

## History

General

### **SOCRATES**

- Site
- Onset
- Character
- Radiation
- Associated symptoms
- Time/duration
- Exacerbating/relieving factors
- Severity

\*\*Take away S and R for all other conditions

Oyamed

Chest Pain  
(Angina, STEMI  
and Non-STEMI)

**Introduction**

- Introduce self to patient
- Wash hands

**PC:**

- Open Question
- Pain – Site, Onset, Duration, Character, Radiation, Relieving/Exacerbation, Severity of pain
  - Chest tightness (Angina) or Pleuritic pain
  - Relieved by GTN spray within seconds
- Other symptoms – N + V + SOB
- Previous similar episodes?

**Risk factors**

- Smoking, Lipids, DM, ETOH, HTN, Past CVS events
- FH of CVS

**Other history**

- PMH, Medication, Allergies, Social history
- Thank the patient during end of consultation

**Differentials for Chest pain**

- CVS: Stable angina, Acute Coronary Syndrome (STEMI, Non-STEMI or Unstable angina), Aortic dissection, Pericarditis
- Resp: Pneumonia, PE, Tension pneumothorax
- GIT: GORD
- MSK: Intercostal muscles, Rib fracture

**Investigations**

- ECG
- Bloods: Troponin, FBC, CHEM20, BGL
- Others: Exercise stress test, CT Angiogram

**Explanation:**

- **ACS:** Central crushing nature? Radiation? N+V? Not relieved by rest?
- **Aortic dissection:** Tearing nature to pain? Sudden onset? Radiates to the back?
- **PE:** Sudden onset? Worse when taking breath in? Prev history of clots? Calf pain or swelling?
- **Pneumonia:** Fever? Productive cough? SOB?
- **GORD:** R/S with food? Burning sensation? Relieved by antacid? Similar pain before?
- **Pericarditis:** URTI recently? Pain relieved by leaning forward?
- **Tension pneumothorax:** Sudden onset? SOB? Getting worse?
- **MSK:** Did it occur whilst doing a physical activity? Ache or sharp pain? Worse on movement?

Shortness of  
Breath

**Introduction**

- Introduce self to patient
- Wash hands

**PC:**

- Open Question
- Dyspnoea – Onset, Duration, Severity, Exacerbating factors and Exercise tolerance
- Cough – Onset, Duration, Severity
- Sputum – Production, Quantity, Colour, Haemoptysis
- Previous similar episodes?
- Other symptoms – Fatigue, Fever, Coryzal symptoms (Sore throat, Rhinorrhoea, Headache, Myalgia), Chest pain
- Heart failure symptoms – Orthopnoea, PND, Leg swelling
- Pulmonary embolism – Calf swelling, chest pain, sudden onset dyspnoea
- Constitutional symptoms – Weight loss, night sweats, loss of appetite

**Other history**

- FH, PMH, Medication (Use of inhalers/puffers), Allergies, Social history (Smoking, Occupational exposure, ETOH, RD use)
- Recent travels and vaccinations (Flu/Pneumococcal)
- Thank the patient during end of consultation

**Investigations**

- CXR, ECG, FBC, CHEM20

**Differentials for SOB:**

- Infection: Fever, rhinorrhoea, sore throat, myalgia
- CCF: Leg swelling, Orthopnea, PND
- PE: Calf swelling/pain, pleuritic pain, sudden onset SOB
- Lung cancer: Haemoptysis, night sweats, weight loss, appetite loss
- Anaemia: Pale skin, chest pain, PR bleeding/other bleeding
- ACS: Chest pain, N+V

**COPD Exacerbation**

- Think Infective/Non-infective
- Non-infection sputum – Clear/yellow
- Key symptoms: Worsening Dyspnoea, cough and increase sputum
- Ask about previous hospital admissions and if patient is known to a specialist respiratory physician

### **Introduction**

- Introduce self to patient
- Wash hands

### **PC:**

- Open Question
- Pain – Site, Onset, Duration, Character, Radiation, Relieving/Exacerbation, Severity of pain
  - Nature: Colicky (obstruction of bowel or ureters) vs constant/steady pain
  - Aggravating & Aggravating: Meals, Antacids, Position.
- Urinary symptoms – Dysuria, Oliguria, Haematuria
- Bowel symptoms – Diarrhoea, constipation, Melaena, PR bleeding
- Other symptoms – N/V, Loss of appetite, Fever/rigors and Weight changes
- Previous similar episodes?

### **Risk factors for Pancreatitis**

- GET SMASHED – Gall stones, ETOH, Trauma, Steroids, Malignancy, Autoimmune, Scorpion bites, High lipids/Calcium, ERCP, Drugs (Bactrim/Azathioprine)

### **Other history**

- PMH, Medication, PSH, Allergies, FH, Social history
- Thank the patient during end of consultation

### **Important examination findings**

- Vital signs
- Abdominal palpation – Murphy's sign, McBurney's sign
- Stigmata of alcohol abuse – Gynaecomastia, Spider naevi, Ascites

### **Investigations**

- FBC, CHEM20, CRP/ESR, Lipase, Erect CXR, CT abdomen

### **Differential Diagnosis (RUQ pain)**

Cholecystitis, Ascending cholangitis (Jaundice, Fever and Pain), Pancreatitis (Epigastrium, radiates to back), PUD, Cholelithiasis (Colicky pain), Gastritis

Abdominal Pain

**Introduction**

- Introduce self to patient
- Wash hands

**PC:**

- Open Question

Oyamed

## Headache

- Before the headache
  - Do you normally get headaches? Is this different from usual?
  - Headache weeks prior to this one (1/2 SAH can have a warning leak)
  - Recent trauma, Exertional/Sexual activity
  - Aura's associated with migraines
- During the headache
  - Site, Onset, Character, Radiation, Associated features, Timing, Exacerbating features, Severity
- After the headache
  - Duration it took to resolve
  - Constant
- Last meal

### **Additional:**

- Stroke symptoms – Speech changes, facial droop, difficulty walking/balance, weakness/numbness
- Infective symptoms – Neck stiffness, photophobia, fever, rigors
- Constitutional symptoms – Weight loss, night sweats

### **CVS risk factors (Related to stroke)**

- DM, Cholesterol, HTN, FHx, Smoking, Obesity, AF

### **Other history**

- PMH, Medication, PSH, Allergies, FH, Social history
- Thank the patient during end of consultation

### **Investigations**

- CT Head and Lumbar puncture
- Others: BGL, FBC, CHEM20, Coag profile and Blood culture (if febrile)

### **Primary headaches**

- Tension headache and Migraines
- Usually recurrent

### **Secondary headaches**

- Thunderclap headache (Usually vascular origin) – SAH, Intra-cerebral bleed and Central vein thrombosis
- Others: Ischaemic stroke, Meningitis, trauma, temporal arteritis, acute glaucoma

Major  
Depressive  
Disorder

**Introduction**

- Introduce self to patient
- Wash hands

**PC:**

- Open Question
- Ask about mood and recent stressors

**Emotional symptoms:** Hopelessness, Anhedonia, Anxiety

- **Somatic symptoms:** Concentration, Energy (Fatigue), Sleep difficulties, Appetite and Weight loss
- **Motivational symptoms:** Loss of interest, lack of drive and difficulty starting anything
- **Psychotic symptoms:** Delusions and hallucinations
- **Bipolar symptoms:** Elevated mood, impulsivity and reckless behaviour
- Premorbid personality
- **Suicidality:** Intent, Plan and past attempts
- **Coping mechanisms:** Drinking/Drug abuse, Compulsive behaviours
- **Premorbid personality**

**Other history**

- Past Psychiatric history, PMH, FH of Psychiatric conditions, Medication, Allergies, Social history (Smoking, ETOH, RD use, Living arrangement and Occupation)
- Thank the patient during end of consultation

**Differentials for Low Mood**

- MDD
- Adjustment disorder – Within 3 months of stressful event and last no longer than 6 months
- Hypothyroidism
- VitB12 deficiency
- Bipolar

**Investigations**

- FBC, CHEM20, VitB12

**Management:**

- Psychology/Psychiatry referral
- SSRI
- Social work r/v

**Post-Partum Depression**

- Explicitly ask about intentions to harm child and harm others
- Explanation of Baby blues: Large reduction in oestrogen postpartum results in reduced levels of neurotransmitters in the brain. Most women will recover without interventions.
  - Management: Need to monitor depressive/psychotic symptoms, referral to family counsel and aim to increase support networks if possible

**Elderly**

- Mobility and ADL (Activities of Daily living)
- If in aged care  Ask about elder abuse

## Syncope

### Introduction

- Introduce self to patient

Wash hands

### PC:

- Open Question
- Before
  - Situational syncope – Coughing, sneezing, micturition, defecation
  - Vasovagal – Emotional stress, pain, prolonged standing
  - Orthostatic syncope
  - Carotid sinus sensitivity – Shaving, tight collar
- Onset
  - Sudden or gradual “What do you remember last?”
  - “Was there any warning symptoms”
  - Any light headedness, tunnel vision, nausea, hot sweaty clammy feeling?
- During
  - Any witness
  - Seizure symptoms – Tongue biting, body jerking, bowel/bladder incontinence
  - Duration of the syncope
- After
  - Any head strikes or injuries
  - Memory loss or confusion
  - Duration of recovery
- Cardiac questions – Chest pain, palpitation, SOB, peripheral oedema
- Sensation changes – Visual, hearing, taste changes
- Stroke question – Dysphagia, weakness
- GIT – Haematemesis, melaena

### Other history

- PMH, Medication, PSH, Allergies, FH, Social history
- Thank the patient during end of consultation

### Investigations

- ECG and ECHO
- FBC, CHEM20, Urine MCS

Cough

**Introduce self and wash hands**

**PCS:**

- Pattern of cough and sputum production
- Previous similar symptoms and response to treatment
- Alleviating and Exacerbating factors
- Infection: Fever, Rhinorrhea, Sorethroat
- 
- PMH
- Current medication and allergies
- Social history – Recent travel

Oyamed

## Diarrhoea

- Frequency
- Volume, Consistency (loose, watery)
- Urgency
- Woke up at night to defecate
- Presence of bright-red blood, pus or mucus
- Pale, greasy, smelly and difficult to flush away (steatorrhea)
- Faecal incontinence
- Weight loss
- Recent treatment with antibiotics
- Recent travel
- Personal history of IBD or previous GI surgery
- Family history of Celiac disease or IBD

Oyamed

## Haematemesis

- Fresh blood in the vomitus or coffee-grain stained?
- Any black stools or blood in the stools?
- Any intense retching or vomiting before blood was seen in the vomitus? (Mallory-Weiss tear)
- Medications: Aspirin, NSAIDS, steroids?
- Alcohol? Any liver disease?
- History of Peptic ulcers?
- Loss of weight?

Oyamed

## Jaundice

- Dark urine, pale stools (obstructive jaundice)
- Skin itching (pruritus)
- Fever (in cholangitis)
- Changes in weight or appetite (malignancy)
- Abdominal pain, changes to bowel habits, vomiting of blood or passage of black stools
- Alcohol - how much for how long
- IVDU, tattoos, blood transfusions, risky sexual behaviours?
- Overseas travel (to Hepatitis endemic areas)
- History of IBD (PSC in UC)
- New medications?
- Family history of liver disease

Oyamed

Paediatrics

- Prenatal
- Birth
- Childhood
- Developmental
- Immunizations

Oyamed

## Physical Examination

- “No other peripheral stigmata of \_\_\_\_ disease”

### Cardiovascular

- **General inspection** – Posture/Comfort, Respiratory distress, Colour and Dymorphic features
- **Hands and Upper limbs** – Palmar crease pallor, Signs of infective endocarditis (Splinter haemorrhage, Osler nodes, Janeway lesions), Clubbing, Xanthomata
- **Vital signs**
- **Face** – Eyes (Xanthelesma, Conjunctival pallor, Jaundice), Mouth
- **Neck** – JVP, carotid pulse and bruit
- **Palpate Chest** – Apex beat, thrills and heaves
- **Auscultate**
- **Base of lungs**
- **Lower legs** – Varicose veins, colour, temperature, trophic changes, ulceration, clubbing, xanthomata (Palpate for calf tenderness, oedema)

Oyamed

## Respiratory

- **General inspection** – Respiratory distress, body habitus and colour
- **Hands** – Clubbing, tar stains, intrinsic muscle wasting and weakness, wrist tenderness and flapping tremor
- **Vitals**
- **Face** – Eyes (Ptosis, miosis, anhidrosis, conjunctival pallor), Sinus tenderness, mouth, and cough
- **Neck** – Tracheal position and tug, lymph nodes
- **Chest** – Shape, symmetry, deformities and scars
- **Expansion**
- **Percussion**
- **Auscultate**
- **Resonance**

Oyamed

GIT

- **General inspection** – Posture, comfortable, body habitus, colour, wasting, distension
- **Check bedside charts**
- **Hands** – Palmar erythema, clubbing, palmar crease pallor, wasting, Dupuytren's contracture, nail changes and hepatic flap
- **Upper arm** – Bruising, scratch marks, wasting and skin lesions (Spider naevi)
- **Pulses**
- **Face** – Jaundice, Conjunctival pallor, Xanthelasma and Mouth (Teeth, gums, palate, tonsils, pigmentation, ulceration, leucoplakia, candidiasis, glossitis and cheilitis)
- **Neck** – Lymph nodes
- **Abdomen**
  - Superficial and Deep palpation, Murphy's (Cholecystitis), Mc Burney (Appendicitis), Rovsing's (Appendicitis for Rebound tenderness)
  - Liver
  - Spleen
  - Kidney
  - Abdominal aorta – Less than 3cm
  - Shifting dullness
  - Auscultate
- **Lower limbs**

Oyamed

Haematological

- **Lymph nodes**
  - Neck
  - Epitrochlear lymph node (Medial of elbow)
  - Axillary
  - Inguinal (Mention)
- **Abdomen**
  - Palpation – Superficial and Deep
  - Liver and Spleen

Oyamed

## Thyroid

- Introduce + Wash hands
- General – Hyperthyroidism (Agitated, Anxious, Fidgety)
- Hands and Pulse – Thyroid acropachy (Graves), Fine tremor (Use paper), Palmar erythema and sweaty (Hyperthyroidism), Dry hands (Hypothyroidism)
- Face – Hyperthyroidism (Sweating), Hypothyroidism (Dry skin and Loss of outer third of eyebrows), Exophthalmos and Lid lag (Graves)
- Eye movements – Assess pain and diplopia

### Neck

- **Look:** Skin changes (Erythema), Scars (Thyroidectomy), Masses (Goitre). Ask patient to swallow and stick tongue out.
- **Feel:**
  - **Thyroid:** Palpate from behind the Adams apple, move downwards to the superior edge of cricoid cartilage, below is the isthmus of the thyroid gland. Assess each lobe. Ask patient to swallow and stick tongue out.
  - **Lymph node** – Anterior and posterior
  - **Trachea** – For deviation
  - **Percuss for retrosternal dullness**
- **Listen:**
  - Take a deep breath and hold
  - Listen over the thyroid glands (Thyroid bruit = Increased vascularity secondary to Grave's disease)

### Special test

- Reflexes (Biceps) – Hyporeflexia for hypothyroidism
- Knee – Pre-tibial myxoedema for Graves' disease
- Proximal myopathy – Hypothyroidism

Neuro (Cranial nerves)

- Introduce + Wash hands
- General inspection – Facial symmetry, Eyes, Scars, Skin changes and Vital signs
- CN1 (Olfactory)
- CN2 (Optic) – Snellen’s chart, Visual field, Light reflex, Accommodation
- CN3 (Oculomotor) – Moving eye, assess diplopia
- CN5 (Trigeminal nerve) – Sensation and Muscles of Mastication (Palpate masseter bulk, elevation and depression. Jaw jerk.
- CN7 (Facial nerve) – Raise eye brows, Close eyes, Smile, Puff cheeks
- CNN 9,10, 12 (Tongue) – Stick out tongue, say Ah, Cough. Assess gag reflex.

Oyamed

Neuro (Upper limbs)

- Introduction + Wash hands
- General inspection – Orientation, Comfort, WTFS and Vitals
- Tone/Clonus – Tone of elbow and wrist, **Assess for drift**
- Power
- Reflexes – Biceps, Triceps and Brachioradialis
- Coordination – Finger to nose and Rapidly alternating movements
- Sensation – Light and Pain
- Vibration
- Proprioception

Oyamed

Neuro (Lower limbs)

- Introduction + Wash hands
- General inspection – Orientation, Comfort, WTFS and Vitals
- **Gait and Balance** – Squat test, Gait, Heel walk, Toe walk, Romberg's test
- Tone/Clonus – Tone of hip/knee/ankle, Clonus of Ankle and Patellar
- Power
- Reflexes – Knee, Ankle and Plantar (Babinski)
- Coordination – Heel-shin test, Toe to finger and Rapidly alternating movements
- Sensation – Light and Pain
- Vibration
- Proprioception

Oyamed

MSK (Upper Limb)

**Introduction** – Hand hygiene, Consent and Exposure

**Look**

- Asymmetry, Posture, Skin changes/Erythema, Deformities, Wasting and Swelling

**Feel**

- Temperature, Tenderness, Palpate the bony landmarks and muscle bulk

**Move** – Passive and Active

- Extension, Flexion, Abduction (painful arc), adduction, internal/external rotation, winging of scapula (Long thoracic nerve for Serratus anterior)
- Assess for Crepitus

**Special tests**

- Strength for Rotator cuff
  - Abduction strength – Full can and empty can (Supraspinatus muscle)
  - External rotation strength (Infraspinatus and Teres minor)
  - Internal rotation strength (Subscapularis)
- Impingement
  - Neer's test
  - Hawkins-Kennedy test
- Biceps tendon testing
  - Speed's test
  - Resisted Elbow flexion
- Sulcus sign and Apprehension test

MSK (Lower Limb)

**Introduction** – Hand hygiene, Consent and Exposure (Take off Socks and Shoes)

**Look**

- Asymmetry, Posture, Skin changes/Erythema, Deformities, Wasting and Swelling
- Assess Gait
- Squat and Ege's test

**Feel**

- Temperature, Joint line, Muscle bulk, Popliteal fossa
- Tendons and Ligaments
- Tenderness
- Patella Effusion tests – Swipe/Bulge test, Patellar tap test (Sweep Laterally)
- Patella Apprehension test (Push outwards)

**Move** – Passive and Active

- Extension, Flexion, Plantar flexion, Dorsi flexion and Rotation
- Assess for Crepitus

**Special tests**

- Sag sign
- Anterior and Posterior draw test
- Lachman's test
- Medial and Lateral Collateral Ligament strain test
- Mc Murry test

Oyamed

## MSK (Spine)

**Introduction** – Hand hygiene, Consent and Exposure (Take off Socks and Shoes)

### Look

- Asymmetry, Skin changes, Wasting, Spasms, Swelling, Deformity, Posture
- Assess Gait

### Feel (Superficial neck)

- Palpate the Anterior and Posterior Triangle
- Palpate the muscles – SCM, Superior trapezius
- Assess tenderness

### Move – Cervical

- Look up, Look down, Turn to left, Turn to right, Ear to shoulder

### Move – Thoracic and Lumbar Spine

- Bend forward
- Bend backwards
- Slide your hand down your leg (L/R)
- Sit on bed and arms at the side of your head – Turn side to side

### Feel

- Cervical – Stand at head of bed and feel the Occipital to C7, ask patient to lift head up
- Thoraco-lumbar – Pisiform grip
- Assess paraspinal muscle

### Special tests

- Femoral nerve stretch test – Femoral nerve (L2-4)
- Straight leg raise test – Sciatic nerve (L4-S1)

## MSK (Hip)

**Introduce** – Hand hygiene, Consent and Exposure (Take off Socks and Shoes)

### Look

- Inspect from front: Scars, pelvic tilt and wasting
- Inspect from side: Lumbar lordosis, Knee flexion and foot aches
- Inspect from behind: Scoliosis, iliac crest alignment and gluteal muscle bulk
- Assess gait
- Assess Trendelenburg sign – Hands on iliac crest and ask patient stand on one leg (Positive – Pelvis falls on side with the foot off the ground, suggestive of weak hip abductors on the contralateral side of pelvis)

### Palpate

- Tenderness and Warmth – Trochanter (Greater)
- Measure length of both legs – True (ASIS to medial malleolus)

### Movements (Lie flat) – Passive and Active

- Hip flexion (Right knee towards chest)
- Internal rotation and External rotation – Flex hip, hold onto leg and push in and out
- Passive hip extension (Lie tummy down)

### Special test

- Faber test (Figure 4 test) – Hang on the opposite iliac crest and other hand push down on the knee
- Faddir test – Flex leg (90 degrees), Adduction and internally rotate (Foot should go outwards)
- Thomas test – Place hand under spine, Passive flex each leg. Your hand should detect lumbar lordosis is now flattened. (Positive if affect thigh rises off the bed, indicating a loss of extension in hip)

## Management

### Contraception

#### History

- Sexual activity – Type of sex, Number of partners, Partner's sexual history
- Previous contraception use
- Safety during sex
- STI Screen
- Pregnancy
- Menarche
- Menstrual cycle
- Contraindications for COCP: Migraines with aura, smoking, abnormal bleeding, previous clot history, breast/endometrial cancer, FH of breast cancer, Hepatic problems
- Social history: Smoking, alcohol, RD use
- Patient's concerns

#### Types of Contraceptive options:

- **Non hormonal** – Condom (Prevent STI) and Withdrawal (Ineffective, sperm in pre-ejaculate fluid)
- **Hormonal**
  - COCP – Good, Daily tablet (48h rule, then 7 days), Improve acne, Oestrogen has side effects (Breakthrough bleeding, breast tenderness and headache)
  - Progestogen only
    - Minipill – Need to take same time, every day
    - Depot – 3 monthly injection, Side effect (Irregular bleeding, headache)
  - Implanon – Very effective, 3 years, Side effects (Bleeding irregularly or menorrhagia)
  - Mirena – Avoid if current STI, Side effects (Painful insertion, cervical shock)

#### Management plan

Pregnancy test, STI screen, Book another appt for mirena/implanon, educate about safe sex

Pregnancy

- PMH and Medication
- Smoking, alcohol and RD use and cessation
- Use of OCP
- Menstrual cycle

Oyamed

**Asthma**

**Immediate**

- Patency of airway, basic life support/primary survey (ABCDE)
- Salbutamol nebulizer/inhaler
- Oxygen if <94%
- Systemic corticosteroid – 3 to 5 days (Oral 30mg)

**Long term**

- Asthma Action plan
- Check inhaler technique – Use of spacer/Rinse mouth after steroids
- Trigger avoidance
- Aim <1 use of reliever per week, unless exercise

**Heart failure (APO)**

**History**

- Orthopnoea, Paroxysmal Nocturnal Dyspnoea, Pitting oedema of LL
- PC: Dyspnoea

**Immediate**

- Lasix (Diuretics)
- Morphine
- Nitrates (if not hypotensive)
- Oxygen (aim >94%)
- Position to alleviate orthopnea
- DVT prophylaxis

Oyamed

STI

### **Trichomonas Vaginalis**

- Metronidazole (2g once with food, avoid alcohol for 48h) OR Tinidazole (2g once)
- No sexual contact for 7 days after treatment
- Current sexual partner is treated too

### **Chlamydia trachomatis**

- Pharmacological
  - Uncomplicated genital/pharyngeal infection - Azithromycin (1g once) or Doxycycline (100mg bd, 7 days)
  - Ano-rectal infection – Doxycycline (100mg bd, 7 days) or Azithromycin (1g twice, 1 week apart)
- Check for other STI based on stratified risk assessment
- Complications:
  - Pelvic inflammatory disease
  - Ectopic pregnancy or infertility
  - Reactive arthritis
- Contact tracing – previous 6 months
- Follow-up
  - 1-2 weeks to ensure compliance, education and partner notification
  - Retest at 3 months to detect re-infection
  - Test of cure is not routinely performed
  - Notifiable disease
  - Ongoing long-term treatment. Antibiotics are curative.
    - However, it is possible for the patient to contract the infection again without proper precautions.
- Recommencing Sex
  - Abstain from sex for 7 days after the azithromycin dose
  - Ensure that partner(s) are tested and treated

### **Neisseria Gonorrhoea**

- Pharmacological
  - Uncomplicated infection = Ceftriaxone (500mg IMI) AND Azithromycin (1g, once)
  - Rectal co-infection = Ceftriaxone (500mg IMI) AND Azithromycin (1g, once) AND Doxycycline (100mg, BD 7 days for asymptomatic or 21 days for symptomatic)
- Check for other STI
- Treat partner after specimen collection

- Abstain from sexual activity for 7 days after treatment
- Contact tracing – \_previous 2 months
- Follow up:
  - 1-2 weeks to ensure compliance, education and partner notification
  - Retest at 3 months to detect re-infection
  - Do not retest before 2 weeks
  - Test of cure is not routinely performed
- Notifiable Disease

### **Mycoplasma Genitalium**

- Initial – Doxycycline (100mg BD 7 days) and then Azithromycin (1g once)
- If severe or resistant to macrolides – Use Moxifloxacin
- Test of cure performed at least 2 weeks after treatment completion
- Contact tracing – Treat current partner

### **Herpes Simplex Virus**

- Valaciclovir 500mg BD 5 days
- No contact tracing, but must be careful not to spread to pregnant women, especially in the last trimester
- Notification of disease and Contact tracing not required

### **STI Contact Tracing**

- Inform the patient that their previous sexual partners from that time will need to be contacted with a prompt to be tested themselves.
- Discuss the patient's sexual partners, obtaining names and contact information.

Express that there are multiple ways of informing these individuals, including anonymous pathways (e.g., [www.letthemknow.org.au](http://www.letthemknow.org.au)).

Oyamed

HIV Risk  
Assessment

**Before Starting the Risk Assessment**

- Initially explain to the patient that his infections could fit in with a diagnosis of HIV infection and AIDS
- Explain that you are going to ask him a series of questions to assess his risk of having contracted HIV
- Obtain consent to do so
  - Ensure competency
  - Explain how the test is obtained
  - Explain the benefits of undertaking the test and risks of not
  - Explain the potential results and risk of false positives and negatives
  - Explain implications of a positive result
  - Ask patient to summarise the information given
  - Advise the patient that he does not need to make an immediate decision
- Be especially sensitive, tactful and empathic

**Conducting the Risk Assessment**

- Sexual Behaviours
  - Does patient have sex with men, women or both
  - Unprotected anal, vaginal or oral sex. If so, how often, how many different

partners

- Has he been receptive of anal intercourse
- Any history of sexually transmitted infections
- HIV status of partners
- Sexual practices of patient's sexual partners
- Illicit Drug Use
  - Hx of IV drug use. If so, sharing of needles
  - Have any of his sexual partners injected themselves
- Exposure to Blood Products
  - History of haemophilia
  - Ever received a blood transfusion or other blood products, especially before 1985
- Occupational Risk
  - What is the patient's occupation and does this occupation place him at risk

Oyamed

VTE Risk  
assessment

\* Indicates a VTE/DVT risk

- Patient is < 60
- Patient is of a normal BMI
- Patient is about to undergo a moderate to major surgery \*
- No prior VTE/DVT
- No known prior thrombophilia
- No CHD, COPD, HTN
- Ongoing malignancy \*
- No myeloproliferative conditions
- No HRT/COCP
- Not pregnancy or <6 weeks post-partum
- Reduced mobility
- Recent travel
- Active infection or inflammatory condition

**VTE Examination**

- Patient sitting in your consult room comfortably - nil respiratory distress, normal colour
- Nil leg swelling, colour changes, haemosiderin deposits
- Nil pitting oedema
- Nil calf pain, swelling or change in temperature

\* Pedal pulses present

\* Lung sounds clear bilaterally

**Options for VTE Prophylaxis**

\* Non-Pharmacological

- TEDS/SCDs
- Hydration
- Early mobilisation

\* Pharmacological (check for medication allergies)

- Heparin 5000 units subcut BD
- Clexane/Enoxaparin 40mg subcut OD

Suicide  
risk assessment

- **Focus on behavioural detail** – Location, Alone/accompanied, Choice of weapon/drug, Leaving a note
- **Ask direct question about suicide** – Thoughts, Worthy, Attempts, Reason for dying/living, Ways of coping
- **Check Ideation** → Intent → Plan → Access to means

**Questions:**

- “I’d like to talk more about that incident, would you be able to tell me what happened that night”
- “Can you tell me how much you drank that night?”
- “When you say you had a good go (of hurting yourself), what were you trying to do”
- “Were you trying to kill yourself? Was that your intention?”
- “Where did you get the (razor) from? What was the purpose of the (razor)”
- “What is it that is stopping you from doing that (being suicide) now”

Oyamed

Violence risk  
assessment

- Ask about current (ideation, plans, intent), history of violence (criminal offence, fights) and access to weapons
- Focus on behavioural detail – Location, Alone/accompanied, Choice of weapon/drug, accusation by police, injuries, under influence of substance

**Questions:**

- “What I might do is take a step back and talk about yesterday”
- “Were you drinking by yourself or with someone else?”
- “Anything stressing you out?”
- “After incident, what happened next?”
- “If that didn’t happen, where do you things would progress to?”

Oyamed

## Constipation

### Non-Pharmacological:

- Simple education about normal bowel habits
- Timing of bowel motions
  - Regular time of day - generally after meals as colonic motility is maximal after meals
  - Avoid postponing urge unnecessarily
- Increase fluid intake with high fibre intake (30g/day) - higher fibre than recommended may cause bloating, pain and flatulence
- Clarify high fibre foods should include:
  - Wholegrain breakfast cereals, whole-wheat pastas, wholegrain breads and oats, barley and rye
  - Fruits e.g., berries, pears, melon and oranges
  - Vegetables e.g., broccoli, carrots, sweetcorn
  - Peas, beans
  - Nuts and seeds
  - Potatoes with skin
- Exercise - aiming for 30+ minutes/day; increase colonic motility
- Reduce stress and depression, if present
- Dietician referral

### Pharmacological (To be used if non-pharmacological methods fail):

- Change diltiazem to another anti-hypertensive medication (e.g., ACEi or AR2B); Ca<sup>2+</sup> channel blockers cause constipation
- Bulk agents (e.g., Psyllium, Ispaghula, Sterculia)
  - Hydrophilic organic polymers function by sequestering extra water in stools
  - Greater volume in lumen stimulates bowel activity and enhances speed of transit
  - If high fibre diet, they can cause bloating and flatulence
  - Can be used long-term
- Osmotic laxatives
  - Generally non-absorbable and draw water into the intestinal lumen resulting in a laxative effect
  - Non-absorbable sugars are fermented in the colon, causing bloating, distension and flatulence (e.g., lactulose and sorbitol)
  - Use a large osmotically active polymers (e.g., polyethylene glycol - macrogel), water ingested is retained in the gut; can be used safely long-term
  - Other osmotic laxative (e.g., magnesium salts and sodium phosphate, sodium picosulfate) can be used with stimulant laxatives in short-term
- Stimulant Laxatives (e.g., Bisacodyl, Senna)
  - Should only be used short-term
  - Can be used alone or in combination with osmotic laxatives
  - Combined with stool softeners; useful in those with poor colonic motility
- Others (Not first line)
  - Stool softeners (e.g., Docusate) - detergents that facilitate the interaction between colonic water and stool
  - Lubricants (e.g., Paraffin emulsion) - alter stool composition; have a lubricating effect but doesn't react with colon
- Enema less helpful as no rectal symptoms in this patient

## T2DM management

- Metformin is the usual first-line therapy
  - Side effects: N/V, Lactic acidosis and B12 deficiency (Macrocytic anaemia)
  - If renal impairment □ Use SU
- If HbA1c not within target in 3 months □ Add DPP-4 inhibitor, SGLT2 inhibitor or SU
- If HbA1c still not within target □ Add GLP-1 RA or Insulin

### Long term Management for DKA/HHS

- **Diabetic Action plan**
  - Call doctor for help
- **Monitor complications** → Macrovascular (CAD, PVD, CVD) and Microvascular (Neuropathy, nephropathy and retinopathy)
- **Allied Health Involvement**
  - Diabetes Educator
  - Hypo awareness → Glucagon/Jellybeans and Safety with driving
  - Lifestyle → Weight loss, exercise, stop smoking and drinking
  - Podiatrist
  - Optometrist
  - Dietician
- **Medication review** by Pharmacist
- **D/C planning**
  - GP follow up and 3 monthly HbA1c target <7%
  - Social worker and occupational worker

Oyamed

## Opioid use

### **Non-pharmacological strategies (Physiotherapy/Exercise)**

- Education - \_Biopsychosocial nature of chronic pain
- Self-management strategies
- Referral to chronic disease management programs

### **Non-opioid pharmacological strategies**

- Omega-3 fish oil, Antidepressants (TCA or Duloxetine), Panadol, NSAIDs, anticonvulsants, topical therapies and disease specific therapies

### **Initiating opioid trial**

- Opioid Risk tool (ORT) – Assess risk of misusing opioids
- Urinary drug screening – Good initial test
- Recommends time-limited use, unless it's for terminal care
- Prescription shopping information service (PSIS) – Does not account for private prescriptions, specialist and dentist prescriptions and fraud.
- Use a patient centred care plan/contract – Provides education about entry and exit strategies, informs consent, boundaries, goals, benefits and harms

### **Monitoring/changing opioid therapy**

- 4 "As" → Analgesia, Activities of daily living, Adverse reactions and Aberrant behaviours

### **Weaning patients off opioids**

- Opioids should be weaned slowly except in response to violence or criminal activity
- 5-10% per week reduction is reasonable, reducing the interval between prescription if required.

Oyamed

Screening (FOBT, mammogram)

**Breast screen**

- Age: 50-75yo
- 2 yearly – Mammogram
- If abnormal: Triple assessment (Exam, Imaging, Biopsy)

**Cervical Cancer**

- Age: 25-75yo
- 5 yearly – HPV testing
- HPV vaccine does not protect against all types HPV strains
- Safe for pregnant women – Don't insert brush
- If positive: Liquid base cytology (Check for abnormal cells)

**Colorectal Cancer**

- Age: 50-75yo
- 2 yearly – FOBT
- If positive: Colonoscopy

**Skin check**

- Annually by GP

Oyamed

Anticoagulant  
(NOAC vs  
Warfarin)

**CHA<sub>2</sub>DS<sub>2</sub>VASc**

- Congestive heart failure
- HTN
- Age >75yo
- Diabetes
- Stroke
- Vascular disease
- Age 65-75yo
- Female

Balanced with the HAS BLED score with regards to risk of bleeding

| CHA <sub>2</sub> DS <sub>2</sub> -VASc             | Score    | HAS-BLED  | Score    |
|--|----------|---|----------|
| Congestive heart failure/LV dysfunction            | 1        | Hypertension i.e. uncontrolled BP                     | 1        |
| Hypertension                                       | 1        | Abnormal renal/liver function                         | 1 or 2   |
| Aged ≥75 years                                     | 2        | Stroke  | 1        |
| Diabetes mellitus                                  | 1        | Bleeding tendency or predisposition                   | 1        |
| Stroke/TIA/TE                                      | 2        | Labile INR  | 1        |
| Vascular disease [prior MI, PAD, or aortic plaque] | 1        | Age (e.g. >65)  | 1        |
| Aged 65-74 years                                   | 1        | Drugs (e.g. concomitant aspirin or NSAIDs) or alcohol | 1        |
| Sex category [i.e. female gender]                  | 1        |   |          |
| <b>Maximum score</b>                               | <b>9</b> |   | <b>9</b> |

Oyamed

## Osteoporosis

### Treatment for osteoporosis

- Weight bearing exercise
- Good nutrition
- Calcium and cholecalciferol supplementation
- Stop smoking and alcohol
- Pharmacologics;
  - Bisphosphonates – Beware osteonecrosis of jaw (Referral for dental before starting)
  - Denosumab SC 6 monthly – Preferred for CKD
  - Raloxefine in post-menopausal female that are unable to take bisphosphonate or denosumab
- Teriparatide

Oyamed

## Delirium

### Delirium

- Sudden onset of condition
- Sleep disturbance
- Fluctuating level of consciousness
- Poor judgment and disturbed behaviour
- Irritability
- Apparent persecutory experiences (hallucinations or delusions)
- Occurring in a patient with significant medical problems

#### Likely causes:

- Electrolyte abnormality
- Dehydration
- Infection - pneumonia, UTI
- Urinary retention
- Constipation
- Analgesia - morphine
- Reduced cerebral reserve related to age
- Disseminated malignancy

*Be sure to ask about previous level of functioning and cognitive ability*

#### Management

- Identify the cause if possible
- Non-Pharmacological Treatment
  - 1:1 nursing for patient
  - Encourage daughter to stay with patient to decrease patient's distress
  - Single room if possible
  - Decrease noise and background distractions
  - Provide a night light to avoid falls and disorientation at night
  - Help orientate the patient regularly
  - Review the patient regularly
- Pharmacological Management
  - Cease any disorientating/sedating medications (i.e., opioid medications)
  - Ensure patient not within alcohol withdrawal
    - Ask sensitively if there is a possibility that alcohol withdrawal may be playing a role and explain that this would necessitate use of thiamine and benzodiazepines
  - If patient is at risk to self or others, consider low dose haloperidol
    - Explain that this will help calm the patient and reduce her distress
    - Aim for oral medication
    - Mention you will review the patient and adjust the dose as necessary

#### Addressing Family distress in response to delirium diagnosis:

- It is not uncommon for patients with delirium to demonstrate distress or irritability
- Behavioural disturbance as demonstrated by the patient is common in delirium
- This does not mean that the patient is "crazy" - it is very distressing for the family

Every effort will be made to reverse the current condition

## Stroke

### Immediate/Short term:

Resuscitate – ABCDE, 2x IV access

“FeSS” – control Fever, Sugar, Swallow

- Paracetamol PRN to control fever, pain
- NBM until swallow assessment to prevent aspiration pneumonia

If **no haemorrhage** found on CT,

- Thrombolysis with IV recombinant tissue plasminogen activator (rTPA) ONLY if:
  - Within 4.5 hour of Sx onset – earlier, the better, do NOT give if time of Sx onset is unknown
  - Aged >18, no contra-indications present
  - BP < 185/110
  - +/- consider clot retrieval if medically fit
- Clot retrieval (mechanical thrombectomy) if:
  - Within 24 hr time window
  - NIHSS ≥10
  - Proximal large vessel thrombus (anterior circulation)
- Aspirin 300mg OD, up to 14 days starting from 24 hours post-thrombolysis

If **haemorrhage** found on CT:

- Urgent lowering of BP, < 140mmHg
- Tx reversible causes – e.g. warfarinised, thrombocytopenia
- Neurosurgical opinion

Admission to stroke unit, early rehab, DVT prophylaxis

Oyamed

## Obesity

### Discuss Risks/Complications of Obesity

- Use a sensitive approach; display empathy and understanding (not judgement)
- T2DM, CVA, IHD, HTN, OSA

*Remember to start with the simplest options first (e.g., lifestyle modifications) before discussing more radical/riskier options (e.g., medication, surgery). Encourage patient to attempt lifestyle modifications first as they are less risky, inexpensive, and effective.*

### Lifestyle Modifications

- Increase exercise/mobility weekly/daily
  - Take regular short breaks to stand up from his desk and walk
  - Gentle aerobic exercise - brisk walk, swim, jog
  - Structured exercise program(s) - classes, groups
  - Encourage to take the stairs instead of the elevator
- Diet
  - Reduce sweets (e.g., candy from vending machines, sweet muffins)
  - Decrease fast-food consumption
  - Choose healthier options (e.g., fresh fruits, veggies) and smaller portion sizes
  - Pack own lunch/snacks each day to provide healthier option and reduce reliance on vending machine and take-away
- Decrease beer consumption

### Allied Health

- Dietician review

### Bariatric Surgery

- BMI for bariatric surgery is usually 35-39; patient is not within that range yet
- Bariatric surgery can certainly help patient's lose weight, but it is not without risk (e.g., infection, poor tolerance to anaesthetics, long-term complications from the procedure). As such, it isn't a good option for all patients.

Bariatric surgery is quite costly

## Interpreting Investigations

### Blood results

#### **FBC**

- Anaemia – Decreased Hb
  - Microcytic – Thalassemia, Iron deficiency, GI bleed, Chronic disease, Sideroblastic, Sickle cell
  - Normocytic – Renal disease, Acute blood loss, Chronic disease, Haemolytic disease (e.g. Bone marrow dysfunction)
  - Macrocytic – B12/Folate (Pernicious), Liver disease, Alcohol, Hypothyroidism and Drugs
- Infection – Raised WBC

#### **CHEM20**

- Cholestatic = Increased ALP and GGT
- Hepatocellular = Increased ALT and AST (Alcohol: AST>ALT)

Oyamed

## Urine analysis

- Glucose – Elevated in DM, renal tubular disease, diabetic meds (Normal: Absent)
- Bilirubin – Elevated in Biliary obstruction (Normal: Absent)
- Ketones – Elevated in DKA for T1DM (Normal: Absent)
- Specific gravity – Normal: 1.002-1.035
- pH - 4.5-8.
  - Low – Starvation, DKA, metabolic acidosis
  - High – UTI, metabolic alkalosis, medications
- Blood – Present in UTI, stones, trauma, rhabdomyolysis, nephritic syndrome, malignancy (Normal: Absent)
- Nitrites – Present if there is breakdown product of gram -ive organisms present in UTI (Normal: Absent)
- Urobilinogen – Bilirubin breakdown product. (Normal: 0.2-1.0)
- Leukocyte esterase – Produced by neutrophils, shows the presence of WBC (Normal: Absent)

Oyamed

ABG

**Normal range**

- pH: 7.35 – 7.45
- PaCO<sub>2</sub>: 35.2 – 45 mmHg
- PaO<sub>2</sub>: 82.5 – 97.5 mmHg
- HCO<sub>3</sub>: 22 – 26 mEq/L
- Base excess (BE): -2 to +2 mmol/L

**Type 1 Respiratory Failure**

- Hypoxaemia (PaO<sub>2</sub> <60mmHg)
- Causes: High altitude, PE, Atelectasis, APO, Pneumothorax, Pneumonia, Pleural effusion, ARDS

**Type 2 Respiratory Failure**

- Hypoxaemia and Hypercapnia (PaCO<sub>2</sub> >50mmHg)
- Causes: COPD, Asthma, Opiate overdose, brain stem lesion/stroke, MND, GBS, Chest deformities (E.g. Flail chest, kyphosis)

Oyamed

ECGs

- Confirm details
- HR
- Rhythm
- Axis
- P waves, PR interval, QRS complex, ST segment, T waves, u waves

Oyamed

## Spirometry

### Normal values

- FEV1: >80% predicted
- FVC: >80% predicted
- FEV1/FVC ratio: >0.7

### Obstructive pattern (e.g. Asthma, COPD)

- FEV1: <80%
- FVC: Slight reduction/Normal
- FEV1/FVC ratio: <0.7%

### Restrictive pattern (e.g. Interstitial lung disease, Pulmonary fibrosis)

- FEV1: <80%
- FVC: <80%
- FEV1/FVC ratio: Normal

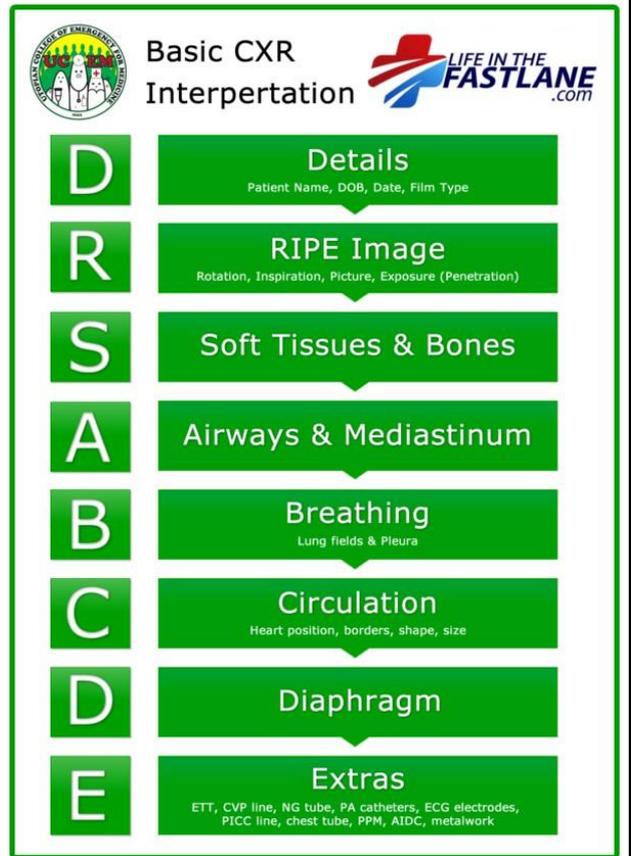
Oyamed

MRI

- Better for viewing soft tissues
- Contraindications: metal implants/foreign bodies, claustrophobia

**Types:**

- T1 - ONE tissue is bright (fat). Most 'anatomical image'
- T2 - TWO tissues are bright (fat and water) - Most commonly used (WWII)



**Basic CXR Interpretation** 

**D** Details  
Patient Name, DOB, Date, Film Type

**R** RIPE Image  
Rotation, Inspiration, Picture, Exposure (Penetration)

**S** Soft Tissues & Bones

**A** Airways & Mediastinum

**B** Breathing  
Lung fields & Pleura

**C** Circulation  
Heart position, borders, shape, size

**D** Diaphragm

**E** Extras  
ETT, CVP line, NG tube, PA catheters, ECG electrodes, PICC line, chest tube, PPM, AIDC, metalwork

Oyamed

CXR

**Heart Failure – ABCDE**

- Alveolar oedema
- Kerley **B** lines
- Cardiomegaly
- Dilated upper lobe vessels
- Pleural Effusions – Loss of costophrenic angle + Fluid meniscus

**Perforated Bowel**

- Pneumoperitoneum

Oyamed

AXR

- Confirm details
- BBC - bowel/other organs, bones, calcification/artefact

Oyamed

CT

### **Intracranial bleeds**

- Extradural – Lemon shaped (Bleed outside of dura mater)
- Subdural – Crescent shaped (Bleed between dura and arachnoid, most commonly due to tearing of bridging veins of elderly)
- Subarachnoid – Bleeds into the CSF filled subarachnoid spaces, so normally black cisterns and sulci will appear white (e.g. Ruptured aneurysm)
- Intracerebral – Localised lesions with surrounding oedema from inflammation (e.g. HTN, DM, trauma)

Oyamed

DEXA

**T-score:** Compares the patient's bone density to the peak bone density of young adults.

- Normal bone density: - 1.0 or above
- Osteopenia: between - 1.0 and - 2.5
- Osteoporosis: - 2.5 or below

**Z-score:** Compares the patient's bone density to that of adults of the same age.

- Z-score of -2.0 or below should trigger investigations

Oyamed

CSF analysis

**Normal**

- Appearance – Clear
- Opening pressure – 90-180mmHg
- WBC – <8 cells/uL
- Protein – 15-45 mg/dl
- Glucose – 50-80 mg/dl

**Bacterial Meningitis**

- Appearance – Turbid
- Opening pressure – High
- WBC – >1000, mostly Neutrophils
- Protein – High
- Glucose – Low (<40)

**Viral Meningitis**

- Appearance – Clear
- Opening pressure – Normal
- WBC - <300, mostly Lymphocytes
- Protein – High, but lower than Bacterial/Fungal
- Glucose – Normal

**Fungal Meningitis**

- Appearance – Clear
- Opening pressure – Normal/Slight elevation
- WBC – <500
- Protein – High
- Glucose – Normal/Low

Oyamed

## Practical Skills

For Blood tests

- Confirm patient's identity (Name and DOB)
- Ask for consent
- Allergies and Contraindications
- For needle  Ask about preferred side
- Wear gloves and glasses
- Offer documentation of procedure and politely finish the consultation

Oyamed

**Consent:**

- **Procedure:** Today, I have been asked to perform an ABG. Need to put a needle into an artery in your wrist, it will hurt a small amount, but this will only take a minute.
  - Cx: Bleeding disorder, infection/burn at site, absent collateral circulation, graft site, AV fistula and Post mastectomy
  - Allergies
- **Rationale:** Accurate guide as to whether you need certain medication or oxygen therapy
- **Benefits:** Treat you faster and more accurately
- **Risks:** Bleeding, infection, thrombus
- **Alternatives:** Watching for symptoms or worsening with oxygen therapy
- **Consent:** Do you consent to this procedure?

**Procedure:**

- Gloves, Gauze, Alcohol wipe, Tape, ABG needle, Local anaesthetic
- Allen's test – Make a fist, Press each side of wrist until pale, relax hand and release ulnar side (Wait for 10-15 seconds)
- Hand hygiene + Gloves
- Expel air in needle, Enter at 45 degrees and observe flashback and self-filling

**Top tips**

- Prepare everything before hand
- Check patient's identity
- Perform Allen's test – Occlude ulnar and radial arteries, wait until hand turn pale, release ulnar artery and watch hand to turn pink
- ABG results
  - Hypoxaemia ( $O_2 < 60\text{mmHg}$ )
  - Acidosis ( $\text{PH} < 7.35$ )
  - Respiratory/Metabolic acidosis
  - Any compensation base on Bicarb (Partial = PH not normal, Complete = PH is normal)

## Venepuncture

- Preferred site?
- Needle insertion 15-45 degrees on skin
- **Contraindications:** Thrombophlebitis, Cellulitis on site, AV fistula, Limb preserved for vascular surgery, Lymphangitis of extremities and venous obstruction
- **Feeling faint:** Lie down with elevated legs

Oyamed

## IV Cannulation

- **Require PPE:** Glasses, Gloves and Apron
- Needle inserted 15-45 degrees on skin
- **Contraindications:** Thrombophlebitis, Cellulitis on site, AV fistula, Limb preserved for vascular surgery, Lymphangitis of extremities and venous obstruction
- **Unable to gain IV access** □ Try another site, call for help
- **Deteriorates rapidly** □ Large IV bore (18G) and if not possible to gain access, call for help.

Oyamed

IDC  
(Male/Female)

### Procedure

- Ask for allergies
- Gather materials (Catheter pack (with sterile gloves), IDC 16 or 18 Fr, sterile gloves, skin prep, bluey, lignocaine gel, catheter bag, sterile water, syringe, tape and glasses)
- Maintain sterile field
- Wears glasses and gloves
- Retract foreskin/Labia and prep the skin from INSIDE to OUTSIDE
- Insert lignocaine gel into urethral meatus (All for male, may not need for female)
- Drapes field appropriately
- Insert to the hilt (male) and midway (female)
- If have resistance – Stop advancing AND try a larger catheter size, call for help
- Attach urine bag to IDC
- Secure to medial thigh
- Document and clean up

### Complications

- Short term: Trauma, False passage, haematuria and UTI
  - For males – Paraphimosis and foreskin irritation
- Long term: Colonization, urethral sloughing, malignancy, stones, haematuria, obstruction and strictures

### Contraindication

- Urethral injury (High riding prostate, blood in meatus, haematoma in perineum), Urethral surgery, Spinal cord injury, Uncooperative/aggressive patient

IM and S/C

- Insert needle bevel upwards

Oyamed

NGT

### Consent

- Procedure: Inserting tube from nose to tummy, which will then be attached to bag
- Rationale: To relieve Nausea and vomiting by allowing gas and fluid to escape from the obstruction and relieve the pressure that is causing you discomfort and pain
- Benefits: Reduces vomiting decreases aspiration, which can cause problems with breathing and infection
- Risks: Minimal risk. It will be uncomfortable and can cause irritation of the lining in nose and throat. Can be misplaced into lungs or skull, however, we will be doing a X-ray to confirm the position
- Alternatives: Wait for definitive treatment, but discomfort can worsen
- Consent

### Contraindications:

- Base of skull injury
- Oesophageal varices/strictures
- Spinal injury

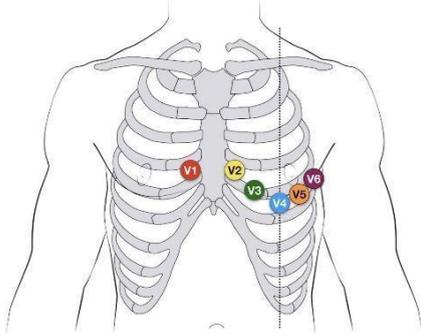
### Procedure

- Performed sitting upright
- Measure tube from Nose to Ear, then Ear to sternum.
- Lubricate the end of NGT
- When inserting, ask patient to keep swallowing water
- Advance tube posteriorly, instead of superiorly (Cribriform plate)
- If resistance met □ Stop, take tube out and call for help
- Verify position by auscultation for air bubbles, pH test of aspirate contents
- Secure NGT with tape
- Attaches drainage bag to end of tube
- Politely finish consultation
- Offer document procedure in notes
- Request chest X-ray to confirm position of tube

### Notes:

- Wide bore = For short term gastric drainage as part of surgical/medical management
- Fine bore = For feeding tube, comfortable (Less risk: Rhinitis, pharyngitis and oesophageal erosion)
- Enteral feeding <6 weeks

ECG



Oyamed

## Oxygen Delivery

- FiO<sub>2</sub>
  - Normal: 21%
  - Nasal prongs: 24-44% [1-6Litres]
  - Hudson's mask: 35-50% [6-10Litres]
  - Re-Breathable mask: 60-70% [8-15Litres]
- O<sub>2</sub> is usually delivered by litres per minute (e.g. Flow metre)

Oyamed

## Suturing

### **Assess the neurovascular status of the finger**

- Skin Colour - normal; nil pallor/cyanosis
- Temperature - slightly cool but symmetrical across all fingers
- Capillary Refill - normal; < 2 seconds
- Sensation - intact; nil tingling, numbness, burning, etc.
- Motor Function - active motor function in tact

### **Select the appropriate local (two vials of lignocaine with adrenaline or with no adrenaline)**

- Adrenaline is not used on areas with poor collateral vascular supply, including ear, nose, fingers, toes, and penis, as it is a vasoconstrictor.

### **Perform the sutures (likely simple interrupted)**

#### **Advice about wound care and when to come back (can mention while suturing)**

- Keep the suture site clean and dry
- Pain relief as necessary - PO paracetamol or ibuprofen unless contraindicated
- Do not pick at sutures and avoid activity that strains the sutures
- Monitor for signs of infection - redness, swelling, increased pain, discharge, fever
- If significant infection occurs, seek medical assistance
- See the GP/practice nurse for suture removal
- Give the patient a written handout containing this information
- Check for patient understanding

Oyamed

Basic Life Support/  
Advance Life Support

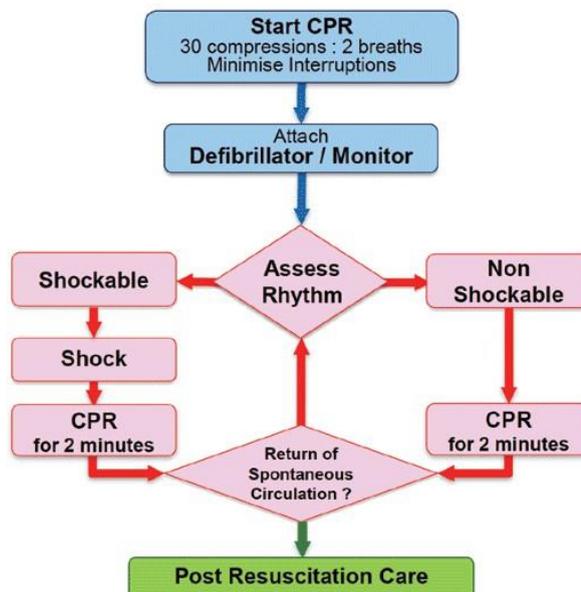
- Wash hand and introduce self
- **Danger**
- **Response** – COWS (Can you hear me, Open eyes, Whats your name, Squeeze my hand)
- **Send for me** – Press the MERT call
- **Airway** – Check for obstruction, Maintain airway with head tilt chin lift
- **Breathing** – Look, Listen and Feel (Ear to nose, Hand to chest)
- **CPR**
  - Beats per minute: 100-120
  - Depth: 1/3 of chest
  - Allow for full recoil
  - Cycle: 30 to 2 [Start counting loudly from 25]
  - Do not stop compressions AT all times, until De-fib is analysing rhythm or shocking
- **Defibrillation**
  - **Shockable:** V.Tach or V.Fib
  - **Non-shockable:** Asystole or PEA
- If non-shockable – Give 1mg of Adrenaline

**Reversible causes of Cardiac Arrest: 4Ts and 4Hs**

- Hypoxia
- Hypovolaemia
- Hypo/hyperkalaemia (Or other metabolic disturbances)
- Hyper/hypothermia
- Thrombosis – Coronary/Pulmonary
- Tamponade – Cardiac
- Toxins
- Tension pneumothorax – Finger thoracotomy in the 5<sup>th</sup> mid-axillary intercostal space



**Advanced Life Support for Adults**



**During CPR**  
 Airway adjuncts (LMA / ETT)  
 Oxygen  
 Waveform capnography  
 IV / IO access  
 Plan actions before interrupting compressions (e.g. charge manual defibrillator)  
 Drugs  
 Shockable  
 \* Adrenaline 1 mg after 2<sup>nd</sup> shock (then every 2<sup>nd</sup> cycle)  
 \* Amiodarone 300 mg after 3<sup>rd</sup> shock  
 Non Shockable  
 \* Adrenaline 1 mg immediately (then every 2<sup>nd</sup> cycle)

**Consider and Correct**  
 Hypoxia  
 Hypovolaemia  
 Hyper / hypokalaemia / metabolic disorders  
 Hypothermia / hyperthermia  
 Tension pneumothorax  
 Tamponade  
 Toxins  
 Thrombosis (pulmonary / coronary)

**Post Resuscitation Care**  
 Re-evaluate ABCDE  
 12 lead ECG  
 Treat precipitating causes  
 Re-evaluate oxygenation and ventilation  
 Temperature control (cool)

## Ethics, communication and explanation

Inhaler  
technique

### Normal:

- Shake the puffer
- Breath out completely, put cannister onto mouth, Squeeze, breath in slowly, aiming the back the mouth
- Spacer – 4 deep breathes
- Wash spacer with warm soapy water

### Acute Asthma attack

- Sit patient upright and leaning forward
- Reassure them and be calm
- Help them administer their reliever (blue/grey container):
  - SHAKE the puffer, attach to spacer and prime spacer with 1 puff
  - 1 puff + 4 breaths, repeat 4 times
  - Wait 4 minutes, if no improvement, repeat again

Oyamed

Obtaining consent

**PRBRAC**

- I will be talk to you about the procedure, rational risk, alternatives and get your consent

**Procedure**

- Explain what the procedure entails.
- E.g. “Key hole surgery” for appendicectomy
- E.g. “Putting a camera up your back passage” for colonoscopy

**Rationale**

- This procedure is used to treat... .. (E.g. This procedure is the main treatment for all appendicitis)
- Delay in treatment can lead to complications such as... ..

**Benefits**

- Very effective and overall simple procedure
- Most people go home the next day
- Recurrence rate are very low

**Risk**

- **Anaesthetic risk** – Pneumothorax, anaphylaxis, cardiac arrhythmias, incorrect tube placement, aspiration, wrong medication delivered
- **General surgical risk** – Infection, bleeding, DVT/PE, pain and scarring
- **Specific surgical risks (e.g. Appendectomy)** – Damage to bowel, damage to ureter, damage to bladder, long-term risk of hernia, long term risk of bowel obstructions secondary to adhesions, pelvic/abdominal abscess formation, there is a chance it won't fix the pain, conversion to open, risk of bowel resection

**Alternatives**

- For appendectomy – IV Antibiotics, however recurrence rate is high

**Consent**

- Do you consent to have a laparoscopic appendicectomy?

**Extra:**

Capacity – Understanding, freely and voluntarily, communicating

Discussing  
starting an SSRI

- It causes Drowsiness □ Take at night
- Usually take 4-6 weeks to work
- Beware of SSRI discontinuation syndrome □ Seek medical professional help if stopping SSRI (Sudden cessation leads to dizziness, vertigo, headache, N&V, gait abnormality).
- Contraindications: Multiple serotonergic medications (Sir John Wart), Acutely suicidal, bipolar disorder

Oyamed

Breaking bad news

### SPIKES

- **Setting** up the interview
- Assessing the patient's **perception**
  - "Can you tell me what you think has happened?"
- Obtaining the patient's **invitation**
  - "Can I explain what we think has happened?"
  - "Please let me know if I haven't made this clear or there is anything else you need to know"
- Giving **Knowledge** and information to the patient
  - Tailor language to the patient's educational level, cultural background
  - Give information in small chunks
  - Check for understanding
- Addressing the patient's **Emotions** with empathetic responses
- **Strategy** and summary
  - Ask if anything needs to be clarified

Oyamed

Motivational  
interviewing

- Pre-contemplation
- Contemplation
- Preparation
- Action
- Maintenance
- Re-lapse

Oyamed

Handling an irritable patient

#### DE-ESCALATE

- Step 1: Don't threaten to withdraw privileges, seclude or medicate
- Step 2: Ensure safety of those in the environment
- Step 3: Escapes, don't corner the person or get cornered
- Step 4: Stance, adopt protective stance
- Step 5: Calm, non-threatening manner
- Step 6: Allow for ventilation of anger and distress
- Step 7: Leave the area and person if secure and safe to do so
- Step 8: Assistance, ensure enough suitably skilled staff are available
- Step 9: Time out, offer time out in quiet room/lounge
- Step 10: Invite to sit and verbalise concerns
- Step 11: Options, offer options (e.g. Large motor exercise, music and beverages)
- Step 12: Never turn your back

Oyamed

MSE

**ASEPTIC**

- Appearance and behaviour – Groomed, Unusual movements, Agitation
- Speech – Fluency, rate, volume and tone
- Emotions – Mood (Scale 1-10) and Affect (Appropriate/Blunt)
- Perception – Hallucinations (Auditory, visual, olfactory, tactile)
- Thought
  - Stream – Flight of ideas
  - Form – Disordered (e.g. Word salad)
  - Content – Obsessions, Delusions (Persecutory, referential, grandiose, somatic, bizarre), Phobias, Magical thinking, Harm to self
- Insight/Judgement
  - Acknowledge their mental health problem
  - Problem solving ability for judgement
- Cognition
  - Consciousness, Orientation, Attention, Memory, Ability

Oyamed

## iSBAR

- **I – Introduction**
  - Who you are, your role, Patient identifiers (at least 3: Name, DOB, URN)
- **S – Situation**
  - What is going on with the patient?
- **B – Background**
  - What is the clinical background/context?
- **A – Assessment**
  - What do you believe the problem is? (Vitals, Ix done)
- **R – Recommendation**
  - What should be done to correct this situation

Sally is a 25yo lady, presenting with RLQ pain, most likely due to appendicitis. This is on a background of HTN. On examination, her vitals are stable but USS shows a blind ending tube with faecolith (>6mm). I would recommend a appendicectomy.

Oyamed

## Completion of Forms

### Fluids order

- Parkland formula:  $4\text{ml} \times \%TBSA \times \text{Body weight}$ 
  - Warm Hartmann's
  - $\frac{1}{2}$  given in 8 hours
  - $\frac{1}{2}$  given in next 16 hours
  - Monitor urine output 0.5-1ml/kg/hr
  - IDC required for >20% TBSA
- Maintenance fluid:
  - 5% Dextrose in N/Sal
  - 4ml/kg/hr for 1<sup>st</sup> 10kg
  - 2ml/kg/hr for 2<sup>nd</sup> 10kg
  - 1ml/kg/hr for >20kg

Oyamed

Oyamed