

## **DAY 2:**

### **History Taking Part 1**

#### **1. Palpitations (108)**

#### **2. Hyperthyroidism:**

- Weight loss - (44)
- Tremors and sweaty hands (98)

#### **3. Benign prostatic hypertrophy with UTI (8)**

#### **4. Back pain:**

- Back sprain (204)
- Back pain - prostate cancer pain management (1)
- Traumatic back pain (161)
- Back pain (renal colic) (19)

#### **5. Constipation:**

- Post hemiarthroplasty constipation (53)
- Constipation with nurse (106)

#### **6. Shortness of breath:**

- Pulmonary embolism scenario A (168)
- Pulmonary embolism scenario B (238)
- Pneumonia in elderly (179)
- Pneumocystis Carinii pneumonia scenario B (263)
- Acute COPD (212)

#### **7. Headache:**

- Migraine (235)
- Subarachnoid haemorrhage (72)
- Giant cell arteritis (132)
- Tension headache (193)

#### **8. Hypothyroidism:**

- Weight gain (147)
- Tiredness (128)

#### **9. Wheeze:**

- Asthma first presentation - (scenario A and scenario B) (74)

#### **10. Cough:**

- Pneumocystis Carinii pneumonia scenario A (66)
- Tuberculosis (119)
- Pneumonia
- Mesothelioma / Tuberculosis (56)
- Pneumonia in 72 year old (276)
- Pneumonia from a nursing home (275)
- Pneumonia in a traveller (107)

#### **11. Anaemia:**

- Iron deficiency anaemia with weight loss (187)
- Iron deficiency anaemia in a vegetarian
- Vitamin B12 deficiency (177)
- Thalassemia (199)

## DAY 2

### 1.PALPITATIONS

#### Nature of Palpitations

- Can you tell me what you mean by palpitations?
- Do you have an awareness of your heart racing?
- Can you tell me what you mean by fluttering feeling?
- Do you have an experience of thumping in the chest?
- Are the palpitations fast or slow?
- Do you have an experience of pounding in the chest?
- Do you have an experience like you're skipping some beats?
- Did you have a feeling that everything stopped for a moment?
- Can you tap for me on this table how fast your palpitations are?

#### FODPARA of Palpitations

##### F – Frequency:

- How often do you experience palpitations?

##### O – Onset:

- How did the palpitations start the first time? Suddenly or gradually?

##### D – Duration:

- When did the palpitations start?
- How long have you had the palpitations for?
- How long do the palpitations last? How do the palpitations stop?

##### P – Progression:

- Are the palpitations becoming more frequent?

##### A – Aggravating factors:

- Anything which makes it worse or anything which brings it on (if intermittent symptoms)?
- Does exercise make it worse?
- Does stress make it worse?
- Does drinking alcohol make it worse?
- Does drinking coffee or tea make it worse?

#### **R – Relieving factors:**

- Anything which makes it better?
- Does sitting help with the palpitations?
- Does holding your breath help with the palpitations?

#### **A – Associations = Differential Diagnosis**

**Note: Ventricular ectopic beats disappear with exercise whereas AF remains the same.**

#### **Differential Diagnosis:**

- Hyperthyroidism (oligomenorrhoea, heat intolerance, palpitations, weight loss, diarrhoea, tremors, palpitations)
- Medications (salbutamol inhalers)
- Hypoglycaemia (history of diabetes)
- Anxiety/panic attack (shortness of breath, chest pain, perioral paraesthesia, generalised chest pains, previous episodes of similar symptoms)
- Arrhythmia (history of angina or myocardial infarction, hypertension or heart failure)
- Pheochromocytoma (intermittent abdominal pain, diarrhoea, episodic symptoms of headaches, high blood pressure, panic attacks)
- Anaemia (light-headedness, weakness, tiredness, patient could be on aspirin or NSAIDs for a long period of time)
- Drug abuse (IV drug abuse)
- Excess intake of coffee / tea (common in people who drink excess amounts of coffee or tea)
- Ventricular ectopics (can occur in previously healthy person)

- Anorexia nervosa (amenorrhoea, weight loss, BMI <17.5, over-exercising, poor dietary habits)

## Questions for differential diagnosis

- Hyperthyroidism
  - Do you feel hot when others are comfortable?
  - Do you have diarrhoea?
  - Have you lost weight? If yes, quantify.
  - Do you experience any tremors?
  - How is your appetite?
- Medications
  - Are you taking any inhalers (salbutamol)?
- Hypoglycaemia
  - Do you have any medical problems like diabetes mellitus, high pressure?
- Anxiety/panic attack
  - When you are having palpitations, do you experience shortness of breath as well?
  - Do you experience any tingling around your lips?
  - Do you get the feeling that you are going to die?
- Arrhythmia
  - Do you have any heart problems like angina?
  - Any heart attacks in the past?
- Pheochromocytoma
  - Do you experience headaches or tummy aches at the same time as the palpitations?
  - Have you noticed that your urine is turning dark in colour?
- Excess intake of tea or coffee?
  - Do you drink a lot of coffee or tea?
- Anaemia
  - Do you suffer from light-headedness, weakness or tiredness?
- Drugs
  - Is there any chance that you could be using recreational drugs?



### **Red Flags**

- Shortness of breath?
- Chest pain?
- Syncope?

SAMSON COURSES

## **Scenario 10**

You are working as FY2 in GP practice. A 55 year old male James Brown presented with some concerns. Take a history, assess the patient and discuss initial management with the patient.

### **Patient Information**

You are a 55 year of age. You have a fluttering feeling in the chest. If the doctor ask what do you mean, tell them it's a thumping in the chest. "I feel like my heart is pumping in a very weird way". You do not have palpitations at the moment. You have got hypertension and you are on Enalapril 10mg once a day. You visit your GP every 6 months and take your medications regularly. You smoke 10 cigs/day for the past 15 years, drink 8-10 units/day of alcohol and drink 7-8 cups of coffee each day. You father had a stroke and died from it and you brother had heart attack at the age of 60.

## **Approach to Scenario 108**

- Initial Approach or GRIPS
- FODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Signpost
- Summarise
- **Examination:**
  - a. Observations
  - b. Pulse
  - c. CVS- listen to heart
  - d. RES- listen to lungs

- **Explain the findings**
- **Diagnosis:**

I think you got some palpitations; It could be an irregular heartbeat which we call Supra-ventricular Tachycardia (if it is a younger individual, then AF). But there can be other causes as well, so we are going to run some blood tests to make sure there is nothing else going on. You do have a risk factor for Atrial Fibrillation, which is your high blood pressure.

But sometimes if you drink too much tea or coffee you can develop an irregular heart beat called an Ectopic Beat, where you can have an experience where by your heart is skipping some beats.

Is there anything you are worried about?

- **Management**
  - a. ECG now
  - b. 24 hour Ambulatory ECG
  - c. CXR
  - d. Routine bloods including TFT's

To make sure there are no thyroid problems like hypernatraemia as they can cause some palpitations as well.

- a. Advice to cut down on coffee or tea.
- b. Follow up in a 1 weeks to discuss the results once
- c. Refer to the medical team immediately if at present patient is experiencing dizziness, shortness of breath and chest pain
- d. **Safety netting:** If chest pain, dizziness, syncope, unwell or if chest discomfort/ feeling are sustained please go to the hospital immediately.
- e. Referral to the cardiologist.

## **Practical scenarios**

108 – scenario B

## 2. HYPERTHYROIDISM

### Nature of weight loss

- How much weight have you lost?
- Over what period of time have you lost such amount of weight?
- Have you noticed your clothes becoming looser or hanging off you?
- Have you been trying to lose weight?
- Have you changed your lifestyle recently?
- Have you changed your eating habits recently?
- How is your appetite?
- Do you still feel hungry?

### Alarm symptoms

- **Dysphagia:** Do you have problems swallowing or does the food ever get stuck?
- **Early Satiety:** Are you able to manage a meal or have you been getting full quickly?
- **Abdominal Pain:** Do you ever experience any pain in your stomach or abdomen? Do you experience pain after eating?
- **Change in bowel habits:** Have you noticed any change in your bowels? Any diarrhoea or constipation?
- **Melena:** What colour are the stools? Have you noticed any blood in your stools?
- **Haemoptysis:** Do you cough out any blood?
- **Bone Pains:** Do you experience any bone pains?
- **Diabetes:** Have you been unusually thirsty or passing a lot of urine?
- **Hyperthyroidism:** Have you been experiencing tremors in your hands? Any sweating or palpitations?

### Differential Diagnosis:

- Malignancy (weight loss, anorexia, tiredness, mild grade fever, loss of appetite)



- Tuberculosis (haemoptysis, cough with sputum, fever, patients are usually from Asia or Africa)
- Anorexia nervosa (weight loss, young female, amenorrhoea)
- Depression (low mood, loss of appetite, anhedonia, insomnia, poor sleep)
- HIV (common in IV drug abuse or homosexuals, weight loss, generally unwell)
- Malabsorption (diarrhoea, tummy pains)
- Systemic autoimmune disease (SLE or Rheumatoid arthritis polyarthritis)
- Inflammatory bowel disease (usually common in young patients with chronic diarrhoea with or without bleeding per rectal, abdominal pain)
- Irritable bowel syndrome (bloating, diarrhoea, abdominal pain relieved by defecation)
- Hyperthyroidism (diarrhoea, palpitations, tremors, weight loss, menstrual irregularities)
- Diabetes mellitus (polyuria, polydipsia, weight loss)
- Bulimia nervosa (binge eating, laxative abuse, fluctuations in weight)
- Malnutrition

### Questions of differential diagnosis:

- **Malignancy**
  - Any weight loss? How much weight have you lost?
  - Do you feel weak and tired?
  - Any loss of appetite?
- **Tuberculosis**
  - Do you have fever with night sweats?
  - Do you have cough? If yes, is there any sputum?
  - Have you recently travelled to Asia or Africa?
- **Anorexia nervosa**
  - Have you recently lost weight? If yes, how much?
  - Is your menstrual cycle regular?
- **Depression**
  - Have you recently been in low mood?
  - Do you enjoy doing any particular activity?
  - How has your appetite been?

- How is your sleep?
- **HIV**
  - Do you have fever, muscles, headaches, diarrhoea or rash on your body?
  - Did you notice any lumps and bumps on your body?
  - Do you use recreational drugs, have unprotected sex or have multiple blood transfusions in the past?

**NOTE: in this setting history taking is crucial!**

- **Malabsorption**
  - Do you have any diarrhoea?
  - Do you have any abdominal pain?
- **Systemic autoimmune disease (SLE or Rheumatoid arthritis/ polyarthritis)**
  - Any fever, joint pain, swollen joints?
  - Any rashes on your body?
- **Inflammatory bowel disease**
  - Any pain in the tummy?
  - Do you feel tired all the time?
  - Is there any blood in your stools? If yes, what colour?
  - Have you lost any weight recently? If yes, quantify.
  - Do you experience these symptoms at night?
- **Irritable bowel disease**
  - Any pain in the tummy?
  - Do you have alternating diarrhoea with constipation?
  - Do you feel bloated and gassy?
- **Hyperthyroidism**
  - Do you feel hot when others are comfortable?
  - Do you have diarrhoea?
  - Have you lost weight? If yes, quantify.
  - Do you experience any tremors?
- **Diabetes mellitus**
  - Do you have increased urination? Increased thirst?
  - Have you ever been told that your blood sugar levels are high?
- **Bulimia nervosa**
  - Do you have periods of binge eating and starvation?

- Do you use laxatives?
- Does your weight vary?
- **Malnutrition**
  - What kind of food do you eat?
  - How is your diet?

SAMSON COURSES

## Scenario 98

You are an FY in GP surgery. A 27 years old female Sarah Jones has presented with sweating and shaking in her hands. One week ago, she had come to the GP and had blood tests done: TSH – 0.6 (0.5-4.5ug/dl); T4 – 22 (4.6-12ug/dl); T3 – 235 (80-180ng/dl). Please take a focused history and discuss initial management with the patient.

### **Patient Information**

You have had tremors and sweating of your hands for the past 2 months. You have lost 3kgs in weight, your periods have become irregular and your mother has thyroid problems.

### **Questions:**

- Q. What is wrong with me?
- Q. How will you manage it?
- Q. What medication will you give me?
- Q. What is radio-iodine doctor?

### **Examiner's Prompt:**

If the candidate says he would like to perform thyroid function tests, give him the results of the thyroid function test

### **Observations:**

Pulse 90/min and BP 130/80.

Rest of the examinations is normal

## Approach to scenario 98

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- Systemic review
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise

- **Examination:**
  - a. Observations
  - b. Hands for tremors
  - c. Thyroid gland in your neck
  - d. CVS - listen to heart
  - e. Check for reflexes

- **Explain the findings**

- **Diagnosis:**

Explain most likely diagnosis (most likely you have an over active thyroid) and any symptoms. To confirm the diagnosis I will need to perform some examinations + investigations)

- **Management**

- a. Refer to endocrinologist
- b. Medicine to suppress over activity: Carbimazole, B-blockers, radio-iodine, operation (complete removal of thyroid gland and put you on replacement medication.
- c. Specialist may also do specific blood test and an ultrasound
- d. Leaflets
- e. Is there anything in particular you are worried about?

Patient is worried that the weight loss is due to cancer. Reassure her that weight loss is due to overactive thyroid gland.

## **Practical scenarios**

### 3. DYSURIA

#### SOCRATES

##### Differential Diagnosis:

- Urinary tract infection (dysuria, fever, frequency, supra pubic pain)
- Pyelonephritis
- Bladder stones (pain on urination, supra pubic pain)
- Sexually transmitted infections (history of unprotected sex, multiple partners, discharge)

##### Risk factors of UTI

- **Benign prostatic hypertrophy**
  - Do you pass urine more frequently than usual?
  - How many times do you wake up during the night to urinate?
  - Do you feel as though you have to wait a while when trying to initiate urination?
- **Prostatic carcinoma**
  - Did you notice any blood in your urine?
  - Do you have any back pain?
  - How many times do you wake up to pass urine at night?
  - Is there any dribbling at the end of passing urine?
- **Bladder carcinoma**
  - Have you lost any weight recently? If yes, quantify.
  - How has your appetite been recently?
  - Did you notice any blood in your urine?
- **Faecal impaction**
  - Do you suffer from any constipation or diarrhoea?
  - Is there any pain in your tummy?

## Questions for Differential Diagnosis

- **Urinary tract infection**
  - Do you have any fever?
  - Any burning when you pass wee?
  - Do you have pain in your lower tummy?
- **Pyelonephritis**
  - Do you have swinging fever?
  - Any rigors or sweating?
  - Any vomiting?
  - Is there any pain in your back?
- **Urinary bladder calculi**
  - Have you noticed blood in urine?
  - Have you ever passed small stones in urine?
  - Have you ever developed inability to pass urine?
  - Do you have any pain? If so, where? Does it radiate anywhere?
- **Sexually transmitted infection**
  - Any urethral discharge?
  - Any history of unprotected sex?
  - Did you notice any rash?



### Red Flags

- Urinary obstruction
- Symptoms of cancer (tiredness & weight loss)
- Haematuria
- Pyelonephritis
- Recurrent UTI.

## Scenario A

You are FY 2 in Urology Unit. A 75 years old gentleman has presented with dysuria. Take a focused history, perform relevant examination and discuss initial management with the patient.

### **Patient information:**

You have presented with burning micturition. You have had hesitancy, frequency of micturition, burning sensation, passing urine at night very frequently (you have to wake up 2-3 times every night, dribbling of urine and very slow flow of urine).

You have had these symptoms for the past one year. In the last 2 days you have been experiencing burning sensation when passing urine and felt hot but you did not check the temperature.

You work as a clerk in the office. Because of your frequency you have to sit near the door so that you can go to the toilet easily. You can't concentrate at work easily. Your wife complains that there is too much smell of urine. You strain a lot when passing urine. You are allergic to amoxicillin. You are worried it could be cancer.

### **Questions:**

Q. Since I am allergic to amoxicillin, what antibiotics are you going to give me?

Q. What caused the water works infection?

Q. What treatment options are there?

Q. If doctor wants to examine the back passage ask "Why do you need to examine it. Is it a very uncomfortable procedure?"

Q. Do you really need to perform this examination?

### **Examiner's prompt:**

Abdominal exam: There is supra-pubic tenderness

Per rectal exam: Enlarged prostate with deep median sulcus but smooth

Observations: normal.



## Approach to scenario A

- **Initial Approach or GRIPS**
- **ODPARA**
- **Differential Diagnosis**
- **Red Flags**
- **MAFTOSA**
- **ICE**
- **Effects of Symptoms**
- **Sign post**
- **Summarise**
- **Examination:**
  - Observations
  - Abdominal examination
  - Per-rectal examination
- **Explain the findings**
- **Diagnosis:** Urinary tract infection with benign prostatic hyperplasia
- **Management:**
  - Perform urine dipstick.
  - Antibiotics (Trimethoprim)
  - Arrange a bladder scan to check the amount of the residual urine. If too much urine is in your bladder after urination, then we can catheterise you.
  - Admit under urology.
  - Blood test: FBC, U&E, LFT, blood glucose.
  - Explain what the specialist would do.
    - Medication (Tamsulosin) to help the sphincter relax
    - Operation :TURP- Remove part of the enlarged prostate.
    - In 90% of the cases, people get relieved of their symptoms
- Offer a leaflet about water works infection and BPH.

## 4. BACK PAIN

### SOCRATES

#### Differential Diagnosis:

- Prostate cancer (usually a middle-aged or elderly patient, weight loss, frequency, haematuria).
- Intervertebral disc prolapse (sudden onset of pain while lifting heavy things).
- Spinal metastasis (weight loss, tiredness, weakness, middle-aged or elderly patient, +/- symptoms of primary tumour).
- Trauma (history of trauma or fall).
- Tuberculosis (weight loss, night sweats, patient from Africa / Asia, alcoholic).
- Ankylosing spondylitis (young man, +/- family history of back pain, morning stiffness, red eye due to anterior uveitis).
- Osteoporosis (elderly patient, usually due to compression or wedge fracture).
- Abdominal aortic aneurysm (middle-aged or elderly, abdominal pain radiates to the back, presence of other markers of atherosclerosis, intermittent claudication).
- Multiple myeloma (chronic back pain, elderly patient, proteinuria).
- Cauda equina (constipation, urinary incontinence or retention, weakness or sensory loss in the lower limbs).
- Osteoarthritis (elderly patient, +/- involvement of other joint like knee or hip).

#### Questions of differential diagnosis

- **Prostate cancer**
  - Have you lost weight? If yes, quantify.
  - Do you pass urine more frequently than usual? How many times do you wake up at night for urination?
  - Have you noticed any blood in your urine?
- **Intervertebral disc prolapse**
  - Did the pain start suddenly on lifting heavy object?
- **Spinal metastasis**

- Do you feel tired and lethargic?
  - Have you lost weight?
  - Have you been diagnosed with cancer?
  - Primary cancer symptoms/any other symptoms?
- **Trauma**
  - Have you recently sustained a trauma?
- **Tuberculosis**
  - Have you lost weight? If yes, quantify
  - Do you have fever or night sweats?
  - Have you recently travelled to Asia or Africa?
  - Do you drink alcohol? (if did not travel outside UK)
- **Ankylosing spondylitis**
  - Do you have a family history of back pain?
  - Do you feel stiff in the morning or after work?
  - Do you have redness in your eye?
- **Osteoporosis**
  - When was your last menstrual period?
  - Have you had fractures in the past?
- **Abdominal aortic aneurysm**
  - Does the pain start in tummy and radiate to back?
  - Have you been diagnosed with high blood pressure?
  - Do you feel pain in your legs, after exercise, that is relieved by resting?
- **Multiple Myeloma**
  - Is the back pain new or have you had it for long?
  - Do you have any kidney issues?
  - Do you have a history of repeated infections?
- **Cauda equina**
  - Do you have constipation or urinary retention?
  - Have you lost control of bowel or bladder?
  - Do you have loss of sensation in your legs?
  - Is there weakness or sensory changes in your limbs?



## Red Flags

- Symptoms of spinal cord compression.

### Scenario 204

You are FY 2 in Urology Unit. A 75 years old gentleman has presented with dysuria. Take a focused history, perform relevant examination and discuss initial management with the patient.

#### **Patient information:**

You have presented with burning micturition. You have had hesitancy, frequency of micturition, burning sensation, passing urine at night very frequently (you have to wake up 2-3 times every night, dribbling of urine and very slow flow of urine.

You have had these symptoms for the past one year. In the last 2 days you have been experiencing burning sensation when passing urine and felt hot but you did not check the temperature.

You work as a clerk in the office. Because of your frequency you have to sit near the door so that you can go to toilet easily. You can't concentrate at work easily. Your wife complains that there is too much small of urine. You strain a lot when passing urine. You are allergic to amoxicillin. You are worried it could be cancer.

#### **Questions:**

Q. Since I am allergic to amoxicillin, what antibiotics are you going to give me?

Q. What caused the water works infection?

Q. What treatment options are there?

Q. If doctor wants to examine back passage ask "Why do you need to examine it. It is a very uncomfortable procedure?"

Q. Do you really need to perform this examination?

#### **Examiner's prompt:**

Abdominal exam: There is supra-pubic tenderness

Per rectal exam: Enlarged prostate with deep median sulcus but smooth

## Approach to scenario A

- Initial Approach or GRIPS
- SOCRATES
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Sign post
- Summarise
- **Examination:**
  - Observations
  - Back examination
  - Neurological examination
  - Per rectal examination
- **Diagnosis:** Back sprain - it is caused by over-stretching of ligaments in the back.
- **Management**
  - Pain killers, go home with analgesia
  - Refer patient to physiotherapy. Advise to start exercise gradually.
  - X-ray.
  - Offer leaflets about back sprain.

## Scenario 19

You are FY 2 in A&E. A 45 years old man has presented with back pain. The nurse has given him 1 tablet of diclofenac. Take a focused history and discuss management with the patient.

### **Patient information:**

As soon as the doctor walks in say: “Oh! doctor, I’m in pain!!”

You are in severe pain now, which started 4 hours ago. You have been given diclofenac by the nurse 45 minutes ago. You should keep saying “Doctor I’m in pain” continuously until the doctor reassures you that the analgesia would take some time to work or he would offer you another analgesia. Your pain was initially 10/10, now it is 8/10. The pain made you vomit 4 times. You are sweating on your forehead. You are sitting on the chair. You have loin pain, radiating to the groin. You have not travelled abroad. You had pain when passing urine.

Q. What are you going to do for me now?

Q. What do think is wrong with me Doctor?

Q. If the Doctor mentioned that he will do any investigations, ask him/her what is that? (CT KUB/ X-ray)

Q. What caused the renal stones?

**SET UP:** Holding a bowl in your hands as if about to vomit.

**Examiners prompt:** Blood on urine dipstick.

If they mention they would like to check the vital signs give them vital charts with the BP 110/70, HR 110, RR 14, Sats 100% on air.

If they mention urine dipstick give them a urine dipstick that is positive for blood.

Examination: Tenderness in right loin.

## Approach to scenario B

- Initial Approach or GRIPS
- SOCRATES
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE

- Effects of Symptoms
- Summarise
- **Examination:**
  - Observations
  - Abdominal examination
- **Diagnosis:** Renal Colic - Stone in the tube connecting the kidney to the bladder. Pain and blood in urine dipstick test both show renal colic.
- Explanation of diagnosis
- Diagnostic Investigations
- **Management**

#### Investigations

- Urine dipstick and MC&S
- Routine blood tests
- CT Kidney Ureter Bladder

Treatment: will depend on size of stones.

- If small: a lot of fluid. Advise to drink plenty of fluid.
- If the pain settles, refer to discharge with a follow up with the GP in one week's time.
- Bigger stones need ESWL to break down the stone in to small pieces that can pass in the urine.
- If pain does not subside, we can refer to urology unit for pain control. In any case we will admit you and they will see you within 7 week.
- Big: Surgery, shock waves, key holes.
- If still in pain, will give morphine I/M or I/V according to patient pain because diclofenac is every 8 hours. Offer anti-emetics.
- Wait for painkillers to try to control the pain
- Follow up

#### **Practical Scenarios**

1, 161

## 6. CONSTIPATION

### Nature of Constipation

- How many times a week do you usually open your bowels?
- At the moment, how many times a week do you open your bowels?
- How often do you open your bowels in an average week?
- What do you pass?
- Is the stool hard or soft?
- Does it hurt or do you strain when you pass stool?
- Have you noticed any blood in the toilet or in your stool?
- When you finish, do you ever have the feeling that you still need to open your valves?

### ODPARA

**O – Onset:** How did your constipation start? Suddenly or gradually?

**D – Duration:** When did you start experiencing constipation?

**P – Progression:** Is it becoming worse, improving or is it the same?

**A – Aggravating factors:** Anything which makes it worse or anything which brings it on (if intermittent symptoms)?

**R – Relieving factors:** Anything which makes it better?

**A – Associated symptoms:** Differential diagnoses

### Differential Diagnosis:

- Hypercalcaemia (polyuria, polydipsia, confusion, abdominal pain)
- Hypothyroidism (cold intolerance, weight gain, constipation, menorrhagia)
- Malignancy (weight loss, change in bowel habits, middle-aged or elderly patient, abdominal pain)
- Dietary (absence of fruit or vegetables, not drinking enough water)
- Medication (morphine, codeine, tramadol)
- Pregnancy (ask about LMP)
- Irritable bowel syndrome (abdominal pain, abdominal bloating, diarrhoea)
- Immobility (bed-bound or hospital admission)



- Post-operative (this is secondary to paralytic ileus, there is usually no pain)
- Anal fissures (history of constipation)
- Faecal impaction (history of constipation, overflow diarrhoea)
- Intestinal obstruction (vomiting, abdominal pain, absolute constipation, abdominal distension)
- Diabetic neuropathy (positive history of diabetes for a long time)
- Spinal cord compression (urinary symptoms, weakness or sensory loss in the lower limbs,  $\pm$  back pain)

### Questions of differential diagnosis

- **Hypercalcaemia**
  - Do you feel thirsty all the time?
  - Do you have any pain in your tummy?
  - Are you passing urine more frequently than normal?
- **Hypothyroidism**
  - Do you feel cold when others are comfortable?
  - Have you gained weight recently?
- **Malignancy**
  - How are your bowel habits? Any recent changes?
  - Have you lost weight recently? Over what period of time have you gained this weight?
- **Dietary**
  - How many glasses of water do you drink everyday?
  - Do you eat enough fruits and vegetables?
- **Medication**
  - Are you taking any medication for pain relief?
  - Are you taking any other medication?
- **Pregnancy**
  - Is there a chance you could be pregnant?
- **Irritable bowel syndrome**
  - Do you have tummy pain with diarrhoea? If yes, is the pain better at night?
- **Immobility**

- Do you have a problem walking?
- **Post-operative**
  - Have you had any operations recently or in the past?
- **Anal fissures**
  - Any pain when opening your bowels?
- **Faecal impaction**
  - Have you experienced excessive diarrhoea after constipation in past?
- **Intestinal obstruction**
  - Do you have abdominal pain?
  - When was the last time you passed bowel?
  - When was the last time you passed gas?
  - Do you feel that your tummy is distended?
- **Diabetic neuropathy**
  - Do you have diabetes?
- **Spinal chord compression**
  - Do you feel any weakness or sensory loss in the lower limbs?
  - Do you have control of your bladder and bowels?
  - Do you have any back pain?



### **Red Flags**

- Systemic symptoms (e.g. unexplained and progressive weight loss, fatigue, sweats, fever, malaise)
- New onset of constipation in older people
- Tenesmus
- Rectal bleeding
- Anaemia

## Scenario 53

You are FY 2 in orthopaedics and trauma department. A 70 years old female has been admitted to the hospital. Patient had hemiarthroplasty 4 days ago because of fracture of the neck of femur. She hasn't passed any stools since she was admitted. Patient is taking co-codamol for pain. Her pain is controlled now and she is stable. Please talk to the patient, take history, assess the patient's condition, perform any relevant examinations and discuss management plan with the patient.

### **Patient Information:**

You had a fall 1 week ago when you slipped on the toilet and broke your femur. You were admitted to the hospital for hip surgery and had an operation 4 days ago. Your operation went well and your pain is controlled well. You had no constipation before the admission and now have not been able to open your bowels for 7 days. Before the fracture you used to open your bowels daily. You were fully mobile before the fall. You are taking co-codamol for pain but are not on any other medication. You are able to pass wind. You have no abdominal pain. You eat a lot of fibre in your diet and drink plenty of fluid. No past medical history or allergy.

### **Questions:**

Q. What are you going to do for me?

Q. If you stop this medication, will I not be in pain again? (ask this question only if the doctor suggests to stop the medication)

Q. What are laxatives?

Q. "I am amazed how you guys are addressing. I was in so much pain and now I am completely fine."

Q. What are you going to do for me?

Q. When will I go home?

**Examiner's prompts:** If the candidate mentions he wants to perform abdominal examination give findings verbally.

Abdominal Examination: There is a mass in the left iliac fossa.

Per Rectal Examination: Loaded with faecal impaction.

Observation charts should have the following vitals and should be given to candidates who **mention observations:** T 37°C BP 120/80 HR 80

## Approach to scenario 53

- Initial Approach or GRIPS
- ODPARA DDs
- Red Flag (absolute constipation, vomiting abdominal pain)
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- Examination:
  - Observations
  - Abdominal examination
  - PR examination
- Diagnosis: Explain it is constipation due to the medication co-codamol. This medicine has paracetamol and codeine. The other reason for constipation is decreased mobility.
- Explanation of diagnosis
- Diagnostic Investigation
- Management
  - FBC, U&E, Abdominal x-ray
  - Paracetamol only and if required ibuprofen
  - Increase mobility and occupational therapy
  - Continue follow-up with physiotherapy
  - High fibre diet
  - Take plenty of fluids
  - Phosphate enema ( Strong laxatives passed through your rectum to clear your bowels )

## Practical scenarios

106

## 7. SHORTNESS OF BREATH

### FODPARA of shortness of breath

**O – Onset:** How did it start? Suddenly or gradually?

**D – Duration:** When did it start? Or How long have you had these symptoms for?

**P – Progression:** Is it becoming worse, improving or is it the same?

**A – Aggravating factors:** Anything which makes it worse or anything which brings it on (if intermittent symptoms)?

**R – Relieving factors:** Anything which makes it better?

**A – Associated symptoms:** Differential diagnoses

### Differential Diagnoses:

- **COPD** (history of smoking, chronic shortness of breath and cough)
- **Asthma** (wheeze, dry cough, shortness of breath, history of atopy, or allergies, family history of asthma)
- **Pulmonary embolism** (common in young females, risk factors e.g. history of long flight, haemoptysis, recent operation, taking OCP, chest pain, SOB)
- **Pneumonia** (fever, cough, shortness of breath, sputum, chest pain)
- **Pulmonary oedema** (shortness of breath, history of IHD, shortness of breath on lying down)
- **Pleural effusion** (SOB, presence of a disease causing heart failure, malignancy, renal failure)
- **Sepsis** (fever, systemically unwell patient)
- **Anaemia** (light-headedness, weakness, tiredness, history of using NSAIDs or aspirin, menorrhagia)
- **Myocardial infarction** (chest pain radiating to the left arm, nausea, sweating in palms, risk factors e.g. hypertension, diabetes, family history)
- **Pneumothorax** (common in young tall men with sudden onset of SOB and chest pain)
- **Anxiety/panic attack** (young female, SOB, hyperventilation, feeling of impending doom, generalised chest pains, patient has a feeling that he is having a heart attack).

### Questions for differential diagnosis

- **COPD**
  - Have you been diagnosed with any lung conditions like asthma/COPD?
  - Do you smoke? If yes, what do you smoke?
  - How long have you been smoking? How many cigarettes per day?
- **Asthma**
  - Do you have asthma?
  - Anyone in the family with asthma?
- **Pulmonary Embolism**
  - Any pain in the legs, especially in the calf?
  - Have you travelled by plane recently?
  - Have you ever been diagnosed with clots in the legs or lungs?
- **Pulmonary Edema**
  - Do you have a history of heart disease?
  - Does shortness of breath get worse on lying down?
- **Sepsis**
  - Are you running a temperature?
  - Any cough?
  - Are you bringing up any phlegm?
- **Anaemia**
  - Have you ever been told you have anaemia?
  - Do you suffer from light-headedness, weakness or tiredness?
- **MI**
  - Any chest pain?
  - Do you have heart problems?
  - Have you had a heart attack in the past?
- **Pneumothorax**
  - Did the shortness of breath start suddenly?
  - Any recent trauma?
  - History of lung collapse in past?
- **Anxiety/Panic attack**
  - When you are short of breath, do you experience palpitations as well?
  - Do you experience any tingling around your lips?
  - Do you get the feeling that you are going to die?



## **Red Flags**

- Tachypnea
- Tachycardia
- Tracheal deviation
- Stridor
- Cyanosis
- Hypoxia
- Hypotension
- Confusion
- Use of an accessory muscle
- Effortful breathing without effective air movement ('silent chest')

SAMSON COURSES

## Scenario 179

You are an FY2 in A&E. A 70 years old male has presented with shortness of breath. Assess the patient and discuss initial management with the patient.

You have had shortness of breath for the last 2-3 days, no fever. You live in a nursing home because you have got some memory problems. But you are generally okay. As you sit on the couch you are short of breath. Students should offer you oxygen, otherwise you continue being short of breath. You are fit and well and not on any medications and have no allergies.

You are lying on the couch and you are very short of breath. You are speaking with difficulty. There is an observation chart available with oxygen saturation of 92% on air but the rest of the observations are normal.

CXR should be available-given to those who mention it

Urea	38mmol/L	( 2.5 to 7.1 mmol/L)
Creatinine	300 umol/l	(60–110 µmol/L)
K+	4.5	(3.6 to 5.2 mmol/L)
Na	137	(135-145 mmol/L)

Chest Examination-If mentioned is normal

### Approach to scenario 179

- Initial Approach or GRIPS
- ABCDE assessment
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. CVS-listen to heart
  - c. RES examination
- Explain the findings
- **Diagnosis**



It is likely to be chest infection as you are short of breath. We need to confirm it by doing some investigations.

- Management
  - a. Admit
  - b. Routine blood tests including CRP/inflammatory markers
  - c. CXR
  - d. Antibiotic co-amoxiclav (pneumonia from nursing home: + clarithromycin)

**Curb-65 score**

**C** = confusion

**U** = urea > 7mmol/l

**R** = respiratory rate > 30

**B** = BP; systolic < 90, diastolic < 60

**65** = age more than 65 years

**Score**

**0** = low

**1 – 2** = is intermediate (less than 1% mortality risk)

**3 – 4** = high risk (1-10% mortality risk)

## Scenario 263

You are an FY2 in A&E. A 50 years old male has presented with shortness of breath. Assess the patient and discuss initial management with the patient.

You are a 50 year old male who has presented to A&E with shortness of breath. You have been experiencing shortness of breath for the last 2 days which was sudden in onset. You also have dry cough and chest pain on the left side. The pain does not radiate and is not aggravated by anything. The pain does not get better by leaning forward. You had flu like symptoms 2 weeks ago. You do not drink significant amount of alcohol and you do not smoke. You are not on any medication and there is no past medical history. You are taking Methadone. You have been injecting yourself with heroin. You have taken the last dose of heroin recently.

Q. What do I need to be admitted?

Q. Will I be able to continue injecting myself in the hospital?

You want to get your medicine and go home. You are not willing to stay in the hospital because of your addiction. But if you find the doctor convincing enough, then you are willing to be admitted.

Blood pressure: 126/75

Temperature: 38.5°C

O2 Saturation: 94%

Heart rate: 95 bpm

Respiratory rate: 20 breaths per minute

On Chest examination: Decreased breath sounds on left side. Pleural friction rub on left side. No added sounds

### Approach to scenario 263

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Systemic review
- Red Flags
- MAFTOSA
- ICE

- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. Chest examination
  - c. Lymph node examination
- Explain the findings
- **Diagnosis**

Most likely you have some chest infections called Pneumocystic Carinii. But we need to perform investigations to know the cause of the chest infection.

- **Management**
  - a. Routine blood tests including inflammatory markers
  - b. ABGs
  - c. Chest X-ray
  - d. Blood culture
  - e. Sputum culture
  - f. We might need to a test called Broncho-alveolar lavage (BAL). This is when we take secretions from your lungs and send it to the lab in order to know what bug caused the infection.
  - g. Admit
  - h. Give high flow 15L oxygen
  - i. IV fluids: normal saline 0.9%
  - j. Take second opinion from seniors
  - k. Antibiotics

Will speak to the microbiologist who is the infection specialist before starting you on any antibiotics, because the infection we are suspecting is one of the rare bugs that usually cause chest infection in people who are immunocompromised.

After speaking to the specialist we may start you on IV antibiotics called Co-Trimoxazole (Trimethoprim-Sulfamethoxazole).

NOTE: If the patient is short of breath from the start you need to review observations earlier using the ABCDE approach.

## Practical scenarios

168, 212, 238

SAMSON COURSES

## 10. HEADACHE

### SOCRATES for Headache

**S – Site:** Where is the pain? Can you show me with one finger?

**O – Onset:** How did it start? Suddenly or gradually?

**C – Character:** What type of pain is it? Dull ache/compressing/sharp?

**R – Radiation:** Does the pain move/go anywhere?

**A – Associated:** Differential diagnoses

**T – Timing:** Is there any specific time you experience the pain or when it becomes worse? Is it always there or does it come and go?

**E – Exacerbating and relieving factors:** Is there anything that makes the pain worse? Is there anything that makes the pain better?

**S – Severity/Score:** On a scale of 0 – 10, 0 being no pain and 10 being the worst, what would be the score of your pain?

### Differential Diagnosis:

- **Subarachnoid haemorrhage** (photophobia, sudden onset of headache, very severe, worst headache of his / her life)
- **Giant cell arteritis** (elderly patient, unilateral temporal headache worse with combing and chewing, weight loss, weakness)
- **Cluster headache** (common in middle-aged men, unilateral headache, red eye on the same side as headache, headaches occurs in clusters)
- **Acute closed-angle glaucoma** (sudden onset of eye pain, causing same-sided headache, red eye, visual impairment, plus or minus a history of similar episodes in the past)
- **Migraine** (young female patient, unilateral headaches, preceded by short-lived visual fortification, nausea and vomiting, previous episodes)
- **Brain tumours or space occupying lesions** (middle-aged or elderly patient, progressive headaches, weight loss, vomiting, focal neurological signs)
- **Meningitis** (headache, fever, neck stiffness, rash, photophobia)
- **Carbon monoxide poisoning** (problems with cookers or leaking gas in the house)

- **Sinusitis** (frontal headaches or between the eyes which is worse when leaning forward, recent history or presence of coryza symptoms)
- **Trauma** (history of head injury)
- **Tension headache** (band-like headache, usually precipitated by stress)
- **Weak eyesight** (history of prolonged use of bright screens like computer or TV monitors)

## Questions for differential diagnosis

- **Subarachnoid haemorrhage**
  - Did the headache start suddenly?
  - Would you call it worse headache of your life?
  - Do you feel uncomfortable in light?
- **Giant Cell arteritis**
  - Is headache one sided?
  - Is it worse on chewing or combing hair?
  - Have you recently lost weight? If so, quantify.
  - Is there any weakness of any part of body?
- **Cluster headache**
  - Is it one sided headache?
  - Do you feel your eye has become red?
  - Is it the first time or have you had it before?
- **Acute closed-angle glaucoma**
  - Is there any eye pain? If so, did it start suddenly?
  - Is there any new problem with vision?
  - Have you have similar episodes before?
- **Migraine**
  - Is the headache one sided?
  - Any visual symptoms just before or during headache?
  - Any nausea or vomiting?
  - Have you had similar headache before?
- **Brain tumours**
  - Is the headache becoming worse with time?
  - Any weight loss? If yes, quantify.

- Any vomiting?
- Any focal neurological signs / any change in sensations or new weakness in any part of body?
- **Meningitis**
  - Do you have a fever with the headache?
  - Any neck stiffness?
  - Did you notice any rash on body?
  - Do you feel uncomfortable in light?
- **Carbon monoxide poisoning**
  - Any problems with cookers or leaking gas in the house?
  - Any paint jobs recently in the house?
- **Sinusitis**
  - Where exactly is the headache? (Frontal or between eyes?)
  - Is there any change in intensity on leaning forward?
  - Any recent cough, runny nose or sneezing?
- **Trauma**
  - Any history of head injury?
- **Tension Headaches**
  - Where exactly does it hurt? (Band like pain around head)
  - Any increased stress in work or personal life?
- **Weak eyesight**
  - What work do you do? (Office workers using computer)
  - Are you using a screen like computers or TV monitors for long time?



### **Red Flags**

- Severe persistent headache of acute onset
- Sudden change in previously stable headache
- Early morning headache
- Thunderclap headache
- Presence of fever and non-blanching rash
- Recent head trauma

- Retro bulbar pain
- Jaw claudication
- Neurological signs, such as hemiparesis, cranial nerve abnormalities or hemianesthesia, drowsiness
- Cough headache or headache when bending over, laughing or straining

SAMSON COURSES



## Scenarios 72

You are FY 2 in A&E. A 66 years old female has come to the hospital with a headache. Please take a history, perform relevant examinations and discuss management with the examiner.

### **Patient Information:**

You are sitting on the chair/lying on the bed holding the back of your head and facing down with your eyes closed. The severity of pain is 9/10. You are not comfortable until the doctor gives you analgesia. You would like to take painkillers. You have had migraine whole your life but you have never had a headache as bad as this. Light is bothering your eyes. You take Sumatriptan for your migraine. If the doctor asks you if this is the worse headache of your life you reply as "I am not sure/yes it is the worse headache of my life" You also have neck pain but you do not have a rash.

### **Questions:**

Q. What is wrong with me?

Q. What are you going to do for me?

**Set up:** Low GCS, holding the back of your neck.

### **Examiner's prompt:**

Candidates who want to perform exam, tell them it is normal.

In the last 2 minutes, asks the candidate: "How would you manage the patient?"

If candidate wants to give painkillers to the patient ask "which painkillers?"

## Approach to scenario 72

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**

- a. Observations
- b. Fundoscopy
- c. Neurological examination of arms, legs and nerves of face
- Explain the findings
- **Diagnosis**

Unfortunately from what you have told me so far, most likely you could have suffered a bleed in the brain which is called SAH

- **Management**

#### **Overall initial management**

- Keep monitoring
- Analgesia
- If CT confirms SAH then refer to neurosurgeons.
- Inform seniors

#### **Specific Management ( examiner)**

- ABC
- I will keep the patient on the monitors.
- CT head
- Analgesia (Paracetamol, Ibuprofen)
- If there is any bleeding, refer to the neurosurgeons
- If the CT scan come back normal, I will arrange a lumbar puncture
- What are you looking for on a LP?
- Ans: Xanthochromia
- When are you going to do a LP?
- Ans: At least 12 hours from the onset of the headache.
- Admit the patient under the medical team
- Take a second opinion from my seniors.

## Scenario 132

You are FY 2 in Rheumatology department. A 60 years old female has been referred to the hospital by the GP with a headache. Take a focused history, perform relevant examination and discuss management with the patient.

### **Patient Information:**

You have presented with 3 weeks history of one sided headache (on left side without any radiation, you feel it mostly as scalp tenderness). You have been taking paracetamol but with no relief. You are also unable to see properly with your right eye for 1 week/your vision is normal. You also have pain in the jaw every time you eat or when you open your mouth and combing hair. You have no weight loss, no nausea, no weakness in your legs. You have muscle pains on your shoulders and thighs. If the doctor asks: "is this the worst headache of your life", say yes.

### **Questions:**

Q. What are you going to do for me?

Q. How are you going to treat me?

Q. If the doctor mentions biopsy ask: "What is a biopsy and how is it done?"

Q. How long will I take steroids? What are the side effects?

Q. When the doctor says they will admit you say: "Oh! I did not expect that"

Q. Why won't you just give me medication and then I can go home?

Q. If the candidate says they will perform blood tests ask: "Which blood tests?"

### **Approach to scenario 132**

- Initial Approach or GRIPS
- SOCRATES
- Differential Diagnosis
- Cancer symptoms
- Red Flags ( loss of vision, worse headache )
- MAFTOSA

- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. Scalp tenderness
  - c. Lift your arms above your head
  - d. Stand up from chair without using support from arms
  - e. Open your mouth - Does it hurt?
  - f. Palpation of shoulder, hips and thigh - for tenderness
  - g. Eye assessment: examiner would say they are normal
    - i. Visual acuity
    - ii. Light reflex
    - iii. Red reflex
    - iv. Fundoscopy
    - v. Eye movements in a form of H
- Explain the findings
- **Diagnosis**

GCA –This is an inflammation of the arteries. Temporal arteritis is when the arteries, particularly those at the side of the head (the temples), become inflamed. It's a serious condition, if not treated promptly it leads to loss of vision.

- **Management**
  - a. Blood test ( inflammatory markers ESR, Kidney Function test).
  - b. USS
  - c. Confirmation by biopsy: explain biopsy to the patient
  - d. Admit the patient
  - e. Offer analgesia (paracetamol or codeine)
  - f. Treatment - steroid 40-60 mg and PPI cover
  - g. Leaflets

**Note:**

Side effects of steroid with solution

- Hypertension - monitoring (blood pressure)
- Diabetes Mellitus - high blood sugar but we will monitor and if you develop diabetes we will treat you with insulin
- Osteoporosis - Bisphosphonate to prevent osteoporosis
- Damage to lining of the stomach - we will give some medication to prevent that from happening

**Practical scenarios**

193, 235

## 11. WEIGHT GAIN

### Nature of weight gain

- How much weight have you put on?
- Over what period of time have you put on this weight?
- Where have you put on the weight? Abdomen, trunk, hip, legs, face or ankles?
- Is the weight gain evenly distributed?

### Differential Diagnosis:

- **Hypothyroidism** (weight gain, constipation, menorrhagia, cold intolerance)
- **Obesity** (familial)
- **Cushing's syndrome** (weight gain, central obesity, bruises)
- **Polycystic ovarian syndrome** (weight gain, acne, hirsutism, infertility)
- **Acromegaly** (increased shoe and ring size, spaced teeth)
- **Depression** (low mood, loss of interest in daily activity, poor sleep, low energy levels, loss of appetite)
- **Medication** (side effects of any medications like steroids, contraceptive pills)
- **Pregnancy** (history of amenorrhoea, take sexual history)

### Questions for differential diagnosis

- **Hypothyroidism**
  - Do you feel cold when others are comfortable?
  - Do you suffer from constipation?
- **Obesity**
  - Have you changed your diet recently?
  - What type of food do you normally eat?
  - Anyone in the family who has increased weight on the higher side?
- **Cushing's syndrome**
  - Is the weight gain more at any part of body? (Central)
  - Have you noticed bluish marks on your tummy?
- **Polycystic ovarian syndrome**
  - Have you noticed excess hair growth on your face?

- Have you tried to have children? If yes, have you had any problems with that?
- Noticed any recent development of acne?
- **Acromegaly**
  - Have you noticed a change in size of your shoes or ring size?
- **Depression**
  - How is your mood normally?
  - Are you on any medication like steroids?
  - How has your energy level been recently?
- **Medication**
  - Are you taking any medications?
  - Do you use oral contraceptive pills or steroids?
- **Pregnancy**
  - When was your last menstrual period?
  - Are your periods usually regular?
  - Is there a chance you could be pregnant?



### **Red Flags**

- Morbid obesity
- Severely reduced mobility
- Suicidal ideation
- Poor self-image
- Diabetes
- Cardiovascular complications

## Scenarios 147

You are FY 2 in GP surgery. A 46 years old female presented with some concerns. Take a focused history and discuss initial management plan with the patient.

You came to practice as a follow up. You had come to practice last week and the doctor did some investigations. You have been experiencing weight gain for the last 1-year and now are feeling tired most of the time. Sometimes you feel cold when others are comfortable.

Q. What is wrong with me?

Q. What are you going to do for me?

Q. What medications will you give me?

You are calm; just want to know why you have been experiencing your symptoms.

All examinations are normal

If the candidate mentions that he needs to perform thyroid function tests, please give them TFT results

Thyroid	Function	Tests
	TEST	NORMAL RANGE
TSH	10	0.5-4.5 ug/dl
T4	2ug/dl	4.6-12 ug/dl
T3	40	80-180 ng/dl

## Approach for scenario 147

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms



- Summarise
- **Examination**
  - a. Observations
  - b. Thyroid examination
- **Explain the findings**
- **Diagnosis**

Hypothyroidism: Thyroid is a gland in body that takes care of metabolism by producing a hormone called thyroxine. Your body is not currently producing enough thyroxine leading to your weight gain.

- **Management**
  - a. Bloods
  - b. Levothyroxine
  - c. Refer to endocrinologist
  - d. Leaflets

## Scenario 128

You are an FY2 in GP surgery. A 45 years old female has presented with tiredness. Take a focused history and discuss management with the patient.

You have had tiredness for the last 2/6 months. You feel cold most of the times when others are comfortable. You have gained 5kg weight, your appetite is poor, have constipation and your sleep is poor. Your mood is 3/6 out of 10. Otherwise you are fit and well. No past medical history and you are not on any regular medication. You live alone and your husband passed away 18 months ago.

Q. What is wrong with me?

Q. What are you going to do?

### Approach to scenario 128

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. Thyroid examination
  - c. CVS - listen to heart
- Explain the findings
- **Diagnosis**

Use the summarisation technique

You have told me that you have been feeling tired for the past 6 months, you have become constipated in the last 2 months or so, you have gained 5kg in weight and you feel cold most of the time. Is there anything else that I have missed?

From what you have told me you most likely you have a condition called hypothyroidism. Which is also called under-active thyroid.

A thyroid gland usually produces a hormone called thyroxine. If it does not work properly, it causes a deficiency of this hormone in your body.

- **Management**

- a. Routine bloods
- b. Thyroid function test
- c. Refer to endocrinologist: Once confirmed I will refer you to the specialist, the endocrinologist, and they will give you medication called thyroxine.
- d. Leaflets
- e. Follow up in 1 week time

**NOTE:** Do not make a routine referral to the patient if experiencing:

Side effects of thyroxine

Abnormal structure of the thyroid gland

Persistent symptoms despite treatment

## 12. WHEEZE

### FODPARA of wheeze

**O – Onset:** How did it start? Suddenly or gradually?

**D – Duration:** When did it start? Or How long have you had these symptoms for?

**P – Progression:** Is it becoming worse, improving or is it the same?

**A – Aggravating factors:** Anything which makes it worse or anything which brings it on (if intermittent symptoms)?

**R – Relieving factors:** Anything which makes it better?

**A – Associated symptoms:** Differential diagnoses

### Precipitating factors:

- **Viral illness** – Did you have any fever, cough, runny nose or sore throat recently?
- **Cigarette smoke** – Do you smoke? Is there anyone in your family who smokes?
- **Pollen** – Are you handling flowers or plants?
- **House dust mite** – Is there any dust in the house?
- **Animal dander** – Do you have any pets at home?
- **Cold air and pollutants** – Do cold air make your symptoms worse?
- **Exercise** – Are your symptoms worse when you exercise?
- **Emotional stress** – Does stress make your symptoms worse?

### Control of Symptoms:

Have you had difficulty sleeping because of your asthma symptoms (including cough)?

Have you had your usual asthma symptoms during the day (cough, wheeze, chest tightness, or breathlessness)?

### Assessing severity:

- Do you get symptoms on exercise?
- What is your best peak expiratory flow rate reading? Has this changed recently?
- What treatment are you on? Inhalers? Oral treatment? Home nebulisers? Have you needed the salbutamol inhaler more than usual?

- How many times in the last year have you had an asthma attack? Have you previously been admitted to ITU because of asthma?

**Ask about drugs that induce bronchoconstriction:**

Aspirin

NSAIDS

Beta Blockers

**Effects of symptoms on patient:**

Does it affect your day to day activities?

Do you wake up in the middle of the night due to wheezes or shortness of breath?

Have you had to take time off from work because of your symptoms?

**Differential Diagnosis:**

- **Asthma** (young patient, history of allergies, family history of asthma, intermittent symptoms of shortness of breath, wheeze and dry cough)
- **COPD** (middle-aged man, long-standing history of smoking, chronic shortness of breath)
- **Foreign body** (this is usually in children, acute onset, while a child was playing with toys, or if it is in an adult, while eating)
- **Anaphylaxis** (rash, history of allergy or previous episodes, similar complaints, swelling of face and neck)
- **Allergy** (rash)
- **Cardiac asthma** (elderly patient, chronic shortness of breath, symptoms worse when patient lies flat)

**Questions for differential diagnosis**

- **Asthma**
  - Is there anyone in the family with asthma or eczema?
  - Any particular time when your wheeze is worse?
  - Do you experience wheeze while doing exercise?

- **COPD**

- Do you smoke?
- Do you usually feel short of breath?
- Do you have a cough? If yes, for how long have you had this cough?

- **Foreign Body**

- Was the child playing with toys right before it started?
- Did it start right after eating?

- **Anaphylaxis**

- Have you noticed any rash?
- Has this happened before in a similar situation?
- Noticed any swelling of the neck and face?

- **Allergy**

- Are you allergic to anything?
- Anyone on the family with allergies?

- **Cardiac Asthma**

- Is there any shortness of breath?
- Is it something new or is it long standing?
- Does it change when lying flat on your back?

- **Chest Infection**

- Do you have a cough?
- Do you bring up phlegm? If yes, what colour?
- Are you running a temperature?



## **Red Flags**

- Unable to talk in full sentences
- Tachycardia
- Tachypnea
- <50% peak flow
- Cyanosis
- Silent chest
- Hypotension
- Bradycardia
- Confusion

## Scenario 74

You are FY 2 in A&E. A 33 years old male presented with chest tightness. The nurse has examined him and there is a wheeze on auscultation of the chest. Take a focused history, perform relevant examination and discuss initial management with the patient.

### Scenario A

You were playing football when you got an attack of chest tightness and wheeze. You say: "I heard myself whistling". You have had asthma since childhood but for 15 years you have not had any symptoms. You used inhalers in the past. Both of your parents have asthma. You have been seen by someone who said you could have asthma. You have had shortness of breath, wheeze and chest tightness when playing football and exercise for the past 2-3 months. You do not smoke or drink. You have not had a fever. You are currently using NSAID for pain relief. You feel cold weather makes it worse. There is a carpet in your house. The nurse gave you inhalers. You feel better now. You blow 650L/min on PEFr.

### Scenario B

You have never used inhalers before. You have not been diagnosed with asthma but you do have eczema. You are taking Ibuprofen for pain relief. One of the nurses mentioned to you that you could have asthma.

Q. What is wrong with me doctor?

Q. What are you going to do for me?

Q. Are you going to admit me?

Q. Will I still be able to play football?

Q. Is it asthma again?

**Set up:**

PEFR

## Approach to scenario 74

- Initial Approach or GRIPS
- FODPARA
- Differential Diagnosis
- Precipitating factors of asthma

- a. Cold weather
- b. NSAID
- c. Pets
- d. Dust
- e. Smoking
- f. Carpet
- g. Occupation
- h. Family history of asthma
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. Respiratory examination
  - c. PEFr
- Explain the findings
- **Diagnosis**

Asthma

- **Management**

Depends on PEFr value.

**PERF normal:**

- a. Follow up in 2 days to GP
- b. Send summary to GP
- c. Blue inhaler
- d. Explain how to use it-before any activity
- e. Oral Prednisolone 30mg once daily for 3 days
- f. PPI cover
- g. Avoid NSAID and take paracetamol instead
- h. Asthma diary
- i. Leaflets



- j. **Safety netting:** come to hospital if not better with inhaler, shortness of breath, chest tightness or generally unwell

**If PERF low:**

- a. Admit
- b. Oxygen
- c. Nebulisation with salbutamol
- d. IV steroids or oral prednisolone
- e. Chest X-ray
- f. Bloods
- g. ECG
- h. Discuss with seniors

SAMSON COURSES

## 13. COUGH

Characteristics of Cough

### FODPARA of cough

**F – Frequency:** How often do you cough?

**O – Onset:** How did it start? Suddenly or gradually?

**D – Duration:**

When did your cough start?

Or how long have you had a cough for?

Is there any particular time in the day when the cough is worse?

Is your cough worse in the morning?

Do you experience any cough at night?

**P – Progression:** Is it becoming worse, improving or is it the same?

**A – Aggravating factors:** Anything which makes it worse or anything which brings it on (if intermittent symptoms)? Does food or drink make it worse?

**R – Relieving factors:** Anything that makes it better?

**A – Associated symptoms:** Differential diagnoses

### Sputum

Do you bring up any phlegm with your cough?

Is there any blood with it?

Can you estimate the amount of phlegm? A teaspoon, a tablespoon or a cupful?

What is the colour of the sputum? (Clear or grey sputum suggests Chronic Bronchitis) (Pinky frothy sputum suggests Left Ventricular failure)

## Differential Diagnosis:

- **Pneumocystis jirovecii pneumonia** (Usually in an HIV patient with a dry cough, shortness of breath, weight loss, positive history of unprotected sexual intercourse or history of visiting endemic areas like Africa)
- **Asthma** (acute dry cough, history of atopy, presence of other allergies, family history of allergy or atopy)
- **Tuberculosis** (usually patient from Africa or Asia or homeless, alcoholic, presenting with weight loss, night sweats, haemoptysis)
- **COPD** (middle-aged man with chronic history of smoking, chronic cough)
- **Post-nasal drip** (presence of coryza symptoms-running nose, sneezing cough and sore throat. Usually it is due to dribbling of secretions at the back of the throat which triggers a cough)
- **Cardiac asthma** (history of heart failure or ischaemic heart disease)
- **Drugs** (ACEI causes a dry cough)
- **Laryngeal carcinoma** (weight loss, haemoptysis, smoking history, middle aged or elderly patient, weakness, tiredness, fatigue)
- **Smoker's cough** (active heavy smoker)
- **Pneumonia** (fever, cough, shortness of breath, chest pain, sputum)
- **Atypical pneumonias** will cause a dry cough. A dry cough with recent history of being on holiday or staying in a hotel will suggest Legionella. A dry cough with a history of contact with pets is likely to be Chlamydia psittaci)
- **Allergy** (sudden onset of symptoms, rash, itching)
- **Interstitial lung disease** (occupational history is important e.g. exposure to asbestos, coal mining)
- **Bronchiectasis** (chronic cough with sputum)
- **Bronchogenic carcinoma** (middle-aged or elderly patient, weight loss, weakness, tiredness, smoking history)
- **Chronic bronchitis**

## Questions for differential diagnosis

- **Pneumocystis jirovecii pneumonia**
  - What kind of cough is it? Is it dry?

- Sexual history?
  - Do you use recreational drugs?
- **Asthma**
  - Do you have a medical condition called asthma?
- **Tuberculosis**
  - Have you travelled abroad recently?
  - Any night sweats?
- **COPD**
  - Do you smoke? If yes, how many per day and for how long?
  - Any shortness of breath or cough?
- **Post-nasal drip**
  - Any runny nose or sneezing?
- **Cardiac asthma**
  - Do you have any heart problems?
- **Drugs**
  - Are you taking any regular medication?
- **Laryngeal carcinoma**
  - Have you lost weight recently? If yes, quantify.
  - Any changes in your voice?
  - Do you feel tired all the time?
- **Smoker's cough**
  - Long history of smoking?
- **Pneumonia**
  - Are you running a temperature?
  - Are you bringing up any phlegm?
- **Atypical pneumonias**
  - Are you running a temperature?
- **Allergy**
  - Any runny nose or sneezing?
  - Do you have any allergies?
- **Interstitial lung disease**
  - Do you feel short of breath, especially after exercise?

- Do you feel tired all the time?
- Any weight loss? If yes, quantify.
- Clubbing
- **Bronchiectasis**
  - Any discharge in sputum? Is it purulent?
- **Bronchogenic carcinoma**
  - Any weight loss? If yes, quantify.
  - Any tiredness or fatigue?
  - Any cough or shortness of breath?
  - History of smoking?
  - Have you noticed any lumps and bumps on your body?



### **Red Flags**

- Shortness of breath at rest or with minimal exertion
- Haemoptysis
- Weight loss
- Raised JVO
- Hypoxia
- Confusion
- Hypotension

## Scenario 66

You are FY 2 in Medicine department. A 30 years old man has come to the hospital with shortness of breath. Take a focused history, perform relevant examination and discuss management with the patient.

### **Patient Information:**

You have had shortness of breath and cough with white sputum for the last 3 weeks. You have had weight loss, have been feeling feverish but you did not check the temperature. There is no blood in the sputum. You came GP once a week where you were given amoxicillin for 1 week but the cough has not resolved. You smoke 40 cigarettes a day since your school days. You are homeless, have multiple male partners. You also use recreational drugs - you do not know about the needle exchange program as a result you share needles. You are short of breath at rest. One of your sexual male partner has got HIV infection.

### **Questions:**

Q. What do you think is wrong with me?

Q. What are you going to do for me?

### **Examiner's prompts:**

Observations: Temp 38°C, RR 34, O2 sats 91%, BP 110/70 and HR 102

Chest examination: Bilateral crackles

X-ray: An X-ray showing bilateral hilar infiltration

## Approach to scenario 66

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Sign posting
- Summarise
- **Examination**

- a. Observation
- b. Chest examination
- c. Lymph node examination
- Explain the findings
- **Diagnosis**

Explain the diagnosis: Most likely you have some chest infections.

But we need to perform investigations to know the cause of the chest infection.

- **Management**

The investigations we need to perform are:

1. Blood tests: FBC, U&E, LFT, Glucose, inflammatory markers, ABGs, a blood test to check for oxygen levels in blood
2. CXR
3. Blood culture
4. Paracetamol to reduce the temperature
5. Urine test
6. Inflammatory markers (CRP, ESR)
7. Sputum culture
8. Advise the patient to undergo HIV and Hepatitis tests (blood borne infections)
9. We might need to do a test called Broncho-alveolar lavage (BAL)
10. This is when we take secretions from your lungs to send it to the lab in order to know what bug has caused the infection.

### **Treatment**

1. Admit
2. Give oxygen high flow
3. IV Fluids
4. IV antibiotics
5. Take a second opinion from the senior.

**NOTE:** If the patient is short of breath from the start you need to review observations earlier (i.e. If patient is Short of breath)

## Scenario 276

You are FY 2 in A&E. A 72 years old man was referred by his GP with cough. He has had a cough for about a week for which his GP sent him for a chest X-ray. He was then referred to A&E. You will find the X-ray film and MEWS chart in the cubicle. Assess the patient and discuss the management with the patient.

### **Patient Information:**

You have had cough for the past 1 week and have productive cough with greenish sputum. You are a known hypertensive and diabetic for 6 years for which you take amlodipine and metformin. Both are well controlled. You smoke 20 cigarettes/day for past 18 years. You do not drink alcohol. Your GP told you that you are allergic to metronidazole. You are otherwise fit and well.

### **Questions:**

Q. Can I go home?

### **Examiner's prompts:**

Observations: RR 26, BP 110/70, HR 92, T 39 and O2 sats 91%

## Approach to scenario 276

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. Chest exam
  - c. Lymph nodes
- Explain the findings
- **Diagnosis**



Explain oxygen levels are low and temperature is high. From what you have told me and from the examination, it looks like you have a chest infection called Pneumonia. I would like to confirm it with investigations.

- **Management**

**Investigations:**

- a. Blood tests including inflammatory markers
- b. Blood culture
- c. Chest X ray

**Treatment:**

- Admit
- IV fluids
- Antibiotics (clarithromycin plus co-amoxiclav - do not explain the details of the medication to the patient unless he or she asks “Which antibiotics will you give me?”)
- Refer to the medical team.
- Offer leaflets about chest infection

## Scenario 107

You are an FY 2 in A&E. A 65 years old male presented with cough. Take a focused history, perform relevant examination and discuss management with patient.

### **Patient Information :**

#### **Scenario A :**

You are a 65-year-old man. You had a cough for the past 3 days. You returned from Spain 3 days ago. You have got a cough and shortness of breath. You went to Spain but you were not staying in the hotel. You have got a family in Spain (your cousin) and you stayed at his place. You have got white sputum. You smoke 20 cigs a day for the last 30 years.

#### **Examiner's prompts:**

Temp 38°C, Sats 92%, HR 110, BP 120/80, RR 22

#### **Scenario B:**

You have had cough for 3 weeks. GP gave you Amoxicillin antibiotics 2 weeks ago but no relief. You have also got chest pain which is worse with inspiration.

#### **Examiner's prompts:**

Observations: Sats: 91%, T: 38.7°C, BP: 110/70, HR: 108, RR: 20

CXR was provided to those who asked for it.

## Approach to scenario 107

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise

- **Examination**
  - a. Observations
  - b. Chest exam
- Explain the findings
- **Diagnosis**

Explain oxygen levels are low and temperature is high. From what you have told me and the examination, it looks like you have chest infection called Pneumonia. I would like to confirm it with investigations.

- **Management**
  - a. Routine bloods including inflammatory markers
  - b. Chest X ray
  - c. Admit
  - d. IV fluids
  - e. Antibiotics - amoxicillin (if suspected Legionella pneumonia then prescribe erythromycin)
  - f. Discuss with seniors
  - g. Leaflets

### **Practical scenarios**

56, 119, 275

# ANAEMIA

## ODPARA of tiredness

### Differential Diagnosis:

- Anaemia (light-headedness, weakness, fatigue, tiredness, history of use of NSAIDs or aspirin)
- Chronic fatigue syndrome
- Malnutrition
- Malabsorption
- Malignancy
- Rheumatoid arthritis
- Drugs
- Anaemia of chronic disease
- Haemolytic anaemia
- Celiac disease
- Inflammatory bowel disease
- Anaemia:
  - Do you feel weak and tired all the time?
  - Has a doctor ever told you that your blood levels are low?
  - Do you feel tired on mild exertion?
  - Do you feel light headed
- **Chronic fatigue syndrome**
- **Malnutrition**
  - What kind of food do you eat?
  - What is your diet like?
- **Malabsorption**
  - Do you have any diarrhoea?
  - Have you been having any tummy pains?
- **Malignancy**
  - Have you lost any weight recently? If yes, quantify.
  - Have you been feeling lethargic and fatigued?
  - Primary tumour symptoms?

- Any lumps and bumps on your body?
- **Rheumatoid arthritis**
  - Have you had any fevers recently?
  - Do you have pain in your joints?
  - Did you notice any swelling in your joints?
  - Did you notice a rash on your face recently?
- **Drugs**
  - Are you using any pain killers like Asprin and Nsaid?
  - Are you on antidepressant citalopram?
- **Anaemia of chronic disease**
  - Have you been diagnosed with any medical condition?
  - Haemolytic anaemia
  - Have you felt you have become pale?
  - Have you been feeling confused lately?
  - Do you feel fatigued and dizzy?
- **Celiac disease**
  - Any diarrhoea or constipation?
  - Any feeling of bloatedness?
  - Do you have an itchy rash?
  - Have you lost weight? If yes, quantify.
- **Inflammatory bowel disease**
  - Any pain in the tummy?
  - Do you feel tired all the time?
  - Is there any blood in your stools? If yes, what colour?
  - Have you lost any weight recently? If yes, quantify.
  - Do you have these symptoms at night?



### **Red Flags**

Constitutional symptoms such as weight loss, loss of appetite, fevers, night sweats and lymphadenopathy, depression, abnormal physical exam, pain anywhere in the body, disabling tiredness, polyuria and polydipsia.

## Scenario B (177)

You are FY 2 in GP surgery. A 30 years old lady has come for review of her blood tests. She had presented with tiredness and she was seen by a local doctor. She had Hb of 10.1g/dL and MCV was 120. The local doctor did the following tests:

<u>Her results</u>	<u>Normal range</u>
-Ferritin	30ng/mL (12 to 150 ng/mL)
-Iron	13g/dL (12.0 to 15.5 g/dL)
-Folic acid	12 ng/ml (2-20 ng/mL)
-B12	100 pg/mL (200- 500 pg/mL)
-Calcium	(2.15-2.55 mmol/L)
-Thyroxin	(8-22 pmol/L)
-TSH	(0.35-5.5mLu/L)

Explain the results, take a focused history and discuss initial management with the patient.

### Patient information

You decided to be a vegetarian 2 years ago for religious reasons. You do not eat meat or eggs. Not willing to change your diet due to religious reasons. You feel tired most of the times and it is affecting your daily activities. You have tiredness for the past 4 months. You work as an accountant and it is affecting your work. You have 2 children and you're finding it difficult in coping with them. The other doctor mentioned you are anaemic. You do not like injections so you make faces when the doctor mentions you need injections. Last week you came for follow-up for the blood test results, they told you that you are anaemic and they requested another blood tests.

Q. Will the medication be life long?

Q. Is there anything causing it?

Q. If the doctor mentions injections - ask why not tablets.

Q. If the doctor mentions he/she will refer you to a specialist, ask: "what will the specialist do?"

Q. Is there any other possible causes for this?

## Approach to scenario B

- Initial Approach or GRIPS
- ODPARA
- History of B12 deficiency (tiredness, tingling or numbness in legs, gait problems, balance problems, anyone in family with anaemia, thyroid problems)
- Causes of B12 deficiency (diet, what kinds of food do you not eat?)

- Symptoms of Anaemia
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise
- **Examination**
  - a. Observations
  - b. General physical
- **Explain the findings**
- **Diagnosis and management**

Explain the blood tests are all normal but Vitamin B12 is low.

- B12 is found in meat, eggs and dairy products
- Treatment is local vitamin B12, but will check for intrinsic factor to make sure that vitamin B12 can be absorbed.
- Initially injections twice weekly for 4 weeks as a loading dose
- Then one injection of B12 every 3 months
- You will perform other blood tests to rule out other possible causes.
- Follow up blood tests in 4 weeks time.
- Refer to the haematologist.
- Leaflets

### **Scenario C (Iron deficiency anaemia in a vegetarian)**

#### **Approach to scenario A**

- Initial Approach or GRIPS
- ODPARA
- Differential Diagnosis
- Red Flags
- MAFTOSA
- ICE
- Effects of Symptoms
- Summarise

- **Examination**
- Explain the findings
- **Diagnosis**
- **Management**

SAMSON COURSES