

This patient is a 40 year old man with palpitations.

Perform an examination of the Cardiovascular system.

- Wash hands / alcohol gel / gloves
- Introduce and confirm patient's identity
- Explain / consent
- Ensure comfortable

- At 45 degrees on couch
- Expose chest

- **Hands** – clubbing, splinter haemorrhages, Koilonychia, nail fold infarcts, Osler's nodes / Janeway lesions, colour, temperature
- **Radial pulse** – rate, rhythm, volume, character, radio-radial delay, radio-femoral delay, Water-hammer pulse

- **Head and neck**
- Sclera, xanthelasma, corneal arcus, malar flush
- Mouth – central cyanosis
- JVP
- Carotid pulse

- **Chest**
- Inspect – scars, deformity
- Apex beat, thrills, parasternal heave
- Auscultate heart (4 areas) – bell and diaphragm, diaphragm in 4th IC space left sternal edge in expiration (AR), with bell in mitral area with patient on left side in expiration (MS), axilla (MR), carotids (AS, and bruits)
- Percuss and auscultate lung bases

- **Abdomen**
- Ascites, hepatomegaly, AA, kidneys, renal artery bruits, sacral oedema

- **Legs**
- Ankle oedema, peripheral pulses

- BP, fundoscopy, urine dipstick
- Thank patient
- Cover up / dress
- Summarise findings
- ?ECG/CXR

This patient is a 60 year old man with haemoptysis.

Please examine his Respiratory system.

- Wash hands / alcohol gel / gloves
- Introduce and confirm patient's identity
- Explain / consent
- Ensure comfortable

- 45 degrees on couch
- Expose chest

- **General**
- Appearance – nutritional status
- Signs of respiratory distress, pursed lip breathing, ? oxygen

- **Hands**
- Colour (cyanosis), temperature, clubbing (inspection and fluctuation), asterixis

- **Radial pulse**
- Rate, rhythm, character - ? bounding

- **Head and neck**
- Sclera, ? Horner's, mouth, JVP, LNs

- **Chest**
- Inspect – RR, deformity, scars, chest expansion, **front and back**
- Palpate – trachea, apex beat, chest expansion, tactile fremitus
- Percuss – anterior, lateral, posterior
- Auscultate – breath sounds, vocal resonance

- Peripheral oedema, erythema nodosum

- Sputum pot, PEFr, inhaler technique
- Thank patient
- Cover or redress
- Summarise
- ?ECG / CXR

You are seeing a 65 year old man with abdominal pain and vomiting.

Examine his abdomen.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Explain / consent
- Ensure comfortable - ? requires analgesia or antiemetic

- Lying flat on couch, head supported by pillow, arms by side
- Expose from nipples to knees

- **General** – appearance – nutritional status

- **Hands**
- Clubbing, palmar erythema, Dupuytren's, leukonychia, Koilonychia, liver flap

- **Head, neck, upper body**
- Sclera – anaemia, jaundice
- Mouth – ulcers, angular stomatitis, atrophic glossitis, furring of tongue, dentition
- Neck – LNs
- Gynaecomastia, spider naevi

- **Abdomen**
- Inspect – scars, distension, collateral veins, ask patient to lift head (hernias)
- Palpate – kneeling at patient's side, start distant from painful site, look at patient's face, LKKS and aorta, Murphy's sign, rebound tenderness
- Percuss – liver (upper and lower border), suprapubic, shifting dullness
- Auscultate – mid abdomen, aorta (bruits), renal artery bruits (2.5cm above and lateral to umbilicus)

- Examine groins (hernias, LNs) and genitalia
- PR
- Urine dip

- Cover patient
- Thank patient

You have been asked by one of your SHOs to review a 13 year old with testicular pain. Examine his genitalia (plastic model provided)

- Wash hands / alcohol gel / gloves
- Privacy / confidentiality
- Chaperone and parent(s) present
- Introduce yourself
- Confirm identity patient
- Consent – for exam and chaperone
- Ensure comfortable - ? analgesia
- **General inspection**
- **Penis** – inspect (ulcers), retract foreskin and examine glans, ? urethral discharge (send for bacteriology)
- **Scrotum**
- Inspect – scars, testicular lie, ? both testicles present
- Palpate – looking at patient's face, testis, epididymis, vas deferens, cough impulse
- Transilluminate mass
- Ask to stand if varicocele suspected
- **Inguinal LNs**
- Cover patient
- Thank patient
- Request urine dip

You are seeing a patient with PR bleeding.
 Perform a digital rectal examination on the plastic model provided.

- Wash hands / alcohol gel / gloves
 - Private room, with chaperone
 - Introduce yourself
 - Confirm identity of patient
 - Consent – for PR and chaperone
 - Ensure comfortable - ? requires analgesia
-
- Remove trousers and underwear
 - On left side, buttocks to side of couch, knees to chest
-
- Inspect anus / skin – skin tags, excoriations, ulcers, fissures, prolapsed haemorrhoids
-
- Lubricate finger
 - PR – anal tone, palpate entire circumference of anal canal, prostate (cervix in females), faeces
 - Remove finger and examine glove
 - Dispose of glove
 - Clean patient
-
- Ask to redress
 - Invite Qs or concerns
 - Thank patient

This is a 26 year old man with facial weakness.

Examine his cranial nerves.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent for examination
- Ensure comfortable
- **Olfactory** – any change in sense of smell? Use vials if provided
- **Optic** – visual acuity, Ishihara plates (colour vision), pupils (direct and consensual), visual fields, fundoscopy
- **Oculomotor, trochlear, abducens** – eye movements
- **Trigeminal**
 - Sensory – light touch in 3 divisions, corneal reflex
 - Motor – temporalis, masseter, jaw jerk
- **Facial** – facial asymmetry, muscles of facial expression, taste anterior 2/3s tongue
- **Vestibulocochlear** – hearing, Rinne’s and Weber’s, Hallpike test (if vertigo)
- **Glossopharyngeal** – gag reflex **bilaterally**, taste posterior 1/3 tongue
- **Vagus** – Say “ahhh” and observe uvula (deviates away from side of lesion), voice – nasal or hoarse, cough – bovine
- **Accessory** – wasting sternomastoid and trapezius, motor – shrug shoulders and turn head
- **Hypoglossal** – inspect (wasting, fasciculation), stick tongue out (deviates towards side of lesion with LMN lesion)
- Thank patient
- Summarise findings

This is a 45 year old woman with vertigo and vomiting.

Demonstrate how you would examine her to determine the cause of her symptoms.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent
- Ensure comfortable - ? requires antiemetic / vomit bowl

- Nystagmus
- Vestibulocochlear nerve – hearing, Rinne’s and Weber’s, Hallpike test

- **Cerebellar signs**
- Ask patient which is dominant hand
- Resting tremor
- Tone
- Dysdiadochokinesis
- Finger-to-nose test – intention tremor and past-pointing
- Fine finger movements
- Heel-to-shin test

- Gait
- Other focal neurology

- Thank patient
- Summarise findings

You are asked by one of the ENPs to review a 70 year old man. He has been involved in a RTA. He was the restrained driver, low impact rear-end shunt. He was ambulant at the scene. Now complains of neck pain, and tingling in his right hand.

Perform an appropriate neurological examination of his right arm, and present a management plan.

- Wash hands / alcohol gel / gloves
- Introduce yourself to patient
- Confirm identity of patient
- Consent
- Ensure adequate C-spine immobilisation
- Ensure comfortable - ? other injuries, ? analgesia

- Inspect – wasting, fasciculation

- Dermatomes (**light touch** with cotton wool, **pain** with sharp object)
- C5 – regimental badge
- C6 – thumb
- C7 – middle finger
- C8 – little finger
- T1 – inner aspect elbow

- Myotomes (MRC scale 0-5)
- C5 – shoulder abduction
- C6 – elbow flexion, wrist dorsiflexion
- C7 – elbow extension
- C8 – finger flexors
- T1 – finger abduction

- Reflexes
- C5 – biceps
- C6 – supinator
- C7 – triceps
- C8 – finger flexors

- Thank patient
- Suggest you would perform a full neuro. exam

- Management plan – (explain to patient), maintain immobilisation, analgesia, C-spine series, refer orthopaedics / neurosurgeons

You are asked by one of the SHOs to review a man in the resuscitation room who has been brought in by ambulance following a fall downstairs. He is complaining of severe lower back pain, and bilateral leg weakness. He is on a spinal board. He is stable, and has no other significant injuries.

Examine his legs, explaining to the SHO what you are doing as you proceed.

- Wash hands / alcohol gel / gloves and apron
- Introduce yourself to patient
- Confirm identity of patient
- Consent
- Ensure C-spine immobilisation
- Ensure comfortable - ? needs analgesia

- Inspect – wasting, fasciculation

- Dermatomes (light touch and pain)
- L2 – medial thigh
- L3 – medial knee
- L4 – medial malleolus
- L5 – 1st web space
- S1 – lateral border foot
- S2 – back of knee
- S3 – ischial tuberosity

- Myotomes (MRC scale)
- L1 – hip flexion
- L2 – hip adduction
- L3 – knee extension
- L4 – ankle dorsiflexion
- L5 – big toe dorsiflexion
- S1 – foot plantarflexion

- Reflexes
- L3/4 – knee
- L5, S1 – ankle
- Babinsky sign

- Thank patient, redress
- Suggest complete neuro exam, log roll, spinal tenderness, PR, perianal sensation, sensory level, priapism, ? bladder +/- urinary catheter, appropriate imaging

You are asked to see this 37 year old woman. She presents 2 hours following an overdose of paracetamol. She has taken about 40 tablets. Assess her mental state.

- Potentially a lot of information to gather in 8 minutes, therefore **be focused**, unlikely to complete exam in 8 mins

- Wash hands / alcohol gel
- Appropriate room – privacy, safety
- Background information - ? need security or chaperone
- Introduce yourself
- Confirm identity of patient
- Consent for history / exam

- **Mental State Examination**

- Appearance / behaviour
- Speech
- Mood – depression, biological symptoms, suicidal thoughts
- Hallucinations
- Thought disorder
- Cognitive function (AMTS)
- Insight

- History relevant to DSH
- Motive
- Planning, note, concealment
- SAD PERSONS score
- Previous DSH / psychiatric history

- PMH, DH, SH – recreational drugs, alcohol, employment, forensic history

- Thank patient
- Summarise findings, particularly suicide risk

This is a 32 year old lady with vaginal discharge.

Perform a PV and speculum examination (plastic model provided)

- Wash hands / alcohol gel
- Private room with female chaperone

- Introduce yourself
- Confirm identity of patient
- Consent – for exam and chaperone
- Ensure comfortable
- Indicate you would carry out abdominal exam prior to gynae exam
- Lie flat on couch, heels to buttocks, let knees flop out
- Cover with drape
- Don gloves
- Inspect vulva
- Lubricate right glove
- PV
- Bimanual exam - ? excitation tenderness
- Inspect glove for blood or discharge
- Dispose of glove
- **Speculum**
- Don gloves
- Lubricate speculum
- Insert
- Inspect cervix with light source
- Carefully remove speculum
- Dispose of speculum and gloves
- Ask patient any Qs or concerns?
- Thank patient, redress

This patient has suffered a laceration to the volar aspect of their left wrist on glass.

Examine the left hand.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient

- Consent
- Ensure comfortable – offer analgesia
- Expose hand and wrist (both)
- **Inspect** (dorsum and palmar, compare to other side)
- Finger cascade
- Colour
- Deformity – Mallet, Boutonniere’s, swan neck
- Scars
- Wasting
- Swelling
- Wounds
- **Palpate**
- Temperature
- Bony tenderness
- Vascular status – radial / ulnar pulse, Allen’s test, CRT
- **Move**
- Assess active ROM
- FDP
- FDS
- FPL
- Finger extensors (terminal slips vs middle slip vs proximal whole tendon lesion)
- EPL
- Finkelstein’s test in suspected De Quervain’s
- **Neuro**
- Median (motor and sensory) – Phalen’s test and Tinel’s sign in suspected carpal tunnel syndrome
- Ulnar (motor and sensory) – paper test, Froment’s, finger abduction
- Radial (sensory)
- Thank patient

Please examine this man’s right elbow. He is a 48 year old labourer, with atraumatic pain in the right elbow.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent
- Ensure comfortable – offer analgesia
- Expose arms
- **Inspect** (front and back, and compare to other side)
- Deformity

- Swelling
- Erythema
- Scars
- Wasting
- Rheumatoid nodules
- Gouty tophi

- **Palpate**
- Temperature
- Synovial thickening
- Bony tenderness (olecranon, lateral and medial epicondyles, radial head)
- Brachial artery
- Biceps tendon
- Ulnar nerve (and Tinel's)

- **Move**
- Active ROM – flex / extend, pronate / supinate
- Passive ROM

- **Specific tests**
- Tennis elbow – resisted extension of wrist with hand in fist and elbow extended and pronated, Chair test
- Golfer's elbow – resisted wrist flexion with elbow in supination

- Ask to examine joint above and below
- Ask to examine vascular and neuro. systems of upper limb
- Thank patient, redress

A 45 year old man returns to your review clinic. He suffered an injury to his right shoulder two weeks ago. He has continuing pain and decreased movement. He is right hand dominant.

Examine his right shoulder, offer a diagnosis, and suggest appropriate investigations

- Read notes / view previous XR
- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent
- Ensure comfortable – offer analgesia

- Expose shoulder and trunk
- Sitting / standing
- **Inspect** (front, side and back)
- Swelling, scars, wasting, bony prominence, colour, bruising, wounds, asymmetry
- **Palpate**
- Skin – temperature
- Bones – SC jt, clavicle, AC jt, acromion, scapula
- Tendon insertions – supraspinatus, long head biceps (supreglenoid tuberosity), short head biceps (coracoid), bicipital groove
- Subacromial bursa, humeral head via axilla
- **Move**
- Active ROM
- Passive ROM – with one hand on shoulder feeling for crepitus

Specific tests

- Supraspinatus – initiate abduction, painful arc, Empty can test (resisted forward flexion at 90 degrees), drop arm test
- Infraspinatus – resisted ER
- Subscapularis – Gerber’s lift off test
- Impingement – Neer’s test (pain on flexion with IR), Hawkin’s test (forward flex 90 degrees, then IR, pain)
- Biceps – Yergason’s test (resist supination of flexed elbow), Speed’s test (resist flexion of supinated straight arm)
- SLAP lesion – O’Brien’s test (resist adduction of IR and flexed shoulder, pain deep in shoulder)
- Apprehension test
- Ask to examine neck, neuro and vascular arm
- Thank patient, redress
- Suggest XR, U/S, joint injection

This is a 20 year old footballer who has twisted his knee during a tackle.

Please examine his knee.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent
- Ensure comfortable – offer analgesia

- On couch
- Expose legs

- **Inspect**
- Colour, scars, swelling, quads wasting, varus / valgus deformity

- **Palpate**
- Temperature
- Effusion – milking, patella tap
- Patella, patellar tendon, tibial tuberosity

- Femoral condyles, MCL, LCL, proximal tibia
- Popliteal fossa, hamstring tendons (biceps femoris laterally, gracilis, SM and ST medially)
- **Move**
- Active ROM (and palpate joint margins with knee in 90 degrees)
- Passive ROM (feeling for crepitus), full extension
- **Special tests**
- Cruciates – posterior sag test, anterior and posterior drawer (bilateral), Lachman's
- Collaterals – in full extension and 20 degrees flexion
- Menisci - McMurray's
- Ask to assess gait
- Thank patient
- Redress

You are in review clinic. The next patient is a 31 year old professional man who sustained a fall onto his right hand a week ago. He is left hand dominant. He is complaining of right wrist pain. He has returned to clinic today.

Examine his right wrist, and outline your further management options.

- Read A&E card, look at XR
- Wash hands, alcohol gel, (gloves)
- Introduce yourself
- Confirm identity of patient
- Consent for examination
- Ensure comfortable – offer analgesia
- **Inspection**
- Expose both arms to above elbows
- Symmetry, swelling, deformity, scars, erythema, bruising, wasting

- **Palpation**
- Skin - temperature
- Bones – radius, ulna, carpals, scaphoid – ASB and tubercle
- Soft tissues – EPB and APL (De Qs), synovial thickening, TFCC (distal to ulna)
- Radial pulse (+/- ulnar artery)
- Radial / median / ulnar nerve sensation
- **Move**
- Active ROM – flexion, extension, ulnar and radial deviation, supination, pronation
- Passive ROM
- **Special tests**
- Scaphoid – as above, plus ulnar deviation, thumb compression / telescoping, scaphoid shift test (pressure on scaphoid tubercle with ulnar deviation)
- De Qs – Finkelstein's
- Carpal Tunnel – Phalen's, Tinel's, APB
- Ask to examine elbow / forearm
- Thank patient, redress
- Suggest repeat scaphoid views at 10 days post injury, MRI / bone scan, futura splint with thumb extension

This 20 year old lady attended A&E one week ago following an inversion injury to her right ankle. She presents today with persistent pain. She is partial weight bearing.

Examine the right ankle and foot. Offer an appropriate management plan.

- Check old A&E notes and XRs
- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent for examination
- Ensure comfortable – offer analgesia
- **Inspection** (including posterior aspect)
- On couch
- Expose both legs to above knees
- Symmetry, swelling, deformity, scars, wasting, erythema, bruising
- **Palpation**
- Skin - temperature
- Bones – distal tibia and fibula, Base 5th MT, navicular, calcaneum
- Soft tissues – deltoid ligt, lateral ligt complex, Achilles tendon, plantar fascia

- Pulses – D.pedis, posterior tibial
- Sensation – peroneal (deep and superficial), medial and lateral plantar nerves, sural nerve
- **Move**
- Active ROM
- Passive ROM
- Ankle – plantar- / dorsiflexion
- Subtalar – inversion / eversion
- Midtarsal – flexion, extension, inversion, eversion
- Toes – flexion, extension
- **Special tests**
- Simmond's
- Lateral ligt. stress test
- Morton's neuroma – compress MT heads
- Ask to assess examine knee
- Ask to assess gait, stand on tiptoes
- Thank patient, redress
- Management – U/S, MRI, equinus cast, operative

This is a 45 year old Pakistani taxi driver who has been involved in a minor RTA. He was the driver of a stationary vehicle; rear end shunt at low speed while stopped at traffic lights. Presents several hours after the accident with neck pain.

Please examine his neck.

- Wash hands / alcohol gel / gloves
- Introduce yourself
- Confirm identity of patient
- Consent for examination
- Concise history – no immediate need for C-spine immobilization
- Ensure comfortable – offer analgesia
- **Inspection** (front and back)
- Sitting
- Expose
- Swelling, erythema, bruising, scars, deformity

- **Palpation**
- Midline
- Paraspinal tissues
- Anterior (+/- pain on swallowing)

- **Move**
- Active ROM – flexion, extension, lateral flexion and rotation

- **Neuro**
- Power (C5 – T1)
- Sensation (C5 - T1)
- Reflexes (C5 – C8)
- Pupils – Horner's (!!)

- Ask to assess gait
- Thank patient, redress