



CARDIFF UNIVERSITY

SCHOOL OF MEDICINE

CLINICAL EXAMINATION CHECKLIST









Introduction

This booklet of common examination checklists is designed to help to focus your clinical examination skills. You should take every opportunity to practise your examination skills on patients, starting with your first clinical contact in year 1 and continuing throughout your medical career. These guides are to be used in conjunction with your communication skills instruction and all the clinical examination teaching, which you will receive during your 5 years.

During your time at Medical School, you will be observed during your placement performing these examinations and will be assessed in the form of the ISCE. PRACTICE, PRACTICE, PRACTICE! In an ISCE, fluency, familiarity and appropriate techniques are the most differentiating feature in students' performance.

Remember that the purpose of a thorough clinical examination is, together with a detailed history, to enable you to construct a differential diagnosis, which helps you to treat your patient.

After each examination, summarise your findings, postulate a differential diagnosis and start thinking of what you would then do to confirm your suspicions.

Remember always to treat the patient with respect and to display an appropriately considerate manner to the patient throughout your examination.

NOTE:
These notes are to help the structure and fluency of your examination; they are not intended to be comprehensive or complete. They do not predict the cases you will encounter in your ISCE examination: they are guides only.









COMMUNICATION—Focussed history

Introduce self
Greet patient by name and explain role
Start by allowing patient to tell story with minimal interruption
Move from open to focussed questions:

Information gathering
Gather history about presenting complaint - symptoms
- chronology
- associated symptoms
- check for other problems

Elicit patient's perspective: ideas and concerns, expectations, effect on life

Background - past medical history
- relevant social context, e.g. occupation, living circumstances
- medication history

Listen (throughout)
Listen attentively, facilitating patient responses verbally and non verbally,
e.g. silence, repetition and paraphrasing
Summarise to check understanding
Demonstrate listening and builds rapport (*'So it all started….'*)

Build relationship (throughout)
Use appropriate non-verbal behaviour, demonstrating interest and respect
Consistently express empathy and / or support (concern, understanding, willingness to help) to develop a good rapport with patient
'What is your differential diagnosis?'
'What is your most likely diagnosis?' and the justification for this
'What physical examination would you do to clarify the diagnosis?









COMMUNICATION—Explanation

Introduce self
Greet patient by name and explain role

Before providing information
Ask what they already know, before starting explanation
Ask for their particular concerns or what they want to know, before starting explanation

When providing information
Use clear language, avoiding jargon
Ask patient whether they have understood the explanation given **(**and clarify patient's understanding)
Elicit further questions
Provide appropriate answers
End with a summary and appropriate plan of further care
Use appropriate non-verbal behaviour, demonstrating interest and respect
Express empathy and support

At the end of the explanation
Check patient's overall understanding of the explanation
Accurate information provided
Comprehensive explanation and plan









COMMUNICATION—Difficult consultation

Introduce self
Greet relative by name and explain role

Before providing information
Elicit relative's information needs
Elicit and clarify relative's main concerns
Elicit and clarify relative's understanding

Provide information - language clear, avoiding jargon
- pace suited to relative
- check understanding
- elicit further questions and provide answers

Deal with distress by picking up cues and respond (*for example supportive silence, empathic responses*)
Express empathy and support
Provide clear plan of ongoing care and support
Provide accurate information
Provide a comprehensive explanation and plan









CARDIOVASCULAR—General

Observe patient's general condition

Position patient correctly

Examine hands

Assess for cyanosis—central and peripheral

Assess radial pulse for rate, rhythm

Measure blood pressure

Examine carotid pulse for character

Consider examining for collapsing pulse

Examine jugular venous pressure

Inspect praecordium

Palpate praecordium, specific areas aortic, mitral tricuspid, pulmonary

Localise apex beat

Auscultate aortic murmurs

Auscultate mitral murmurs

Examine for peripheral oedema

Listen to lung bases

Consider examining peripheral pulses









CARDIOVASCULAR—Blood pressure

Correct cuff position on the upper arm (centre of bladder inside the cuff should be over brachial artery and the lower edge of the cuff 2–3 cm from fold in the antecubital fossa)

Cuff should be level with the heart

Arm supported

Brachial/radial artery palpation for systolic (cuff pumped up to occlude artery, systolic found by palpation)

Stethoscope applied correctly over brachial artery

Ensure slow descent of pressure

First sound taken as systolic and 5th sound as diastolic

Accurate measure of blood pressure









MUSCULOSKELETAL—GALS (gait, arms, legs, spine) screen

Initial questions
Do you have any pain or stiffness in your muscles joints or back?
Can you dress yourself fully in the morning?
Can you climb up and down stairs with no difficulty?

GAIT
Observe gait
Observe patient in anatomical position from behind, side, front

ARMS
Arms behind head (shoulders in full abduction and external rotation)
Elbow flexion (arms tucked in flexed 90° at elbow)
Pronation/supination (with elbows bent at 90°, observing muscle bulk, etc.)
'Make a fist'
Precision pinch
Metacarpal squeeze

LEGS
Internal rotation of the hips with knee fully flexed
Patellar tap
Observation of soles of feet
Metatarsal squeeze

SPINE
Lateral cervical flexion

Lumbar flexion (with fingers on two adjacent spinous processes, bend forwards looking for separation of fingers)

Palpation of bulk of trapezius for fibromyalgia trigger points

Summarise findings and postulate a differential diagnosis









MUSCULOSKELETAL—Hand

Assess general appearance

Ask about joint tenderness

Look Inspect and comment on nails (normal, splinters, pitting)

Comment on presence/absence DIP swelling

Comment on presence/absence of PIP swelling

Comment on presence/absence of MCP swelling

Comment on presence/absence of deformities for RA, OA or gout

Comment on palmar surface appearance

Comment on presence/absence of rheumatoid nodules/psoriatic plaques on extensor surface

Feel Any swelling of affected joints? bony or synovitis

Move Assess active movement grip strength, pincer grip

Assess wrist movement

Brief assessment of function

Summarise findings

Postulate a differential diagnosis









MUSCULOSKELETAL—Upper limb

Assess general appearance

Ask about joint tenderness

Adequately expose limbs

Look Inspect for deformity/swelling

Feel Palpate for tenderness/bony abnormalities/crepitus

Move Assess active movements of shoulder joint
- Flexion
- Abduction
- Internal rotation
- External rotation

Assess passive movements of shoulder joint

Assess movement of elbows: active and passive

Assess movement of wrists: active and passive

Assess active movements of hands (grip)

Brief assessment of function

Summarise findings

Postulate a differential diagnosis









MUSCULOSKELETAL—Hip

Assess general appearance

Ask about joint tenderness

Adequately expose both hips

Assess gait

Look Inspect both legs for deformity/scars/muscle wasting

Assess gluteal integrity (Trendelenburg's test)

Assess legs for true or apparent shortening

Feel Palpate around anatomical landmarks for tenderness

Move Assess all active movements

Assess passive movements

Flexion

Internal/external rotation

Abduction/adduction

Fixed flexion deformity (Thomas' test)

Summarise findings

Postulate a differential diagnosis









MUSCULOSKELETAL—Knee

Assess general appearance

Ask about joint tenderness

Adequately expose both knees

Assess gait

Look Inspection of knees for deformity/scars

Inspection of quadriceps for muscle wasting

Feel Palpate for joint line tenderness

Palpate for crepitus

Assess for knee effusion

Move Assess all active movements

Assess passive movements flexion/extension

Assess medial and lateral collateral ligaments

Assess stability of the joint (anterior and posterior cruciate ligaments)

Summarise findings

Postulate a differential diagnosis









MUSCULOSKELETAL—Spine

Observe general condition of patient

Assess gait

Inspect from behind

Inspect from side, to note absence/reversal of normal spinal curvatures

Palpate spine for tenderness

Lateral flexion cervical spine

Forward flexion cervical spine

Rotation of cervical spine

Rotation of thoracic spine (seated on edge of couch)

Chest expansion

Flexion of lumbar spine (with your fingers on two adjacent spinous processes, bend forwards looking for separation of fingers)

Extension of lumbar spine
Lateral flexion of spine
Straight leg raising and sciatic stretch test

Consider neurological examination, including strength, reflexes, sensation

Summarise findings

Postulate a differential diagnosis









NEUROLOGICAL—Visual system

General inspection

Inspect for external abnormality (ptosis, proptosis)

Check visual acuity

Examine visual fields appropriately, each eye separately

(Show how to draw and label any visual field abnormality correctly)

Examine eye movements appropriately asking about double vision including convergence

Test pupillary response to light (direct and consensual)

to accommodation

Handle ophthalmoscope correctly and with familiarity

Identify red reflex in both eyes

View optic discs correctly

Examine all quadrants of the fundus

Examine macula

Summarise findings

Postulate a differential diagnosis









NEUROLOGICAL—Upper limbs

General inspection

Adequate exposure of arms (including scapulae)

Inspect spine and neck

Inspect arms for deformity, wasting, tremor, sores

Assess tone

Assess muscle strength

Demonstrate biceps reflex

Demonstrate triceps reflex

Demonstrate supinator reflex

Assess co-ordination: finger–nose test (intention tremor)
rapid alternating movements (dysdiadochokinesis)

Assess sensation: light touch, pin prick, vibration, joint-position sense

Summarise findings

Postulate a differential diagnosis









NEUROLOGICAL—Lower limbs

General inspection

Adequate exposure of legs (including hips)

Inspect spine for scoliosis, spina bifida, sores

legs for deformity, wasting, fasciculation, sores (heel)

catheter

Assess muscle tone

Demonstrate ankle clonus if appropriate

Assess muscle strength

Demonstrate quadriceps reflex

Demonstrate ankle reflex

Demonstrate plantar response

Assess co-ordination heel–shin test (intention tremor)

Assess sensation: light touch, pin prick, vibration, joint position sense

Assess gait and balance, including Romberg's test

Consider examining perineal sensation and anal tone, if appropriate

Summarise findings

Postulate a differential diagnosis









RESPIRATORY

Observe patient's general condition

Position and expose chest appropriately for inspection

Examine hands for clubbing

Examine hands for peripheral cyanosis

Assess pulse

Consider assessing hypercapnic flap (only if relevant)

Examine for supraclavicular and cervical lymph nodes

Assess respiratory rate

Look for central cyanosis

Assess position of trachea

Assess chest expansion

Percuss chest appropriately

Correct auscultation, including vocal resonance

Summarise findings

Postulate a differential diagnosis









SURGICAL—Abdomen

Observe patient's general condition

Examine nails

Examine hands

Examine forearms (for evidence of arteriovenous fistula)

Examines eyes for anaemia/jaundice
Examine mouth
Examine neck for lymphadenopathy
Examine skin of upper thorax/abdomen

Appropriate exposure and positioning for abdominal examination

Appropriate superficial palpation

Palpation of liver
Palpation of spleen
Palpation of kidneys

Percussion of abdomen

Examine for ascites

Auscultation of bowel sounds/bruits

Examine hernial orifices

Consider rectal examination

Summarise findings









SURGICAL—Breast

Seek consent, put patient at ease

Expose breasts appropriately

Inspect breast with arms by side and elevated

Systematic palpation of asymptomatic breast

Systematic palpation of symptomatic breast

Examination of both axillae

Examination of supraclavicular fossae

Examination of chest and abdomen for evidence of metastatic disease

Summarise findings

Postulate a differential diagnosis









SURGICAL—Peripheral vascular system

Adequate exposure of legs

Inspection of legs for venous stasis/signs of ischaemia

Inspection of other areas at risk of ulcers e.g. between toes and pressure points

Assessment of capillary refill time

Assessment of temperature

Palpation of femoral pulses, bilaterally

Palpation of popliteal pulses, bilaterally

Palpation of dorsalis pedis pulses, bilaterally

Palpation of posterior tibial pulses, bilaterally

Auscultation for bruits

Consider Buerger's test, including identifying the 'vascular angle' (Buerger's angle): the angle to which the leg has to be raised before it becomes pale

Consider examining the neurological system in the lower limbs

Summarise findings

Postulate a differential diagnosis









SURGICAL—Thyroid and neck

Adequately expose the neck

Observe any lump, anteriorly

Palpate lump appropriately (from behind patient)

Assess whether any lump moves on swallowing or on protruding tongue

Assess position of trachea

Examine lymph nodes

Auscultate for bruits

Assess thyroid status, pulse, tremor, hands

Examine for thyroid eye disease

Summarise findings

Postulate a differential diagnosis









Using an Ophthalmoscope

Demonstrate how to examine the visual fields

Handle ophthalmoscope correctly and with familiarity

Use correct technique for viewing the optic disc

Use correct technique for viewing periphery of the retina

Demonstrate how to test the pupillary response

Understand the appearance of the optic nerve if inflamed or damaged

Identify correct physical signs

Summarise salient points and positive findings

Generate diagnostic hypotheses and discusses investigation and management