The Nervous System

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The Difficulties

Knowing what to do

Learning how to do it

Understanding what it means

The Principles

History: guide to underlying disease and area of examination to focus on

Examination: localises site of disease

History, Examination & Localization: help to determine the disease

Competence

Knowledge: mostly self learned

Skills: need to be taught, learned & practised

Experience: comes with time

Neurological History Taking

Neurology History Taking

Aim to be: a good listener

Show: interest, sympathy and understanding

Clinical findings: may become obvious during history

History Taking 1

Determine handedness: which hand used for writing

Start with an open question: tell me what problem is

Let the patient tell: story of the illness

Record illness chronologically: date/month/year onset

Ideally not more than: 3 or 4 main PCs

Determine order of importance: of each PC

History of Presenting Complaint

- Character/Nature: *e.g.* seizure or loss of power
- Site/Location: where is it
- Severity: how bad is it
- Time Course, onset: sudden/gradual
- Duration: how long
- Progression: continuous/intermittent, improve/worse
- Exacerbating & Relieving factors: better/worse
- Associated symptoms: others
- Past Hist: same illness, investigations, treatments

History Taking 2

System Review: Screen for other neurological symptoms (see next slide)

Repeat briefly the main PCs to the patient

Ask: Is there anything else you would like to tell me?

System Review

Headaches, pain: in head, face, trunk or limbs

Loss of power *or* weakness: in limbs *or* trunk

Loss of feeling, numbness or pins & needles: in limbs or body

Loss of consciousness or dizzy spells: blackouts, unsteadyness

Incontinence: loss of control of bladder and/or bowel

Vision and Hearing: loss of vision or hearing

Past Medical History

Medical illnesses, accidents, hospitalizations & operations: List chronological order/yr for each

Determine whether illness: active or inactive

Ask re history of: infections, seizures, head injuries, diabetes (DM), hypertension (BP) etc

Family History

Neurological illness: record 1st degree family relatives: *parents, siblings and children*

If relevant document family tree: names, age, sex

Hereditary disease: enquire if family affected: *e.g. muscular dystrophy, epilepsy, Huntington's disease*

Social History

Occupation and Education: ask re employment

Life Style Habits:

- Smoking: pack yrs
- Alcohol: amount & duration
- Diet: estimated calories intake/day if indicated
- Exercise: daily & amount

Marital status and household dependants

Drug History

List the drugs/medication patient is taking

Include following: name of drug dose & duration frequency per day side effects of medication

Allergies

Key points

- Establish good communication
- Allow patient to tell the story of the illness
- Ask questions in a logical order and listen to the answers
- Better often to get pts description of PC than your summary
- Observe patient during history
- Hypothesise likely anatomical basis for patient's symptoms

Neurological Examination

Key Points

Learn basic neurological skills

Practise on student colleagues and patients

Become familar with range of what is normal

Learn abnormal neurology or hard neurology signs

Hard signs are objective, reproducible and can't be altered by patient

Neurological Examination

Level of Consciousness, Cognitive Function, Mental Function: *Only assessed if an abnormality is suspected*

Cranial Nerves

Limbs

Gait

General Observations

Level of consciousness: confused, comatose, conscious

Abnormalities in: speech, posture, movement & gait

Higher cerebral function: attention, memory, learned abilities

Mental health: mood, attitude, concern, insight

Appearance & Behaviour: dress, self neglect, familiarity

Neurological Examination

The 12 Cranial Nerves

The Limbs: Upper & Lower

Gait

Key Points

Neurological examination is considered difficult

Main reasons are uncertainty re examining technique and not knowing what is normal

Student needs to become familiar with examination routine and the range of normal findings

Abnormal findings need to be first demonstrated and taught by tutor and then learned and practised by student