**Expressive**

(Motor)

Spoken speech (Broca's area 44)

Written speech (agraphia, area 45)

# 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

## 3,4,6. **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-chochlear**

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 in swallowing



# Motor system

## Weakness

- Unilateral or bilateral
- Symmetrical or asymmetrical
- Distal or proximal
- Flexor or extensor
- Abductor or adductor
- Trunk muscles, abdominal

## Involuntary movement

- Proximal or distal
- Static or kinetic
- Rhythmic or jerky
- What  $\uparrow$  (emotions)
- What  $\downarrow$  (sleep)
- Discreption ( Pill rolling )

# 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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