

## **Examination of the Abdomen.**

### **Introduction:**

Make the patient comfortable.

**General Examination:** Jaundice; anaemia; chacexia; scratch marks; lymphadenopathy; oedema

**Inspection** Hands: Clubbing; koilonychia; leuconychia; palmar erythema; dupuytren's contractures; wasting of the small muscles, wrist swelling; IV punctures; thrombophlebitis;

Head and neck: eyes: Xanthelasma; Lips: pigmentation; spider naevi; telangeictasia; lymph nodes.

Abdomen: Distention; discoloration; scars; sinuses; umblicus; visible peristalsis; dilated veins; hernial orifices; masses; genitals.

**Palpation:** Abdomen and groin: Is the patient in pain? If he is in pain palpate the area away form pain. Palpate clockwise: Liver, Spleen, Kidneys, Bladder and groins. Feel the femoral pulse, scrotum and prostate.

**Percussion:** Liver & mark the boundaries, spleen and the bladder. Fluid thrill, shifting dullness.

**Per-rectal Examination.**

Thank and cover the patient.

## **Breast Examination.**

### **Introduction:**

Explain the procedure and take consent.

**History:** carcinoma can occur at any age after puberty. If the patient presents with a lump enquire about its mode of onset, duration and rate of growth.

Pain? Discharge: colour, character and quantity.

**Local examination:** patient must be in sitting posture and stripped to the waist to expose completely both the breasts before inspection is commenced.

**Inspection:** this is carried out ❶ with the arms by the side of the body, ❷ With the arms raised above the head, with the hands on the hips pressing and relaxing ❸ bending forward so that the breasts fall away from the body. Nipple: ♦ its position ♦ size and shape ♦ surface: look for cracks, fissures or eczema ♦ discharge if any. Areola: look for cracks, fissures, ulcer, eczema, discharge or a swelling.

Skin over the breast: look for redness, warmth, oedema, engorged veins, dimpling, retraction, puckering, *peau d'orange*, nodules, fungation and *cancer en cuirasse*.

Breasts: ❶ position ❷ size and shape ❸ puckering or dimpling.

Arm and thorax: '*cancer en cuirasse*' i.e. multiple cancerous nodules and thicken infiltrated skin like a coat of armour may be seen in the arm and the thoracic wall. Brawny oedema of the arm may be due to extensive neoplastic infiltration

of the axillary nodes. It is mainly due to lymphatic blockage.

Palpation: should be made initially in sitting position and later on in recumbent position. Palpation should be made between the pulps of the fingers and the thumb. 1. Local temperature and tenderness, 2. Situation, 3. Shape and size, 4. Surface, 5. Margin, 6. Consistency, 7. Fluctuation, 8. Fixity to the skin, 9. Fixity to the breast tissue, 10. Fixity to the underlying fascia and muscles, 11. Fixity to the chest wall, 12. transillumination, 13. Abnormal discharge.

Palpation of lymph nodes: axillary group: pectoral, brachial, subscapular, central and apical and Cervical lymph nodes.

While palpating the lymph nodes careful assessment must be made as to their number, size, consistency, mobility.

General examination: liver: for secondary deposits, lungs and bones for metastasis. Rectal and vaginal examinations are also necessary to detect Krukenberg's tumour of the ovary, which occurs by transcoelomic implantation or lymphatic permeation.

Special investigations: aspiration, mammography, thermography, USG, biopsy, CXR, bone X-ray, bone scan, liver scan, CT, look for GGT & alk phos.

DD: mastitis, abscess, duct ectasia, cysts, fibroadenosis, fibroadenoma, duct papilloma, Carcinoma and sarcoma.

## Examination - Cranial nerves.

Good morning Mr. Smith I am Dr. XYZ senior house officer in the department of Medicine,

I am here to test your cranial nerves. Cranial nerves are 12 in number and they supply the head and

neck regions. During the examination I have to touch your face, but at any time of the examination if you feel uncomfortable let me know. Shall we proceed with the examination?

(I smell) Are you able to smell and taste everything (VII sensory)?

Can you hear properly (VIII auditory)?

(II Acuity, visual field, direct and indirect light reflex & accommodation) Are you able to see clearly? Could you read this sentence? Testing Visual field: (Both eyes fixed and open and later with one eye closed). Are you able to see the finger flicking at the corner of the eye both on lateral and nasal sides? Please look at that object on the table, and now look at my finger near your nose? Now I am going to shine this torch into your eyes, is that all right?

(III, IV, VI Eye movements) I am going to move my finger horizontally and vertically, your eyes should follow my finger keeping your head steady.

(V Motor) screw your eyes tightly, open your mouth (jaw deviates to side of lesion), (V Sensory) corneal reflex.

(VII facial) raise your eyebrows, show me your teeth.

(IX & X gag reflex) say 'Ah'.

(XII tongue movements) please stick your tongue out (deviates to side of lesion).

(XI trapezii) lift your shoulders against resistance, turn your head left/right against resistance.

Thank you, Mr. Smith you have been very cooperative. I have tested all your cranial nerves and they are all right

## Examination of CVS

**Introduction:** Good morning Mr. Smith I am Dr. XYZ Senior House Officer in the department of Medicine. I would like to have a look at your heart in detail. The examination is going to be painless and it takes a few minutes, but at any time of the examination if you felt uncomfortable let me know. For this examination I have to touch you. If that is all right with you shall we proceed with the examination now? (Consent). Make the patient comfortable in bed.

**General Examination** Pain; dyspnoea; tachypnoea; cyanosis;

**Inspection** Hand: Clubbing; cyanosis; splinter haemorrhages; oslers nodes; Radial pulse: pulse rate and describe the pulse; collapsing pulse; Brachial pulse; IV punctures; BP Face: Eyes: Pupils and xanthelasma; anaemia; spider naevi; capillary haemorrhages on the lips; cyanosis on tongue; Neck: JVP; Hepato-jugular reflux;

Chest: Inspection: anatomy; symmetry; scars; respiratory movements; parasternal heave; any abnormalities, dilated vessels, Legs and ankles for oedema

**Palpation:** Apex beat and parasternal heave.

**Auscultation:** Mitral area: supine and left lateral if there is any murmur; tricuspid area; aortic and then pulmonary area.

**Back** Inspection and then auscultation for breath sounds, crackles and crepitations.

Thank and cover the patient.

## Examination of a Diabetic leg.

### Introduction.

Explain the examination and take consent.

Inspection of both the legs: Colour; loss of hair; wasting; dilated vessels; ulcers; callus; nail changes

Palpation: Temperature; sensation; Pulses, dorsalis pedis, posterior tibial and popliteal.

Examination of sensory and motor system:

Fine touch: with Cotton swab

Pain; Two point discrimination; temperature; vibration sense;

Joint position sense.

Ankle and knee jerk.

Thank and cover the patient.

## Examination -- Hand and Wrist.

Introduce and take consent.

Inspection: look at both hands together for bruising, swelling, wasting of the hypothenar muscles.

Nails: clubbing, koilonychia, leukonychia, pitting, splinter haemorrhages; cyanosis; nicotine staining; palmar erythema; pallor; dypuytren's contractures; scars; sinuses; sweating; finger changes for arthritis; rheumatoid nodules; Bouchard's and Heberden's nodes; Osler's nodes; pulmonary osteoarthropathy.

Palpation: radial pulse, radial styloid, scaphoid tubercle, proximal pole, distal radio ulnar joint, anatomical snuffbox and base of 1st metacarpal.

Movements: active: dorsal flexion, ventral flexion, pronation, supination, radial deviation, ulnar deviation. Then passive to confirm.

Radial pulse, brief neurological examination and check functional movements at the clavicle, shoulder and elbow.

## Examination of the knee.

Introduce and take consent.

Inspection on standing:

Scars, sinuses, swelling (front and back).

Attitude of the knee.

Wasting of quadriceps.

Obliteration of the para patellar hollows.

On walking: Gait.

Palpation (supine): warmth, crepitus, patella, tibial tuberosity, joint line, and attachment of collateral ligaments.

Effusion: visible fluctuation, palpable fluctuation and patellar tap.

Measure the girth of the knee and compare with the normal.

Movements:

Passive - full extension then flexion, active SLR.

Varus and valgus.

Anterior cruciate: anterior draw test, Lachmann's.

McMurrays for menisci.

Brief examination of the hip, spine, neuro and vasc.

Power grip, pinch grip, key grip, and opponence.

## Examination of the Respiratory system.

Introduction

Make the patient comfortable.

General Examination: posture; breathing; use of accessory muscles; ability to speak.

Systemic Examination: Hands: clubbing; cyanosis; nicotine staining; wasting of the small muscles; warmth; wrist for swelling and tenderness; Radial pulse: bounding?

Face: flaring of ala nasi; eyes: pupils and ptosis; tongue for central cyanosis

Neck: JVP; trachea; dilated veins; crepitus; Lymphadenopathy; sternocleidomastoid prominence

Chest Inspection: from a distance, anatomy; respiratory movements; symmetry; scars; sinuses; respiratory rate; any abnormalities, dilated vessels and intercostal recession

Palpation: Apex beat; chest expansion

Percussion: on both sides

4 times in the mid clavicular line and twice in the mid axillary line

Auscultation in the same areas (4+4 and 2+2) then 99 test (4+4)

Back Inspection: Then sit up the patient and describe

Palpation: Expansion of the chest. Percussion: 4+4 diaphragmatic dullness. Auscultation: 4+4 and 99 Test (4+4).

Thank the patient and cover up.

## Examination of the Thyroid.

### Introduction:

Explain the procedure and take consent.

Physical Examination: General appearance: - thyroid swelling, prominent eyes - primary toxic goitre. Wasting, sweating, nervousness, trembling, hot and moist palms and elevated sleeping pulse rate are the features of primary thyrotoxicosis.

Local examination: Inspection: thyroid gland can only be seen if it is swollen.

Pizzillo's method: patient's hands are placed behind the head and the head pushed backward against the clasped hands. Movement on swallowing: - thyroid swelling moves upward on deglutition. Thyroglossal cyst moves upwards on deglutition and protrusion of the tongue.

Retrosternal goitre: the lower border of the swelling also moves up on deglutition. This is not possible in case of retrosternal goitre. Congestion of the face and distress may be seen in case of retrosternal goitre due to obstruction of the great veins at the thoracic inlet.

Palpation: the thyroid gland should always be palpated with the patient's neck slightly flexed. The gland may be palpated from behind and from the front with the four fingers of each hand placed on each lobe. Careful assessment of the margins, particularly the lower, is important.

Lahey's method: palpation of each lobe is best carried out from the front.

Whether the whole thyroid gland is enlarged? Surface: smooth or bosselated, consistency: firm, soft or hard, uniform or variable.

Swelling: position, size, shape, and extent.

Mobility: in horizontal and vertical planes. Fixity means malignant tumour or thyroiditis.

To get below the thyroid: an important test to discard the possibility of retrosternal extension. The patient is asked to swallow and the lower border is palpated for any extension downwards.

Pressure effects: on the trachea, larynx (stridor and dyspnoea), the oesophagus (dyspnoea), the recurrent laryngeal nerve (hoarseness), the carotid sheath (pulsation of the artery cannot be felt), and the sympathetic trunk (Horner's syndrome). Position of larynx and trachea should be noted.

Toxic manifestation: primary toxic thyroid is generally not enlarged whereas an enlarged thyroid or nodular thyroid with toxic manifestation is generally a case of secondary thyrotoxicosis. CVS in secondary and CNS in primary thyrotoxicosis are mainly affected.

Evidence of myxoedema or not. Swelling malignant or benign.

Pulsation or thrill in the thyroid.

Percussion: over the manubrium sterni to exclude the presence of retrosternal goitre.

Auscultation: in primary toxic goitre a systolic bruit may be heard over the goitre due to increased vascularity.

Measurement: circumference of the neck may be taken at frequent intervals.

General Examination: primary toxic manifestation (Graves' disease): exophthalmos, Von Graefe's (lid lag) sign, tachycardia, tremor of the hand, moist skin, intolerance of hot weather and thyroid bruit. Secondary thyrotoxicosis: AF is quite common. CVS is mainly effected. Cardiomegaly and signs of cardiac failure: ankle oedema, orthopnoea and dyspnoea. Exophthalmos and tremor absent. Metastasis: lymph nodes, bones and lungs.

## Mini mental state Examination.

Max. points

- Orientation (5) a) can you tell me today's date/month/year?  
Which day of the week is it today?  
Can you tell me which season it is?
- (5) b) what city/town are we in? what is the county/country?  
What building are we in and on what floor?
- Registration (3) testing the memory, say: ball, car, man  
Can you repeat the words I said?  
(Repeat up to six trials and record number of trials needed here)
- Attention and Calculation (5) a) spell the word 'WORLD' backwards and  
Recall (3) what are the words I asked you to say earlier?
- Language }  
Naming } (2) name these objects (show watch and pencil)  
Repeating (1) repeat " no ifs, ands or buts"
- Reading (1) write " close your eyes". Read this sentence and do what it says.
- Writing (1) can you write a short sentence for me

Three stage} (3) take this paper and fold it in half and  
command } put it on the floor.

Construction (1) will you copy this drawing please?

Total score 30

Refer: **Acute confusional state.**

## **Per vaginal Examination.**

**Introduction:** Good morning Mrs. Smith I am Dr. XYZ, Senior house officer in the department of Obstetrics and Gynaecology, I am here with my nurse to do a vaginal examination. During this examination I will examine your front passage with one hand and with the other I am going to feel your tummy, this is called bimanual examination. This examination is going to be a bit uncomfortable but I will be as gentle as possible. If at any time of the examination if you feel pain or the examination becomes unbearable let me know. Shall we proceed with the examination now?

For the examination you should flex your knees and hips keep your ankles together and flop your knees apart.

Wear gloves and apply jelly (cold)

Insert the fingers up the vagina and feel for any tenderness in the fornices or in the abdomen, masses and uterus.

Then gently remove the fingers, look at the glove, give her a tissue to wipe off the jelly and cover her.

Remove the gloves and thank the patient

**D.D:** tenderness:

Left: Salpingitis, ectopic and tubo ovarian mass.

Right: Salpingitis, ectopic, tubo ovarian mass and Appendicitis.

## Post operative care.

Post operative complications: Day1:

Primary haemorrhage: continuous bleeding.

Sometimes starting during surgery.

Replace blood loss, return to the theater for adequate haemostasis. Treat shock.

Reactive haemorrhage: haemostasis appear secure until BP raises. Then the bleeding starts.

Basal atelectasis: mimic lung collapse, cough, pyrexia and basal changes in CXR.

Physiotherapy and pain control.

Shock: suggests blood loss: MI, PE, septicaemia.

Pain: HTN is often a sign of pain.

Low urine output.

Next few days: paralytic ileus, secondary haemorrhage, pneumonia, wound dehiscence, wound infection, pyrexia, UTI, urinary retention, DVT and confusion.

Q: A 35y ? patient with post-op distention of the abdomen. Pulse: 100, BP: 90/70. Talk to the registrar about the cause and management.

Answer: State of the patient after the operation.

Findings: TPR, BP.

Abdomen: distention, tenderness and shifting dullness.

Management: secure airway, give O<sub>2</sub>, insert two large bore IV cannula, take blood for investigations, infuse plasma expanders.

Send bloods for FBC, U and E, ESR, Grouping, cross matching and culture.

Monitor the patient: I/o charts, TPR, BP.

Send urine for urinalysis and arrange for abdomen USG and CXR.