

Lecture

Approach to the Neurological Patient & History Taking

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الرجاء تحويل الجوال إلى وضع
الصامت مع الشكر



Approach to the Patient

good connection with pt = good doctor.

- To be a good doctor or nurse it is much easier if you are interested in people.
- Most patients want a doctor who listens to them.

When you are dealing with patients, always consider your:

- **A: Attitude** – how would I feel in this patient's situation?
- **B: Behavior** – always treat patients with kindness and respect.
- **C: Compassion** – recognize the human story that accompanies each illness.
- **D: Dialogue** – listen to and acknowledge the patient.

Approach to the Patient

- **Wash Your Hands.**
- **Introduce Yourself:** give your name and your job.
- **Identity:** confirm you're speaking to the correct patient (name and date of birth)
- **الاذن** **Permission:** confirm the reason for seeing the patient ("I'm going to ask you some questions about your condition, is that OK?")
- **Keep Privacy.**
- **Positioning:** Ensure you are sitting at the right side at the same level as them and ideally not behind a desk.

Confidentiality and Consent

- As a student and as a doctor you will be given private and intimate information about patients and their families.
- This information is confidential, even after a patient's death.
- Clearly record your findings in the patient's case notes immediately after the consultation.

Personal Responsibilities

- Always look after yourself and maintain your own health.
- Protect yourself, your patients and your colleagues by being immunized against common but serious communicable diseases where vaccines are available, e.g. hepatitis B and COVID-19.

Dress and Demeanor

- The way you dress is important in establishing a successful patient–doctor relationship.
- When you see a patient or relative, introduce yourself fully and clearly.
- A friendly smile helps to put your patient at ease.

Communication Skills

- **A consultation is a meeting of two experts:** you as the clinician and the patient as an expert on his own body and mind.
- Excellent communication skills allow you to identify a patient's problem rapidly and accurately and improve with patient relationship.

Hand Washing

- Transmission of microorganisms from the hands of healthcare workers is the main source of cross-infection in hospitals, primary care surgeries and nursing homes.
- Healthcare-acquired infections complicate up to 10% of hospital admissions.
- Hand washing is the single most effective way to prevent the spread of infection.
- It is your responsibility to prevent the spread of infection and routinely wash your hands after every clinical examination.

**How to hand rub
with alcohol based hand rub**



Apply a palmful of the product
and cover all hand surfaces

**How to handwash
with soap and water**



Wet hands and apply enough
soap to cover all hand surfaces



Rub hands palm to palm



Right palm over the back of the
other hand with interlaced
fingers and vice versa



Palm to palm with
fingers interlaced



Backs of fingers to opposing
palms with fingers interlocked



Rotational rubbing of left
thumb clasped in right
palm and vice versa



Rotational rubbing, backwards
and forwards with clasped
fingers of right hand in left
palm and vice versa

8 ⌚ Steps 2-7 should take
at least 15 seconds



11 ⌚ Steps 2-7 should take
at least 15 seconds



Rinse hands with water



Dry thoroughly with towel



Use elbow to turn off tap

History Taking

↳ 12-30 min

Beginning Setting up

Preparation:

- Read your patient's records and any transfer or admission letters before you see your patient.

Where will you see your patient?

- Choose a quiet, private space.
- This is often difficult in general hospital.

How long will you have?

- Consultation length varies: in general practice the average length is 12 minutes.
- In hospital for new and complex problems: 30 minutes or more is usually needed.
- If you are a student: allow at least 30 minutes.

Starting your Consultation

- Introduce yourself, and anyone else who is with you.
- Use your patient's and your own names to confirm identity.
 - It may be appropriate to shake hands.
- If you are a student, inform the patient that you are in training.

Active Listening

- Hearing your patient's story about his illness experience is vital.
- Ask open questions to start with: **'How can I help you today?'** or **'What has brought you along to see me today?'**
← *سبحان الله ما بي يومك اليوم بي لي ما بي اليوم.*
- Active listening means encouraging the patient to talk by looking interested.

Tips for Effective Conversations

- Speak clearly and audibly.
 - Ask open questions.
- Don't interrupt your patient.
 - Try and appear unhurried.
- Do not use jargon or emotive words.
- Clarify and summarize what you understand - you may need to do this more than once.
 - ^{يعرف من شاذ} Acknowledge emotions.
 - Seek ideas and expectations.

I. History Taking

Personal Data ✓

Chief Complaint ✓

History of the present illness. ✓

Past History ✓

allergy + Drug History ✓

Family History ✓

travel history ✓

Social History ✓

Systemic Review ✓

Personal History

1. **Full Name**
2. **Age:** 1st – 2nd decades “myopathy”, 3rd - 4th decades “multiple sclerosis”, 5th - 6th decades “CVA”.
mascular dystrophy as charcot marie
3. **Sex**
4. **Address**
5. **Marital status and children number**
6. **Occupation**
7. **Residence:** nutritional deficiency.
8. **Special habits**
9. **Handedness:** in right handed people, the dominant hemisphere is the left.
10. **Mode of admission**

Chief Complaint

Most important complaint
Should be short

- It should be recorded in patient's his/her family members own words.
بلفظ المريض
بفلسه المريض
- Short/specific in one clear sentence communicating present/major problem/issue "Maximum three complaints".
أبسط ما يمكن
important complaint
- Mention the duration.
- Do not interrupt the patient's first few sentences if possible.
- *e.g. difficulty of swallowing for three weeks prior to admission.
don't say dysphagia

- Patient its main chief complain numbness in Lower, upper limbs.
Symptoms $\Rightarrow$ Anorexia, Weight loss ^{fever} = Cancer ^{difficulty in walking}
polynuropathy - paraneoplastic -

Associated Symptoms $\Rightarrow$ is headache associated with vomiting, fever?
if yes $\Rightarrow$ Meningitis ^{blurred vision?}
you have to make admission to this patient
because he was taking "paracetamol" which masking the
clinical picture
 $\rightarrow$ partial treated septic meningitis (LP $\rightarrow$ WBCs $\checkmark$)
^{WBC in the CSF}

General fatigue

(ocular cause ^{نقص} NMJ $\rightarrow$ ^{الضعف})

Symptoms $\Rightarrow$ ptosis ^{يكون فيه صلابا} ^{وينتاد سوس به ذلك} Myasthenia gravis

20 years old patient, its main complain is continuous electrical light pain in
his face - Trigeminal nerve problems - ^{*paroxysmal headache maybe trigeminal neuralgia.}

Age $\rightarrow$ Primary Trigeminal neuralgia (>50)
^{ضم الاذن}

Associated Symptoms? Numbness, Tinnitus, Hearing impairment in Rt side
^{loss} $\rightarrow$ Tumor in ^{cerebellopontine angle} (unilateral)

14 years old patient, its main chief complain is transient attack of
numbness in one side ^{$\rightarrow$ the post ictal stage}

Symptoms $\Rightarrow$ general fatigue
^{"post ictal stage"} ^{then} ^{$\rightarrow$ sleep}

focal sensory epilepsy

if motor →
Ex. : Weakness in hand → Extinction Weakness → radial nerve injury
Whole hand → Lacunar stroke
Hemi, Quadriplegia

mass lesion in neck, gradual weakness in upper limb
Upper thoracic pain.

Associated symptoms ⇒ (Sensory Level $\checkmark$ / $\times$), Sphincter dysfunction
Urine retention
→ urinary catheter 1.5 L

✓ MRI → Tumor from mediastinum
* Compresses in spinal cord
at Level D1-D5

↓
X GPS
→ sphincter weakness

Kinetic tremor → intention tremor
parkinson → tremor in wrist
roll tremor

“Cerebellum”

Target عند وصوله لل
مركز بن يقرب بخط
الخط أنه يبدأ الرجعة

- Headache

→ pulsating, associated with
nausea
blurred vision
vomiting

Migraine

X vomiting
nausea → Tension headache
[psycogenic, daily]

- Severe headache, hotness, ↓ consciousness

↓ في وقت بين الحصة

+ vomiting

Aneurysm
[sub arachnoid hemorrhage]
Rupture

MS may start by urine disturbances...

History of Present illness

- You have to analyze the chief complain very well using **SOCRATES** for pain and using other questions for other complains.

- Do not forget to ask about the c**onstitutional** **symptoms** (fever, weight loss, anorexia, sweating)

Bsymptoms ← fever
weight loss
night sweating.

- Do not forget to ask about the **related risk factors**.

لو تو بپرسید هذا [Complain] pain
در مورد بقیه

History of Present illness

Ask the patient further questions about the presenting complaint (**SOCCRATES** for Pain):

Site *diffuse, hemicranial ...*

Onset *gradual, Sudden ...*

Character: (stabbing, colicky, sharp, dull, burning, cramping, throbbing)

Course: (progressive/regressive/intermittent/constant)

Radiation → *Lower back pain radiating to post. Lateral thigh of leg Sciatic* → *Flank pain renal colic*

✿ **A**ssociated symptoms

After 2 days → *Vesicle VZV Skin rash*

Time (Duration)

Exacerbating & relieving factors

→ *Paracetamol*
→ *Diclofen*
↓ *coffee* "headache"
↓ *Sleep*

Severity

History of Presenting Complaint

Then Ask the patient about the following symptoms:

1. Symptoms of increase intracranial pressure:

- Headache.
- Vertigo.
- Vomiting.
- Blurring of vision.

First : Main chief complain analysis in present illness

Then ask about these things

Chief complain في امر كذا في كذا

2. Symptoms of cranial nerves affection:

- **Olfactory Nerve:** anosmia, cacosmia, smell hallucination

- **Optic Nerve:** decrease acuity of vision, visual hallucination, defect of visual field *bilateral, unilateral*

- **Ocular nerves (Oculomotor, Trochlear, Abducent):** Ptosis, squint, diplopia.

- **Trigeminal Nerve:** facial pain and numbness, difficulty of mastication.

- **Facial Nerve:** facial asymmetry, inability to eye closure, facial asymmetry.

- **Vestibulo-cochlear:** cochlear part (hearing loss), vestibular part (ataxia, tinnitus, vertigo)

- **Glossopharyngeal, vagus, cranial accessory, hypoglossal:** dysphagia, dysarthria, dysphonia, nasal regurge.

formulation problem
[expression] motor ← sensory understanding

→ articulation problems.

Present History

3. Symptoms of motor system affection:

- **Irritative lesion:** convulsions, fasciculation, abnormal movement.
- **Destructive lesion:** muscle weakness and paralysis. Ask about muscle wasting.

4. Symptoms of cerebellar and extrapyramidal system affection:

- Discoordination (ataxia), tremor, involuntary movement, slurred of speech, bradykinesia and muscle hypotonia or rigidity.

5. Symptoms of sensory system affection:

- **Irritative lesion:** pain, numbness, hyperesthesia.
- **Destructive lesion:** hypoesthesia, anesthesia. Ask about deep sensation.

6. Symptoms of sphincters disturbances:

- Control of micturation & defecation.
- Urine urgency.
- Impotence (in diabetes mellitus, multiple sclerosis or conus lesion).

في حوضي / بيبأ ^{مس} MS في sphincter
numbness, discoordination
Demyelinated disease

Cerebellar Ataxia
Sensory Ataxia

Headache

- Onset: sudden, gradual.
- Timing: morning, evening, at night.
- Site.
- Character.
- Frequency.
- Duration.
- Severity.
- Precipitating factors.
- Relieving factors.
- Associated features: vertigo, vomiting, visual disturbance.

Visual Disorder

- Onset: Sudden, gradual.
- Impairment: one/both eyes, total/partial.
- Frequency.
- Duration.
- Precipitating factors.
- Relieving factors: close one eye in diplopia.
- Visual hallucination.
- Associated features.

patient rotates its head in the left while he's talking with doctor.

⇒ Lt side hemianopia, Rt PCA (post. Cerebral Artery ischemic infarction)
"Occlusion"

Visual acuity

لو غصت عينك
بالحنينة بشوف
قد الشيء

Visual field

عالمية الميرة
حاف
بي الحال لاه

Visual acuity measures the morphoscopic sense, or the capacity of the eye to distinguish details through distance vision and near vision. On the other hand, the visual field measures the sense of space and the extent of the visual field.

ptosis, diplopia

along the day
intermittant

, At morning ✓, evening get worse
At morning x, evening get better
myasthenia gravis
paraneoplastic Syndrome

Loss of Consciousness

- Onset: Sudden, gradual.
- Frequency.
- Duration.
- Precipitating factors.
- Associated features: tongue biting, incontinence and limb twitching in epilepsy.
or hypoglycemia
- Alcohol/drug abuse.
- Head injury.
- Cardiovascular or respiratory symptoms.

Speech Disorder

- Onset: Sudden, gradual.
- Frequency.
- Duration.
- Difficulty in articulation. *Cerebellar damage, Slurred Speech*
- Difficulty in expression. *Broca's area* *Aphasia*
- Difficulty in understanding. *Wernick's area*

Motor Disorder

- Onset: Sudden, gradual.
 - Frequency.
 - Duration.
 - Precipitating factors: e.g. walking.
 - Relieving factors: e.g. rest.
 - Lack of coordination.
 - Weakness: progressive/static, distal/proximal,
↳ in the muscles
 - Involuntary movement.
- Myopathies
↑
↓
polyneuropathy

Sensory Disorder

- Onset: Sudden, gradual.
- Frequency.
- Duration.
- Precipitating factors: e.g. walking, neck movement.
- Relieving factors: e.g. rest.
- Pain.
- Numbness/tingling.
- Site.
- Associated features.

Sphincter Disorder

- Onset: Sudden, gradual.
- Frequency.
- Duration.
- Bladder.
- Anal.
- Pain.
- Difficulty in control: urgency, incontinence, retention.

dysuria → UTI

Lower Cranial Nerve Disorder

- Onset: sudden, gradual.
- Frequency.
- Duration.
- Precipitating factors.
- Deafness/Tinnitus- uni/bilateral.
- Vertigo- rotation of surroundings.
- Swallowing difficulty.
- Voice changes.

Mental Disorder

- Onset: sudden, gradual.
- Frequency.
- Duration.
- Memory.
- Intelligence.
- Personality.
- Behavior.

Past History

*Previous admission
visiting of med. clinic*

Have you had any serious illness that brought you to see your doctor?

- **Have you had to take time off work because of ill health?**

- **Have you had any operations?**

- **Have you attended any hospital clinics?**

- **Have you ever been in hospital?** (date, diagnosis, investigation, procedures, treatments).

- **Previous similar condition in details:** (when, diagnosis, treatment).

- **Any known chronic illness** (DM, HTN, Asthma, TB, CKD, Hepatitis). If present, ask in details.

For those who use Anti-TB drugs $\Rightarrow$ $\ominus$ ↓ Water soluble vitamins
polyneuropathy $\swarrow$
They're toxic in peripheral nerves B1, B6, B12 must be taken

Past Medical History

Start by asking the patient if they have any medical problems.

- **Fever:** meningitis, encephalitis, transverse myelitis.
- **DM:** diabetic polyneuropathy, amyotrophy, cranial nerves palsy, impotence.  numbness
- **HTN, DM, Dyslipidemia, Chronic AF :** are well known risk factors of cerebrovascular disease (ischemic and hemorrhagic stroke).
- **Valvular disease, infective endocarditis:** cardioembolic ischemic, stroke, brain abscess.
- **Tuberculosis and anti TB drugs:** meningitis, Pott's disease (spinal tuberculosis), polyneuropathy.

Past Medical History

Migraine, Polycystic kidney: Subarachnoid hemorrhage

Rheumatic fever: Sidenham's chorea. → *dancing movement*

Otitis media: ear discharge in facial palsy, meningitis and brain abscess.

• **URTI:** Guillai-Barre syndrome.
(Upper respiratory tract infection)

• **TIA:** in ischemic stroke.

• **Coagulopathies condition:** intracranial hemorrhage.

• **Similar attacks:** in multiple sclerosis. *young ♀*

• **Cancer:** brain metastasis, paraneoplastic syndrome, complication of chemotherapy and radiotherapy.

** prostate cancer metastasis may lead to lower back pain*

Past Surgical History

- **Past surgical/operation history:** time, place and what type of operation, drugs, post operative course.
- History of previous hospitalization, (when, why).
- Dental extractions & any excessive bleeding during these procedures. *↳ Coagulopathy, taking Anticoagulant*
- **History of trauma/accidents:** time, place and what type of accident.

Drug History

HTN
DM → Controlled
→ Uncontrolled

- **Drugs for the present illness**
- **Drug for the chronic illness**
- **Aspirin, NSAID, Antibiotics and others ...**
- **Herbal medicine** الأعشاب
- **Allergic reaction (drug / food):** Clarify exactly what patients mean by allergy.
- **Blood transfusion** [Cause of its need ?]
- **Vaccination** reaction ? complication ?

Drug	Dose	Duration	Indication
Aspirin	75 mg daily	5 years	Started after myocardial infarction
Atenolol	50 mg daily	5 years	Started after myocardial infarction
Co-codamol (paracetamol + codeine)	8 mg/500mg, up to 8 tablets daily	4 weeks	Back pain
Salbutamol MDI	2 puffs as necessary	6 months	Asthma

MDI, metered-dose inhaler.

phenothiazine → Drug induced Parkinsonism
 used for schizophrenia + long acting.

im Blomace < Dopamine
 Ach

12 ~ 15 mg daily
 anticholinergic + Dopaminergic agent

لا انتفض بشكل خاطئ يعني
 لا انتفض بشكل خاطئ يعني

Drug History

Drugs intake: use generic name or put trade name in brackets, with dosage, timing and how long.

Streptomycin: in peripheral polyneuropathy

Major tranquilizer (reserpine, chlorpromazine): in parkinsonism.

* phenoparsetan overdose → lead to ataxia ^{main complication}
↳ we give it for Pt with epilepsy

Steroids: in myopathy.

C. pills : may leads to DVT, strokes, myocardial infarction, migraine and depression. *increase coagulation*

Barbiturates: in cerebellar ataxia.

Tramadol, Antimalarias drugs : in convulsion disorder.

Antineoplastic drugs: peripheral polyneuropathy

Vitamin A overdose: pseudotumor cerebri. Doxycycline + Vit. A

Anti-TB drugs: peripheral polyneuropathy.

→ Tm ⇒ diuretics
Shunt
frequent LP

Aminoglycoside antibiotics: dizziness, loss of hearing, deterioration in patients with myasthenia gravis. *1 CP + cis co ↓*

Contraindication

Anticholinergic drugs, sulfate magnesium, botulinum toxin:

deterioration in patients with myasthenia gravis. *← increase symptoms*

Family History

- Any similar condition/disease running in the family.
- History of chronic illnesses in the family.
- A consanguinity.
- Many neurologic disorders have an underlying genetic component: multiple sclerosis, migraine, many types of epilepsy, neurofibromatosis, Wilson's disease, Huntington's disease, Charcot-Marie-Tooth disease.
- A positive family history of HTN or heart disease in a patient with a stroke.

Social History

- Smoking history: amount, duration & type.
- *Optic Nerve*
Alcohol history: amount, duration & type.
blurred of vision bilateral
- Occupation, social & education background, family social support & financial situation.
- Social class.
- Home conditions
- Animal Contact.
- Travel history.

- **20 cigarettes = 1 packet**
- Number of cigarettes smoked per day $\times$ Number of years smoking / 20
- For example, a smoker of 10 cigarettes a day who has smoked for 15 years would have smoked:
 $10 \times 15 / 20 = 7.5$ pack years.

Difficulty Obtaining a Complete History

The examiner may find difficulty obtaining a complete history if the patient has:

- Loss of memory (Alzheimer's Disease).
- Speech difficulty (Aphasia)
- Language barrier (different culture).
- Drug intoxication (Alcohol, drug overdose).
- Impaired level of consciousness (Epilepsy, CVA, Hypoglycemia)
- Psychiatric illness.

System Review (SR)

Systematic Enquiry (SE)

General:

- Weakness
- Fatigue
- Anorexia
- Change of weight
- Fever
- Night sweats

Cardiovascular:

- Chest pain
- Paroxysmal nocturnal dyspnea
- Orthopnea
- Short of breath
- Cough/sputum
- LLs swelling
- Syncope
- Palpitation
- Cyanosis
- Claudication

Respiratory System:

- Chest pain
- Cough (productive/dry)
- Sputum (color, amount, smell)
- Hemoptysis
- Dyspnea /orthopnea/paroxysmal nocturnal
- Wheezing
- Tachypnea
- Hoarseness of voice
- Sore throat

Gastrointestinal/Alimentary:

- Appetite (anorexia/weight change)
- Diet
- Oral ulcers
- Nausea/vomiting
- Regurgitation/heart burn
- Dysphagia: difficulty in swallowing
- Abdominal pain/distension
- Hematemesis/melaena
- diarrhea/constipation.
- Jaundice

Endocrine:

- Polyuria/polydipsia
- Loss of appetite/hyperphagia
- Changes in menstrual cycle
- Heat/cold intolerance
- Gain/loss of weight
- Skin /hair changes
- Sweating
- Fatigue

Nervous System

- Headache.
- Behavior and other cognitive abnormality.
- Visual problem.
- Smell problem
- Taste problem.
- Hearing problem.
- Tinnitus
- Speech problem.
- Impaired consciousness level.
- Convulsions/ Fainting
- Muscle weakness.
- Numbness and abnormal sensation.
- Tremor and gait instability.

Genitourinary System

- Frequency change.
- Character of urine: color/ amount (polyuria) & timing
- Red discoloration of urine
- Dysuria
- Urgency
- Terminal dribbling
- Nocturia
- Incontinence
- Unusual bleeding
- Discharge
- Smell.

System Review

Genital system

- Pain/ discomfort/ itching
- Discharge
- Unusual bleeding

Musculoskeletal System

- Pain – muscle “Myalgia”, bone, joint “Arthralgia”
- Redness, swelling
- Weakness/movement
- Deformities
- Gait
- Morning Stiffness

Hematological:

- Generalized fatigability
- Any bleeding (gum bleed, epistaxis)
 - Bruising
 - Skin discoloration
 - light headedness
 - Night sweating
 - Weigh changes

A scenic view of a coastal area with steep cliffs, a body of water, and evergreen trees. A large red 'Thank You' text is overlaid on the image.

Thank You