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# Medic Church MBBS II Mock OSCA

Dear friends in MBBS II:

This mock OSCA is not perfect, but we really hope that this can help you in some way. We know that some of you are Christians, while some are not. But we serve you alike all because of the eternal love of Jesus. Please know that no matter how frustrated or worried you are, when you call upon his Holy Name, his love will guide you through. May the heavenly peace be with those who pursue sincerely for the Salvation of Jesus Christ, our Lord.

"For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life."

John 3:16

Best wishes for your exam! May God bless you!



(The list here is subject to final modification when we know what equipment we have)

#### **Stations included:**

- 1. Sensory modalities of lower limbs + knee jerk
- 2. Abdominal examination
- 3. Interview with a patient newly diagnosed Ca esophagus
- 4. Cranial nerves II, III, IV, VI test and confrontation test
- 5. Patient with sciatica (physical examination and MRI interpretation)
- 6. Interview with an angry patient on antithyroid medications planning to have baby
- 7. Per vaginal examination with cervical smear
- 8. Setting up an IV drip
- 9. Examination of the neck
- 10. Examination of the hip

# Other topics suggested for own revision:

- Blood taking
- Joint movement (shoulder)
- +/- Ophthalmoscope
- Per rectal examination
- Complete neurological examination
- Counseling for OA

The following pages of answers are for reference only. Please revise your own textbooks for details. Optional information, which you are not required to know, is in italics.

# Station 1. Sensory modalities of lower limbs + knee jerk

- 1. inform the patient and get a consent
- 2. position the patient (lying flat) and expose adequately both LLs, (fold up the trousers properly)
- 3. Give clear instructions to the patient
- 4. Remember also the dermatome of LLs if you can
- 5. Ask the patient for any sensation wherever and whenever you test
- 6. Demonstrate to the patient the sensation that you are testing for on a normal area e.g. anterior chest wall, chin, forehead
- 7. Ask the patient to close his/her eyes when the examination is performed.
- 8. Light touch → Start with cotton wool for light touch in sequence of those dermatomes
  - Do not stroke the skin because this moves the hairs.
- 9. Pain → head or the broken end of orange stick for pain
- 10. Temperature → tuning fork surface for temperature
  - (The ideal way to test for temperature sensation: use a test tube filled with cold/hot water)
- 11. Vibration → large tuning fork usually 256Hz for vibration test
  - set the tuning fork into vibration by hitting on tendon hammer head
  - put it on the middle phalange of big toes, ask any vibration felt by patient
  - □ if not, proceed from distal joints to proximal, ie. Big toe→ ankle→ knee→ASIS

#### 12. Proprioception

- □ show to the patient the movement of big toe up and down
- □ then ask the patient to close both his/her eyes
- put your fingers on lateral side of the joint, not the dorsal/palmar surface as this will stimulate the touch sensation rather than the propioception alone.
- ☐ Move the joint up or down (for several times before stopping)
- and ask the patient to tell the direction of movement.
- □ if failed, test from distal joint to proximal one.
- Remember to compare the two limbs throughout the examination

# Knee Jerk

- 1. Inform the patient and get a consent
- 2. Position the patient (lying and relax), expose adequately above the knee enough to see the contraction of rectus quadriceps
- 3. As sometimes subtle reflex may not show you the extension of knee but the contraction of the muscles
- 4. Slide one of your arm under the knees if the patient is lying, so they are slightly bent and supported.
- 5. This slightly stretches the tendon to enhance the reflex, but not over bending (usually around 30 degrees) which will otherwise obliterate the reflex by over extension
- 6. Hold the tendon hammer at the end to ensure enough swinging action of the pendulum onto the tendon.
- 7. Palpate for the infrapatellar tendon.
- 8. Tap the hammer directly onto the tendon with good swinging movement.
- 9. Observe for both the extension of knee and also the contraction of the quadriceps
- 10. If no obvious reflex seen, ask the patient to do reinforcement manoeuvre
- 11. Interlock the fingers and then pull apart hard at the moment just before the hammer strikes the tendon
- 12. Or ask the patient to clench his/her teeth tightly just before the strike
- 13. These are called Jendrassik's manoeurvre
- 14. Remember that you must test for both knees and compare before you finish
- Q. What type of reflex is this? Stretch reflex (1)
- Q. How many synapses does it involve? One (0.5)
- Q. What is the spinal level of this reflex? L3, L4
- Q What can you do if there is no obvious reflex? Reinforcement manoeuvre.
- Q What else do you want to do? (If you are asked after testing one knee, the answer is to test the other knee)
- N.B. Please do revise for the other reflexes, on the manoeuvres to test and their neurological levels.

# Abdominal Examination

# **Principles:**

- Inspection
- Palpation
- Percussion
- Auscultation

#### Procedure:

- Get a consent
- Position and expose adequately. Lie flat, hands aside, undress from nipples to genitalia
   /mid thigh (but usually not)

#### **Inspection:**

- 1. Stand at the end of bed and ask the patient to take a deep breath
- 2. Look for shape of abdomen:
  - Saphoid (In neonates with congenital diaphragmatic hernia, all their abdominal viscera were pushed up into the thoracic cage instead of restrained in the abdominal cavity.)
  - Distended in 5'Fs: fat, flatus, feces (indentable), fetus, fluid (bulging flanks)
  - Finally abnormal swelling, eg.intestinal obstruction (I.O.), tumor, AAA
- 3. Any obvious mass
- 4. Umbilicus for Flattened/everted/slit-like if severe ascites (horizontal slit in ascites, but vertical in pregnancy)
- 5. Movement observed on the abdomen:
  - Visible peristals is in intestinal obstruction. This is observed at a tangent.
  - AAA (pulsatile and expansile!!)
- 6. Dilated veins:
  - check for the direction of flow (below umbilicus)
  - portal hypertension if veins drain away from the umbilicus (caput medusa)
  - IVC obstruction if drain towards umbilicus
- 7. Striae: subcutaneous lines caused by acute abdominal distension with subcutaneous bleeding.
  - Ascites
  - Cushing's Syndrome with weakened connective tissue formation around the blood

vessels, so truncal obesity with abdominal distension result in striae purple in color as there is subcutaneous bleeding

- Pregnancy: blood is absorbed afterwards and so white striae finally result
- any scar / surgical scar
- Any hernia?
  - stand the patient up in abdominal examination in case of 1. Dilated vein and 2.
    Hernia
  - you may ask the patient to cough in order to make the hernia more prominent
  - Don't miss hernia: remember to look at the hernial orifice as well as the genitalia before finishing P/E.

#### Palpation:

- knee/squat /sit beside
  - this increases the sensitivity of palpation
- Ask for any presence of pain before touching the abdomen
- Start superficial palpation away from any painful site first.
  - to relax the patient, detect any gross abnormalities, and any mild tenderness
  - to detect any tenderness, guarding, and rigidity
  - use the palmar surface of your fingers for palpation
  - Involve the 9 quadrants
- Then deep palpation
  - any mass (which can be liver, spleen, kidney, aorta, stomach bowel, pancreas, etc.), delineate the features of mass

Palpate for liver with relation to the respiration, then the spleen and kidney. You could palpate and percuss for each organ in order.

#### Liver

- Start from RLQ(ASIA), hand in waiting position during inspiration and move only during expiration.
  - Lower border, just below the costal margin.
  - Surface, smooth/nodular, consistency, firm /hard.

- Edge
- Involve Right /Left lobe
- Percuss to the lower border of the liver from the right iliac fossa
  - Measure the liver border below the costal margin
  - Find out the upper border of the liver by percussion from the 2<sup>nd</sup> intercostals space
  - Normal 5<sup>th</sup> ICS
  - be aware of hyperinflated chest condition, eg. emphysema
- Any bruit in the liver (you could listen at the end of P/E)

Could be due to -

- 1. Vascular tumor, common: HCC/hemangioma.
- 2. Compression of aorta eg. By large liver tumor
- 3. Alcoholic hepatitis

#### Spleen

- Start from RLQ (ASIA) along Gardner's line: a line drawing from Left axilla to the Right ASIA
- Usually the spleen enlarges along this line, but can just grow downward
  - Notch palpated?
- If you can't palpate the spleen with the patient lying supine, roll the patient onto the right side towards you and repeat the palpation.
- Percuss along the Gardner's line for any dullness
- In the presence of ascites, try dipping of the spleen (ballottement)

#### **Kidney**

- Use bimanual palpation to trap the rounded lower poles of kidneys on inspiration first.
- By asking the patient to take a deep breath, hold and wait for the kidney to descend on deep inspiration.
- Ballot the kidney
  - Size in normal adult: about 11-13cm
- Resonant on percussion

#### **Percussion**

- Usually percussion for the liver/spleen is done after palpation for the respective organs
- Now, we percuss for ascites
  - Shifting dullness
  - Fluid thrill
- Rules in percussion
  - Signs of ascites can only be detected when at least 1L of fluid is present.
  - Finger to be percussed on should be parallel to the fluid level of dullness.
  - Percussing finger should be perpendicular to the level of dullness
  - Percuss from resonance to dullness

#### Auscultation:

- Liver bruits
- Bowel sounds with diaphragm of the stethoscope just below the umbilicus
  - Some was taught that the place of choice should be the right lower quadrantwhere the ileocecal valve is. This is the place where most bowel sounds are produced, as the valve vibrates.
- Renal bruits site: on either side of (1-2cm lateral to) the midline above the umbilicus

#### Note:

- Complete examination of the abdomen also includes
  - 1. Examination of hernia
  - 2. Examination of the genitalia
  - 3. Digital per rectal examination

#### Interviewing a patient with Ca esophagus

#### **Background information:**

You are the chief medical officer seeing Mr. Lee. He is now come to see you after the investigations done last week. Mr. Lee, 55 years old, is confirmed to have stage IV Carcinoma of esophagus after the full investigations. He is unfortunately not suitable for curative surgical resection. Palliative treatment will be given. Median survival of stage IV patient is only 2 months.

#### Content:

- Greeting and introduce yourself
- Assess the patient's willingness to know about his own condition e.g." Do you want to know about your investigation results?"
- Disclosure of bad news:
  - ---- Incurable: Stage IV
  - ---- Reason of not giving surgical treatment
  - ---- Palliative treatment or other supportive care available
  - ---- Median survival
- Explore the patient's feelings
- Show your empathy. (Allow appropriate silence, use empathetic words)
- Explore any misconception of patient about Ca esophagus Eg. How much do you know about Ca esophagus
- Correct if any.
  - Eg. Ca eso is not infectious, is safe to eat on the same table with others, even children. Not inheritable.
- Give proper body language (e.g. hold hands) and at good sitting distance at 90 degree, not too far
- Ask patient if he want to disclose the bad news to his family/relatives/friends
- Reassure with realistic hope (be realistic, avoid giving false hope).

#### Marks to be deducted if:

■ Give false hope (eg curvative)	(-2)
Not addressing patient's emotion	(-1)
Not answering patient's questions	(-1)

No extra mark given even if too detailed elaboration on palliative treatment.

The patient helper should:

- Act as shocked and sad
- When being asked, says" I want to know the investigation result."
- Ask Am I curable?
- Ask How long can I live?
- When being asked about what do you know about the disease, says: Is cancer infective?
- When being asked, says: I will tell them (relatives & family) by myself.

Reference on communication skills in breaking bad news: Fielding R. clinical communication skills p 189-228

Something more about Ca esophagus: (for interest only in this stage of your medical years)
Patients with ca esophagus usually present with painless progressive dysphagia.

The only hope of Ca esophagus is curvative surgical resection in early stage. Usual operation is called Lewis Tanner operation, which is a 2 phase operation. In advanced stage patient, currently in QMH we are giving preop systemic chemotherapy and local radiotherapy to the patient before planning for any possible operation. In patients with severe dysphagia in advanced stage, we could do palliative resection to relieve symptom. But the recurrence rate is usually high around 30-40% within 6 months. Other palliative measures like stenting, nasogastric tube feeding. Terminal cancer patient also need for pain relief, eg. in bone metastasis case.

#### Cranial nerves examination: the II, III, IV, and VI nerves

#### **Examination includes:**

- Visual acuity
- Visual field
- Ocular movements
- Direct light reflex + consensual light reflex + accommodation reflex
- Ophthalmoscopy

#### General inspection: eg. ptosis, pupil size unequality.

#### **Visual Acuity:**

- Sit at same eye level in front of the patient
- Hold the Snellen/Rosenbaum chart 14 inches from the patient.
- No need to take off the spectacles if any, cover one eye
- Ask the patient to read the figures
  6/6, (6 actually needs 6 meters) the upper figure indicates the actual distance that the
  patient can read, the lower one for the vertical size of figure
- If patient cannot read, move closer.
- If failed, count the fingers → moving fingers → shine the touch for light perception
- Test the other eye

#### Visual field:

- Sit in front of the patient with same eye level
- Appropriate distance (arm-length)
- Prepare your pin with red head/large head pin, or use your fingers
- Ask for consent
- If patient wears glasses, no need to take it off
- Ask patient to cover one of his/her eyes, eg Right eye
- Ask the patient to look into your **Right** eye
- You cover your own Left eye
- Test all four quadrants of visual field and also the center
- Note: Keep the testing finger equidistant between you and the patient
- Test both eyes
- Change arms when testing opposite side

#### **Eye movements:**

- Both eyes open
- You could put one hand on the head of patient to keep it steady
- Draw a H shape in front of the patient and ask him/her to follow with eye movements
- Ask for any diplopia/double vision in each position
- Look for any abnormalities in each eye movement, eg palsy, nystagmus
  - Non-sustained nystagmus at extreme of horizontal eye movement less than 3s is usually physiological.

# Direct light reflex, consensual light reflex and accommodation reflex

- Shine a bright light in one eye
  - Look at the reaction at that eye → direct light reflex
  - Repeat and look at the reaction in the other eye → the consensual reflex
- Ensure the patient looking into the distance and not at the light
- Repeat for the other eye
- Place your finger ten centimeters in front of the patient's nose
- Ask the patient to look into the distance and then at your finger
- Look at the pupils for their accommodation

#### Ophthalmoscopy (optional)

- Get used to the buttons and the focus rings of the ophthalmoscope
- Turn off lights or draw the curtains (seldom done in the ward)
- Sit opposite the patient
- Ask the patient to look at a particular point in the distance at his eye level
- To examine the right eye
  - Take the ophthalmoscope with your right hand
  - Approach the patient's right side
  - Look at his right eye from about 30cm away with the ophthalmoscope in the same horizontal plane as his eye about 15° from the line of fixation
  - Keep out of the line of sight of other eye
  - The pupil should appear pink → red reflex
  - Gradually move in towards the eye
  - Bring the ophthalmoscope to within 1-2cm of the eye
  - Look at the cornea and the iris
  - Focus the ophthalmoscope with the focus ring
  - Look at the optic disc
  - Look at the blood vessels
  - Look at the retinal background
  - Look at the periphery
- Repeat the steps with other eye

# A patient with sciatica

#### Clinical situation:

Mr. Wong, a 50 year-old construction site worker, comes to see you for his terrible low back pain which radiates down to his R. lower limb.

- Address the patient and introduce yourself
- Ask for consent and start the physical examination for sciatica
- Patient lies supine
- Ask which limb is painful, examine the normal side first
- Flex the knee, check the passive hip flexion ?normal
- Then extend the knee, raise the leg on the unaffected side by lifting the heel with one hand while preventing flexion of the knee by the other hand
- Ask the patient to report if pain comes
- Report the angle of movement (normal: 90 degrees)
- Repeat on the affected limb
- Ask where the pain/shooting numbness (tingling sensation) exactly is . (In typical sciatica, the pain goes from the buttock down to the dorsum of foot)
- Slightly lower the affected limb and dorsiflex the ankle
- Ask for any exaggeration of pain: because of further stretch of the nerve

Q: What is the test you do called? Straight leg raising

Q: What is your finding/diagnosis? <u>Sciatica</u>

Q: What investigation would you like to order for this patient? MRI

# Then you will be shown with a picture of MRI:

Q: What pathology are you looking for in sciatica?

Disc prolapse

Q: What level of disc prolapse could be involved in sciatica? <u>L4-S1</u>

#### **Patient education**

Finally you will be asked to give instruction to the patient for protecting his spine in daily activities and in his work. You have to demonstrate to the patient

- Proper sitting position
- How to lift up weight properly

# Interviewing a patient on antithyroid drugs planning for pregnancy

#### Case scenario:

A woman with Grave's disease is now planning to have a baby. She has been on antithyroid medications for almost 3 months. She wants to stop the course or shift to other kind of treatment. She is now very angry as she has been waiting for you in the outpatient clinic for almost 3 hours!!

- Address the patient and introduce yourself.
- Give apology to patient for being late
- Explain why you are late in a responsible and polite way
- Back to the subject and clarify the problem
- State your viewpoint
- Explain that she needs a 12-18 months course of antithyroid drug in order to keep her thyroid status normal
- Give reason why she cannot simply terminate the medication now
- Explain other alternative treatments that she might choose.
  - ⇒ Radioactive iodine, and surgery
- Explain the potential risks and also benefits related to her plan of pregnancy and her current health problem.
- Reiterate your viewpoint with reason
- Collaboration through enlisting the patient as a partner
- Show effort to find out a solution for her and to accommodate some of the patient's demands
- Allow time for patient to think about and suggest that she may want to discuss with her family.

# Per vaginal examination

- Inform the patient about the procedure and get a consent
- Position the patient in a lithotomy position (which is the left lateral position-buttock on edge of coach, knee drawn up to chest, heel clear of perineum, head on pillow)
- Inspection: any abnormal mass?, discharge? Atrophic changes in menopausal women like loss of pubis hair, dry skin
- Choose the right sized speculum
- Avoid using KY jelly as the lubricant (though controversial, prefer to use water)
- Use one hand to separate the labium major
- Warn the patient that there may be some discomfort when inserting the speculum
- Gently put it into the vagina and then open the bivalve
- Inspect for the color of vaginal wall, and discharge, signs of inflammation, the cervix
- Use a Ayre spatula to get the cervical smear at the squamo-columnar junction
- Withdraw the speculum
- Examine the vagina by your finger
- Feel for the motility of cervix, any tenderness, the consistency, size and motility of uterus, any other abnormal mass palpated
- Palpate the uterus by bimanual palpation (with 2 finger of R hand in anterior fornix, place left hand flat on abdomen above pelvis )
  - Sideways → fallopian tubes and ovaries
  - Anterior fornix → swelling and tenderness
  - Posterior fornix → swelling tenderness in the Pouch of Douglas
  - Cervix → mass, tenderness and retroverted uterus
- Rectal-vaginal examination
  - look for swelling in the rectouterine pouch, retroverted uterus and rectal cancer

#### **IV DRIP**

■ Inform patient about the procedure, and get a consent.

Optional: select an appropriate size of angiocatheter, smaller the number, bigger the size. Usually 20G (gauge) for blood

- Apply a tournequet on the forearm/upper arm, not too near/too far from the puncture site
- Select a proper vein (usually at site of branch because less likely to slip away, at dorsum of hand) for drip site, palpate the vein
- Use alcohol swab to clean the overlying skin
- Use your left hand to hold the patient's hand and tighten the surrounding skin so that the vessel will not slip away
- Puncture the vein at 30° to the skin with the sharp edge of the needle.
- Observe for any blood coming out from the angiocath indicating that the angiocath is correctly in situ.
- Release the tourniquet
- Withdraw the needle slightly, and advance the whole angiocath into the vein
- Withdraw out the needle and press the proximal end to prevent bleeding
- Connect to a drip set
- Connect the H.B. (heparin block) or drip set to the angiocath
- Ensure there are no air bubbles trapped inside the drip set
- Properly attach the tegaderm to fix the angiocath
- Q. Why should you prefer setting up a drip in vein to an artery? (Optional)
- Risk of air embolism
- Risk of systemic infection

#### **BLOOD TAKING**

- Inform patient about procedure and get a verbal consent
- Choose a correct sized syringe 2.5ml, 5ml and 10ml. Same needle size in 5ml and 10ml syringe
- Now, usually a "vacutainer" is used instead (for examination and in the ward)
- Prepare the appropriate bottle for blood collection EDTA for complete blood picture, heparin tube for L/RFT.
- Apply/tie the tourniquet on the arm of patient, ask the patient to make a fist
- Clean the area of puncture with alcohol swab which provides antiseptic effect when drying up
- Don't touch the needle as it is aseptic
- Hold the syringe correctly with tapered end facing upwards and puncture at 30 degree angle to the skin.
- Aspirate blood out to appropriate amount if see some blood coming out
- Release the tourniquet
- Use a gauze to cover on the puncture site
- Withdraw the needle quickly as less pain and press the puncture site with gauze
- Check no further bleeding, attach a small bandage to the puncture site, ask the patient to press on it for few minutes
- Directly discard the needle to the sharps box
- Never recap the needle with your hands

#### PERECTAL EXAMINATION

- Inform the patient about the procedure and get a consent
- Position the patient properly (left lateral position):
  - ⇒ lying lateral to the left, and flex the knee to the chest wall
- Wear the gloves and prepare the KY jelly, tissue paper
- Inspection
  - ⇒ Any prolapsed hemorrhoids +/- anal fissure/fistula
  - Note: only prolapsed hemorrhoids can be observed externally and non complicated hemorrhoids are impalpable
  - ⇒ Any obvious lumps/bumps
- Negotiate the finger to the anus before straightly put into the anus
- Warn the patient that you are now going to put in your finger
- Test the anal tone (you can ask the patient to strain down on your finger and test for the tone): normal, flaccid, tight
- Feel the whole rectal mucosal wall by rotating the finger: smooth, or any mass? fixed to surrounding tissue
- Rectum is empty or fill with feces ? hard stool or soft stool
- Palpate for the prostate if male.
  - ⇒ Consistency? smooth, firm, hard, size: normal 2.5 finger breath
  - ⇒ Presence of median groove
- Withdraw your finger
- Inspect for the nature of stool: ?yellowish, ?tarry stool, ?blood stained
- Clean the anus for the patient (It is your job)
- Q. What is the bedside examination for **diagnosing** hemorrhoids?
- It is not by per rectal examination, but by proctoscope.

# **Examination of the joint movement**

# **Shoulder (1999):**

- Ask for consent
- Inspection: LOOK
  - 1. Swelling, eg effusion
  - 2. Deformity
  - 3. Dislocation
  - 4. Symmetry at bony structures, muscles development
  - 5. Height of clavicle
- Palpation: FEEL
  - 1. sternoclavicular joint
  - 2. acromioclavicular joint
  - 3. subacromial bursa
  - 4. head of the humerus
- Movement: MOVE

Examine for both passive and active ranges of movement:

- 1. Flexion
- 2. Extension
- 3. Abduction
- 4. Adduction
- 5. External rotation
- 6. Internal rotation
- 7. Circumduction

Compare the both sides

- Power:
- 1. Flexion
- 2. Extension
- 3. Abduction
- 4. Adduction
- +/- (internal rotation)
- +/- (external rotation)

Notes: In 1999 exam, only joint movement was examined. Inspection, palpation and power examination are not required in that year. Degrees of range of movement for each joint was asked but no mark was given.

# **Examination of a patient with Parkinsonism**

#### **4 Main Features of Parkinsonism:**

- 1. Tremor
- 2. Rigidity
- 3. Bradykinesia
- 4. Postural Instability
- Observe for mask face, serpentine stare (decreased blinking), any rest tremor
- Ask the patient to talk, notice any monotonous speech
- Glabellar tap, +ve if blinking persists after more than 5 taps but a unreliable sign
- Demonstrate resting tremor
  - ⇒ Course 3-5Hz, ask to raise the hand that decrease tremor, pill-rolling thumb, head tremor of yes-yes, or no-no
- Rigidity
  - ⇒ Test tone for spasticity (sign of UMNL), clasp-knife, leadpipe , wrist for cogwheel.
- Bradykinesia
  - ⇒ Ask the patient to open and close the hands, or ask to write his/her name, or to draw circles → micrographia, you may also notice the tremor
- Then ask the patient to walk
  - ⇔ Observe for difficulty and slowness in rising up from the chair
  - ⇒ Gait: shuffling, small steps, festinant, narrow based gait
  - ⇒ Decreased arm swinging
- Test axial rigidity
- Swing the patient left and right (a late sign of idiopathic Parkinson)
- Test for retropulsion, with a guard behind the patient, you stand in front and push back and forward the patient for **postural instability**

After you have demonstrated the 4 main characteristics of Parkinsonism, you should look for secondary causes or other differential diagnosis. (Optional)

- CNS test for cranial nerves, tone, #power, #sensation, #reflex, #cognitive function
  - Those with (#) are normal in idiopathic Parkinson disease, cognitive normal in early state of idiopathic Parkinson.

#### **DDx of Parkinsonism:**

- 1. Hypothyroidism, do TFT for new patient
- 2. Dementia
  - Alzhemer's,
  - multi-infarct dementia
  - repeated head injury e.g. boxer hypoxia)
- 3. Depression

# **Atypical features not suggestive of idiopathic Parkinsonism:**

- 1. Sudden onset/young onset
- 2. Hx of repeated stroke with stepwise deterioration
- 3. Frequent falls in early stage
- 4. Early dementia
- 5. Early urinary or bowel incontinence
- 6. No tremor but with significant bradykinesia
- 7. Gaze palsy
- 8. Axial rigidity >> limb rigidity
- 9. Presence of pyramidal /cerebellar sign
- 10. Poor response to levodopa

#### **Examination of the neck**

- Inform the patient and get a consent
- Proper exposure of the neck

#### **■** Inspection

- Inspect from the front and from the back of the neck
- Note whether the posture of the head and the neck is normal
- Look for any obvious mass and note and features of site, number, shape, size, scars and surrounding skin
- Ask the patient to swallow and note whether the mass moves up with swallowing → if yes → enlarged thyroid gland (Best provided with a cup of water)
- Ask the patient also to
  - Open the mouth and then protrude the tongue
  - Note whether the mass moves with protrusion of the tongue →
    thyroglossal cyst (which appears as a lump in anterior neck triangle).
    This is to differentiate a thyroid mass from a thyroglossal cyst.

#### **■** Palpation

- Stand behind the patient
- Palpate the thyroid gland
- Tender? Symmetrical? Size? Surface? Movement with swallowing? Consistency?
- Palpate the trachea
- Cervical lymph nodes
  - submental
  - submandibular
  - preauricular
  - postauricular
  - anterior triangle: upper middle and lower cervical
  - Posterior triangle
  - supraclavicular lymph nodes
- Palpation of the salivary glands parotid and submandibular → bimanual palpation
- Auscultation
  - ⇒ Bruits over the thyroid gland → thyroid bruit in Graves's disease
  - ⇒ Bruits over the carotid artery
  - ⇒ In some cases one have to distinguish the bruit in an artery from a murmur radiated from the heart.
- Please refer to the anatomy textbook for description of the location of different groups of lymph gland

# Examination of the hip joint – range of movement

- N. B. We include the whole examination steps for hip joint here for sake of completeness, you may only perform the part on ROM if asked for that only during examination.
- Inform the patient and ask for consent
- Look
  - Scars, muscle development, wasting, bony prominence, deformities, and dislocation
- Feel
  - Tenderness of the joint
  - Signs of inflammation
  - Palpate the bone contours
- Move
  - Active movement followed by passive movement
  - Flexion 0-140
  - Extension 0-10
  - Abduction 0-45
  - Adduction 0-30
  - Internal rotation 0-40
  - External rotation 0-40
- Remember to compare both sides
- Muscle power
  - Remember grade the power from grade one to grade five
- Measurement

# **Counseling for DMD**

#### **Scenario**

Mrs Wong who has a 4-year-old son suffering from Duchenne Muscular Dystrophy, comes to consult you about the condition of her child.

- Address the patient and introduce yourself
- What disease is my child suffering from?
  - ⇒ Duchenne Muscular dystrophy Chinese name: 杜興氏肌肉營養不良症 Or, Muscular dystrophy – Chinese name: 肌肉營養不良症
  - ⇒ Progressive muscle weakness
- Is this a hereditary condition? Did my child get the disease from me?
  - ⇒ It is a hereditary disease
  - ⇒ It is a X linked recessive disease with mothers of affected males in families with more than one affected male being the carriers.
  - ⇒ But mothers of affected males with no affected relatives are not always carriers since their sons may have been affected by new mutations.
- Will my child's condition improve as he grows older? Is the disease curable?
  - ⇒ Progressive disease
  - ⇒ On average, use of wheelchair proceeds from occasional use at about 9 to almost total dependence by the early teens
  - No cure for DMD at present. The worsening of ability can be slowed down by physiotherapy, but it cannot be stopped
- Will this disease cause death?
  - ⇒ Possible complications impairment of lung function because of weakness of respiratory muscle in moving the chest wall, scoliosis, impairment of heart function
  - ⇒ Close monitoring of the conditions of the child correct any complications
     → reduce morbidity and mortality
- Will I pass the disease to the next child if I get pregnant again?
  - ⇒ The son of a carrier has a 50% chance of being affected
  - ⇒ Girls are rarely affected. But 50% probability of being a carrier

# Osteoarthritis (OA) - Counseling

# Senerio:

# Give advice to the son who needs to look after his 60-year-old mother suffering from OA

- Counseling on the disease's effect on daily activities
- Any need to climb any stairs when going home?
- Assess the home environment arrange for modifications of household setting like setting up rails in the bathroom
- Anyone to take care of the patient?
- Arrange for any domestic helper service from the social welfare department
- Susceptibility of falling setting up alarms for calling help

Final words...

#### To All medics:

為義人死、是少有的、為仁人死、或者有敢作的。惟有基督在我們還作罪人的時候為我們死、神的愛就在此向我們顯明了。 羅馬書 5:7-8

For scarcely for a righteous man will one die: for peradventure for the good man some one would even dare to die. But God commendeth his own bve toward us, in that, while we were yet sinners, Christ died for us.

Romans 5:7-8

#### To All Christians:

耶穌又對眾人說、若有人要跟從我、就當捨己、天天背起他的十字架來、跟從我.<sup>24</sup>因為凡要救自己生命的、必喪掉生命.凡為我喪掉生命的、必救了生命。人若賺得全世界、卻喪了自己、賠上自己、有甚麼益處呢? 路加福音 9:23-25

And Jesus said unto all, If any man would come after me, let him deny himself, and take up his cross daily, and follow me. For whosoever would save his life shall lose it; but whosoever shall lose his life for my sake, the same shall save it. For what is a man profited, if he gain the whole world, and lose or forfeit his own self?

Luke 9:23-25

#### End