

You are working as an ED HMO in a metropolitan hospital. A 21 years old female, Brenda, at 32 weeks gestation came along with her mother to the ED with complain of headache. She took 2 tablets of Panadol with minimal relief. The headache was associated with nausea and had vomited once this morning. She seems very agitated. Brenda is up to date with all her antenatal check-ups. Her ultrasound at 20 weeks and sweet drink test at 28 weeks were normal, She doesn't smoke or drink alcohol. Medical and Surgical history was unremarkable. This is Brenda's first pregnancy and her husband is overseas at the moment.

#### YOUR TASKS ARE TO:

- ▶ 1. Take history from Brenda (this should take no longer than 4
- minutes)
- 2. Physical examination findings will appear at 4 minutes
- 3. Explain the condition and your immediate management to the patient

- Hx findings:
- ► The headache: All over the head/Feels like 'pounding' and so severe/Intensity is around 6-7/10; it started suddenly with the intensity of 3 and progressing. The time until it reached the greatest intensity is not so quick, /does not radiate anywhere else/Nothing that you notice could alleviate or worsen the pain. took paracetamol, with minimal relieve/have not had any previous of headache before this
- also noticed some nausea and vomited once. The vomiting is mainly consisted of the
- food that you take. No greenish material or blood in the vomitus.
- notice some tummy pain, mainly on the right upper side of the tummy. This also occur this morning. Describe is as 'not so bad and not really concerning for you'
- ▶ □ If asked for other associated symptoms, answer with 'no', or 'not that I am aware of'.
- Questions that may be asked, including:
- o Loss of consciousness,
- o Slurred speech
- o Weakness on one side of the body
  - o Difficulties walking
  - o Yellowish discoloration
- o Bruises/rashes
- o Fever
- o Neck stiffness
- o Seizures



- done everything that recommended. All of the test has been normal so far.
- In So far, still notice that the baby is kicking well, and you do not notice any regular waves of crampy tummy pain, and no vaginal discharge of any kind.
- do not have any other past medical history, including migraine and kidney disease
- In No family history of any pregnancy related issue or any other specific condition.
- do not smoke and drink alcohol throughout the pregnancy.

- PHYSICAL EXAMINATION FINDINGS:
- General appearance: distressed, no jaundice, no pallor, no
- oedema, no obvious rash or bruises
- Vital sign:
- ▶ BP: 145/93 HR: 88 bpm
- RR: 20 x/min T: 36.2
- Eyes: pallor (-), jaundice (-)
- Neck: lymphadenopathy (-). JVP 5+2 CmH2O
- Respiratory examination: air entry bilaterally equal, no added breath sound
- Cardiovascular: S1/2 normal, no murmur, no S3/4
- Abdomen: Right upper quadrant pain noted on palpation
- Obstetric exam:
- No tenderness and no contraction,
- Fundal height is 32 cm
- Longitudinal lie with cephalic presentation
- Foetal heart rate: 142 bpm
- Pelvic exam: no discharge, no fluid leakage, no dilatation
- Neurology exam: brisk knee jerk (+)
- Urine dipstick: protein (+++)

- A headache during pregnancy should alert the candidate of the possibilities of hypertension during pregnancy, which in this case is a preeclampsia. Attempt need to made by the candidate to exclude other causes of headache in pregnancy. As pregnancy increases the risk of developing Subarachnoid haemorrhage, this need to be ruled out. Other less serious causes of headache which include the primary headache also need to be inquired.
- Once a preeclampsia is suspected, it also needs to be differentiated from other classifications of hypertension in pregnancy which include chronic hypertension, chronic hypertension superimposed preeclampsia and gestational hypertension.
- Question to rule out the complication of preeclampsia should also be made, which include IUFD, preterm labor, eclampsia and HELLP syndrome.
- Immediate management of preeclampsia should include:
- □ Hospitalisation
- □ Specialist / senior consultation
- □ Continuous monitoring
- o Mother: vitals sign and symptoms of eclampsia
- o Baby: CTG
- □ Investigation:
- o FBE, ESR/CRP
- o Kidney and liver function test

- o LDH
- o Coagulation factor
- o Electrolyte
- o Microscopic urine and culture
- o USG
- Pharmacology:
- o MgSo4
- o Anti-hypertensive is generally not given in preeclampsia with blood pressure 140/80. However, it is accepted if the candidate mention that the specialist will decide.
- Steroid for lung maturation if necessary (specialist will decide)
- also advise that delivery may be done if there is a concerning features either from the baby or from the patient

### Case 2:

- ▶ You are an HMO working in a busy metropolitan Emergency Department. Your
- next patient is Marnie, a 36 years old female patient brought in by police as
- > she was shouting at people on the street. She is a known patient with
- schizophrenia for the past 6 years.
- YOUR TASKS ARE TO:
- ▶ 1. Take a psychosocial history to enable you to further evaluate the
- problem (this should take no longer than 6 minute)
- 2. Present the mental state examination to the examiner
- ▶ There will be a 6 minutes prompt time in this station.

36 years old female patient, did no do any physical violence.

admit that you shouted on 'Jessica'a friend of yours (which is not real) that sometimes come and go. She always complains about your personality and also complain about your appearance as well.

do not particularly able to see or feel her talking about you with people passing by. No idea of harm

were diagnosed with schizophrenia 6 years ago, and took medication at that time until the past 1 year, where feel okay, and stopped taking medicine

o At the time of diagnosis, noticed some auditory hallucination, in which someone is 'whispering complains on my ear', the voice also gave negative comment on your appearance and career.

mood is 'okay'

never harm yourself or other; and no suicidal or homicidal ideation at the moment sleep is disturbed because of Jessica

only eat what is available on the street Impaired judgement and insight.

case of relapse paranoid schizophrenia. A complete psychosocial history should include at least: Mood/Suicidal/homicidal ideation/Sleep and appetite/ Hallucination/ Delusion/ Judgement/ Insight

HEADSS question: Home/ Employment/ Activity/ Drugs/ Social/Sexual history

Past medical history, family history and the possibilities of organic causes

- ABSEPTICJ3R:
- Appearance
- Behaviour
- Speech
- Emotion
- Perception
- Thought
- Insight
- Cognition
- Judgement
- Risk
- Reliability
- Rapport



- ➤ You are working as HMO in a GP clinic. Your next patient is Jessie, a 24 years old female with rashes as seen on the picture. The rash appear 1 day ago and not particularly itchy nor painful. She had a history of upper respiratory tract infection a week before. She is generally well, and have no other symptoms. You have here is Mark, a final year medical student who are keen to learn the physical examination from you
- YOUR TASKS ARE TO:

 Explain to medical student how you will do physical examination in this patient with anatomical landmark (you may use medical jargon)

Provide your Diagnosis and differentials at 7 minutes



- talk to med student and mention what you are going to do, WIPER (wash hands,introduce yourself, prepare patient and take consent,explain the procedure,offer chaperon,positioning of patient,ask patient to have appropriate exposure of the area that you want to examin)
- General appearance pallor, jaundice, edema, signs of dehydration, signs of bleeding
- Vital signs BP,PR,RR,T
- Rash(size site and distribution,colour,palpate for tenderness,texture, elevation and use glass to check if it is blanchable,oozing, bleeding, discharge,excoriation marks in surrounding skin)
- Hands(nails, palmar erythema,
- Arms(IV drug site, epitrochlear and auxiliary lymphnode(anatomical site)
- Lymphnodes(cervical, supra and infra clavicular and groin lymphnodes, you can mention popliteal as well.
- Face: fundoscopy of eyes looking for any retinal haemorrhage and papille edema) mouth(gum hypertrophy,gingivitis,stomatitis, sign of beeding,tonsillitis and pharyngitis) Neck stiffness
- Chest: resp and cvs examination.check for bone tenderness on sternum)
- Abdominal examination(inspection for brusis and destention, palpation for tenderness and hepatosplenomegaly)
- Genital and rectal exam :inspecting for any rash by consent of pt and offering chaperone
- Joint exam
- Office test(UDT, BSL)
- Don't forget Anatomical landmarks
- List of ddx:ITP, HSP, Meningococcemia, malignancy(leukemia and lymphoma), less likely causes: other infections(EBV,CMV, scarlet fever,....), medication induced rash, dermatitis, psoriasis

### CASE 4

- You are at your GP clinic and 6 year old TOM was brought in by mom, Alice, because he has been limping and unable to bear weight on left side.
- Your Task is to:
- 1. take history from the mother
- Ask physical examination findings from the examiner
- 3. Discuss diagnosis and management

## Ddx:

- Septic arthritis
- Osteomyelitis
- Perthes disease
- Slipped capital femoral epiphysis
- Irritable hip(Transient tenosynovitis)
- Trauma /Fracture
- HSP
- Malignancies of the bone
- Juvenile rheumatoid arthritis



- When did it start? How did it start? Is it getting worse? Is she able to walk at all? Is she bearing weight at all? Any pain? Have you noticed any swelling?
- Well baby questions Has he been crying too much? Drowsy? Tell me about his appetite, eating and drinking in last couple of days Dehydration decrease in Wet nappies/ going to toilet
- Has he had any flu like symptoms lately? (irritable hip & reactive arthritis)
- Anyone smokes around him at home? (R/F of Perthe's- passive smoking)
- Septic arthritis & Osteomyelitis questions ❖ Have you noticed any fever?
   Vomiting? ❖ Lethargy? ❖ Any swelling of any joint in the body? Or pain? Pain in knee → think of hip (referred pain) ❖ Find out the focus of infectionmeningitis, pneumonia, G.E, UTI



- ► Rule out any malignancy ♦ Weight loss, decreased appetite, Lumps or bumps
- Rule out HSP \*Recent viral infection? Rash on buttocks and knees, tummy pain,dark urine
- Rule out Juvenile R.A eye sypmtoms: iritis, scleritis
- R/O trauma
- BINDS Medication + Allergies PMHx- Previous injuries or surgeries Family Hx

# Physical examination:

• G.A + PICKEL (Generalised lymphadenopathy - viral infection / haematological cause) • Vitals (temp) + growth chart/BMI • Musculoskeletal exam- always examine 1 joint above and 1 joint below, compare both sides 1. Gait 2. Look- scar marks, swelling, redness, muscle atropy, deformity 3. Feeltemp, tenderness, CRT, pulse 4. Move- limited internal rotation & abduction of the hip joint 5. Measure- true length & apparent length- shortening of true length 6. Special tests- Roll test +ve in Perthe's (Roll test: with the patient lying in the supine position, the examiner rolls the hip of the affected extremity into external and internal rotation. This test should invoke guarding or spasm, especially with internal rotation.) 1. Office tests- UDS, BSL • Other systems - CNS, Bone tenderness, Abdomen, RS & CVS (Osteomyelitis - Point tenderness on the bone, Septic arthritis- generalized tenderness)

#### Dx and Mx:

From history, PE and x-rays provided to me, your child has a condition called Perthes disease also known as avascular necrosis of the head of the femur. • It is not an uncommon condition, more frequently seen in males. • Because of unknown reasons, the blood supply to the head of the thigh bone is reduced leading to fragmentation and further leading to death. • Sometimes, it is associated with previous history of infection or trauma. • Passive smoking is an r/f • It is good that we have caught it at an early stage to prevent the risk of complications (shortening of leg, permanent deformity and disfigurement, osteoarthritis). Sometimes other joints of the body may be involved (shoulder joint and opposite leg). • We need to admit the child. • Call in the pediatric registrar. They might decide to do further testing CT/MRI/bone scan to determine how much damage has been done. • Your child needs strict bed rest. Don't allow him to put weight especially on the affected leg. Provide him with crutches. We will give him painkillers. • Depending on the severity of the disease, the specialist might decide to put specialized orthopedic support for him. Sometimes, this treatment needs to be continued for an extended period of time (2 years). This is important because your child is in a growing phase and we want to prevent any abnormal, permanent positioning of the head of thigh bone. also be managed by physiotherapist who will teach him some exercises to strengthen the thigh muscles

- A married couple (husband James 25, wife Mary 23 years) have been trying to conceive for the last 12 months. Examination of both the husband and the wife is normal. Investigations arranged by you, from a general practice setting, have shown she is ovulating each month, and has patent Fallopian tubes. The husband's recent semen analysis is not normal. His result is as follows:
- The husband has come to see you today for the result of the semen specimen. His wife is aware of her results. She was unable to come today. When you examined him previously, you found no abnormality on general or genital examination. Both testes were normal in size (20 mL estimated volume), felt normal in consistency, there was no indication of a varicocele or hydrocele.
- Your tasks are to:
- Take a further relevant and focused history from the husband in regard to the results obtained.
- Advise the husband regarding the couple's fertility problem

- Semen analysis:
- Collected after three days of abstinence. Examined 30 minutes after collection by
- masturbation, normal values in brackets
- Volume: 6 mL (2-6 mL)
- Count: 2 million/mL (Greater than 39 million/mL)
- Sperm concentration: 10 /mL (12-16)
- Motility: 20% (Greater than 40%)
- Velocity: 20 microns/sec (Greater than 30 microns/second)
- Abnormal morphology: 95% (Less than 80%)
- Anti-sperm antibodies nil (Nil)

- ▶ I have the reports with me, and would you mind if I ask you couple of question first?
- Do you notice any congenital abnormalities with your genital area? Any medical problem with your genital tract? Do you have any previous genital surgery? Any previous trauma? you have had no surgery to your testes or inguinal region.
- Have you been diagnosed with mumps or any sexually transmitted disease?
   You had mumps when aged 10 years. There was no testicular involvement (give this latter information only when specifically asked).
- Have you been exposed to any environmental toxins or radiation (e.g. pesticides, illicit drug use and chemotherapy)? You have had no contact with any chemicals.
- Do you have any difficulty with erection? Are you able to maintain this
  erection to have adequate inter-course on demand? Does your wife have any
  problem on intercourse? Like pain or irritation? Do you reach orgasm and
  ejaculate during intercourse

- Was your wife being pregnant before your marriage? Do you have any children from previous relationship?
- How often do you have sex? Do you know anything about ovulation time of your wife? (If you have sex, away from this time, even though they try for many years, it wont be successful? • Are you on any medication? You are not on any drugs and have never taken any tablets except Panadolwhen you have a headache.
- How do you feel in general? Do you feel that you are healthy? How is your diet? Do you exercise? Is there any family history of infertility?
- Do you smoke? Or drink alcohol? You do not smoke and have 3-4 glasses of alcohol, usually wine, per week. You have never used any drugs of addiction or hashish. What do you do for a living? You work in an office writing computer programs for the banking industry.

▶ PEFE • GA: evaluation of secondary male sexual characteristics including hair distribution and the presence of breast enlargement. • VS, BMI • Genital examination: • Testis: Check about the site of the testes, any undescended testes, size based on orchidometer, shape, consistency, and presence of vasa and epididymis and tenderness or history of torsion, varicocele, hydrocele, hernia opening. (About 3x4 cm or about 20 mls in volume, the consistency is firm, normal epididymis and spermatic cord, no other pathology) • Check the penis - length, the opening - hypospadias • Any congenital abnormality? • DRE for size and consistency of prostate- very important • Investigations in male infertility

- we have performed sperm analyses, in which we measure the no. of sperms, their motility, their, velocity etc. We have got the reports and there some abnormalities in the report. • • AMOUNT: 2ML -NORMAL • COUNT - 4-6 MILLION/ML (MUST BE 20MILLION) • MOTILITY: 20% (50%) • ABNORMAL SHAPES: 95% (50%) • • Well, one semen specimen is insufficient to make a meaningful prediction of fertility potential. Preferably three specimens obtained about three months apart are required. If these show the same findings as the first one, then clearly there is a problem which is almost certainly a major. factor in the infertility. We need to do another sperm analysis, in 10 -12 weeks. • Sometimes, certain conditions can affect the functioning of the testis like febrile illnesses, stress, and certain medications. Usually these are temporary and on repeating the tests, the sperm count reaches the normal level. So, we will repeat another test at about 3 months' time. • Some precautionsabstinence for 3 days before taking the specimen. When you take the specimen, take the bottle from the lab, don't wash it with water. Don't use any cream or water. After getting the specimen, go straight to the lab. In less than 30 mins, you have to give your specimen to the lab because after 30 minutes, your semen would undergo liquefaction. • If the semen analysis improves spontaneously with time, the possibility of achieving a pregnancy is increased. There is no documented evidence for the use of hormone or other treatment, in improving the semen specimen,
- It is unlikely a cause of the abnormal semen specimen will be found. In 30-40% of cases no causative factor can be found (idiopathic male infertility). A number of blood tests should be performed to provide information as to the likely reversibility of the problem. This would include the measurement of serum FSH, LH, prolactin and testosterone levels. If the FSH is high, spontaneous improvement in the analysis is less likely. This disturbed analysis, may be due to hormonal disorder or imbalance. Something happened to (defect) spermatogenesis. There is an ejaculation disorder (retrograde ejaculation, erectile dysfunction)

- Another cause could be sperm antibody. Please don't worry. There is still a lot hope.
- There is a definite place for the use of IVF, with intracytoplasmic sperm injection in the oocyte (ICSI). This has a pregnancy rate of about 20-40%/cycle. IVF without the use of ICSI has poor results (about 2-5% pregnancy rate per cycle of transfer). • Micro-dissection testicular exploration and sperm extraction (TESE) is a microscopic surgical sperm retrieval technique that allows for more testicular tissue preservation and has a higher rate of sperm retrieval than conventional testicular biopsy • There is a place for the use of donor sperm and performing artificial insemination, if this had been acceptable. Pregnancy rate is about 20% per cycle of insemination. Use of donor semen is cheaper and more straightforward than other methods of treatment such as IVF, but the baby would not contain any of the husband's genetic material. Intrauterine insemination using his poor semen sample has a very poor success rate (about 1-2% pregnancies/cycle of insemination). • If asked whether you would accept the use of donor sperm to achieve a pregnancy in your wife, indicate 'no'. If asked whether you and your wife would accept the use of IVF to achieve a pregnancy, indicate 'yes' • Key issues • Need for appropriate history from husband. • Knowledge of appropriate tests to assess him, and of the possibility of improvement with time. • Need for empathic counselling. • Ability to understand that a definitive cause is unlikely to be found. Critical errors
   Failure to advise that at least a second semen specimen (3) months after the first) must be examined. • Failure to recognise that persisting severe abnormality of the semen specimen as currently obtained will result in a very low pregnancy rate. • Failure to understand that ICSI (within IVF) is the best method of achieving pregnancy using his genetic material

- You are at your GP when 27 yr old Mary presents to you with bleeding from vagina since the past 1 hour. She thinks that she is pregnant as her home pregnancy test has come out positive.
- Your TASK is to
- 1 Further history from patient.
- 2 Physical examination on card
- 3 Explain your diagnosis and management with the patient.



- ► G/A- No signs of pallor, dehydration, bruises/ petechiae.
- V/S- BP with postural drop,PR,RR and temperature all normal
- Abd-No visible distension or mass •no tenderness/ rigidity. BS Normal
- Pelvic exmn;Inspection: of vulva and vagina is normsl
- Bleed red colour, mild ,No clots or tissues/ no vesicles. No sign of trauma.
   Speculum- Cervix •red blood, os is closed Bimanual CMT (negetive) •
   Uterus- size( corresponding) Adnexa- no mass/ tenderness.
- Office test- Urine pregnancy test positive
   Urine dipstick
   BSL are normal

► HISTORY • Ask examiner about vitals. • Bleed- duration, colour, severity, clots/ tissues/ grapes or bubbles/ smelly/ episode/ blood group. • Associated symptoms- tummy pain. • fever • tiredness/ dizziness. • recent infections. • H/O trauma. • Bladder/ bowels. • Period H- LMP, regularity, other issues. • Sexual H- Planning for pregnancy. • Signs of pregnancy( vomiting, breast tenderness). • A/N checks done if any. • Contraception before pregnancy. •

SADMA, diet-( raw meat), pets at home, coffee intake. • , medications- folic acid. • Family H/O birth defects

Stable relation ship. • STI.

#### Mx:

- Threatened Miscarriage. Is when bleeding and occasionally abdominal pain happens before 20 weeks of pregnancy. More than half of the women stop bleeding and will continue to have a normal and healthy pregnancy. Exact cause could be unknown. SAD, excessive coffee use, problems with the placenta feeding the growing baby, infections, injuries, sometimes genetic abnormalities can lead to this. No way to predict a miscarriage
- Management. 1 Refer to hospital. 2 Needs specialist review. 3 Take blood for inv: FBE, UCE, beta HCG, Blood grouping and Rh. Antibodies against rubella STI screen. 4 U/S- check for normal viable pregnancy, rule out other causes of bleed
- If not bleeding heavily/os closed/ U/S showing normal viable intrauterine pregnancy specialist might advice her to return home. Avoid overexerting yourself. Do not insert tampons. Use pads. No sex until symptoms resolved completely for 1 week. Red flags- seek urgent medical advice in ED if bleeds heavily, cramping worsens, if nay passage of tissues, fever and also if you have any of these symptoms during any time of your pregnancy. Follow up U/S after I week.

You are an HMO in a GP clinic where a 40 years old Jenny present to the clinic to collect her biopsy result. She presented to the clinic one week prior as she had a concern with the dark lesion on her neck. Your colleague then decided to do an excision and send it for a biopsy. The biopsy result came out today and result is as follow:

A malignant melanoma with the Breslow depth of 0.75 mm, and Clark stage II This is the first time you meet Jenny.

- YOUR TASKS ARE TO:
- Explain the biopsy result to Jenny
- Provide your short term and long-term management plan

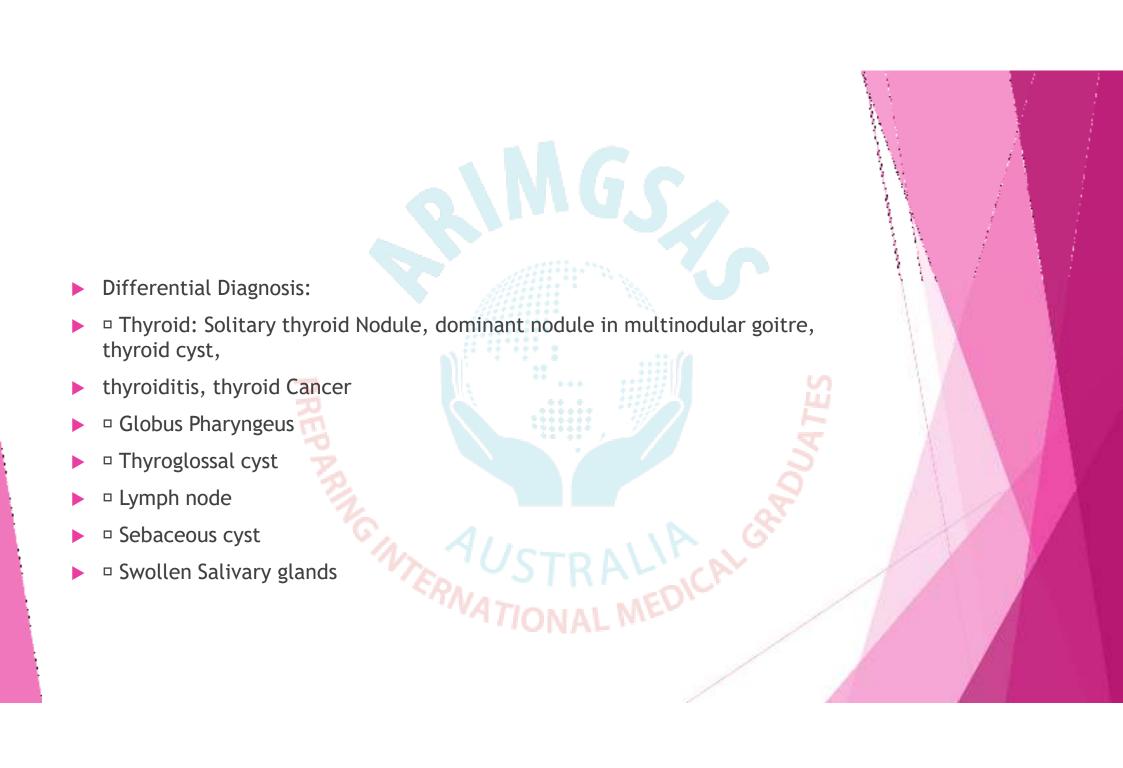


- Explain Melanoma, the extension and importance (explain Breslow and Clarck classification)
- Breslow thickness of <1mm is still considered 'early' so don't dwell too much in breaking bad news part.
- Management in this case will require an immediate referral for re-excision with at least 1 Cm margin. (critical key point)
- Explain the surgical procedure in general and what to expect.
- Sentinel lymph node biopsy and further imaging is generally not required in MM with depth of <1mm. however, you can mention that the specialist may consider to do.
- Long term management will include frequent follow up and education on self-skin check, providing the red flags of 'suspicious lesion' and sun smart advice.
- You can also mention the 5 year survival rate.
- Check ups for first degree relatives annually for a skin check is advised

- Your next patient in the GP clinic is 57 years old Lucas who comes with a complain of neck lump, which has been there for the past 6 months and grow slowly. He has a family history of thyroid cancer, and afraid that this might be a cancer as well. His vitals are stable:
- Your tasks are to:
- Perform an examination of his thyroid gland giving running commentary to the examiner. (You should not take more than 7mins for this task)
- Explain the likely causes to the patient.

- Assess the Stability of patient first Measure BP with postural drop, Pulse, Temp, R/R, 02
- saturation, Sign of dehydration
- ▶ If candidate approach to measure examiner need to give the findings like—
- BP 100/70 mmHg,
- ► □ Pulse—90/min
- □ Rest of vital sign normal
- □ Mild sign of dehydration
- 1. General inspection —
- Any obvious neck swelling
- □ Any Protective posture
- ▶ □ Any signs of distress
- ▶ 2. Hand & tamp; Nails—
- Leuconychia
- Palmar erythema / Sweaty Plams
- □ Thyroid Acropachy
- ▶ □ Fine/Coarse Tremors

- > 3. Arms -Pulse check for the regularity of the pulse./Check Tone, reflexe/ Proximal Myopathy
- 4. Face & amp; Head—
- Look for Thinning or loosing of hair
- Dry Skin
- ▶ □ Loss of outer 3 rd of the eye brows.
- ▶ □ Eyes: pallor; Icterus; Exophthalmos; Lid Retraction; Lid Lag; Ophthalmoplegia
- ▶ 5. Neck
- Inspection: trying to look for the lump; ask the patient to swallow; protrude the tongue
- Palpation: Try to palpate thyroid gland from the back, ask the patient to swallow and protrude the tongue; look for any swelling that the candidate can feel; look for any other swellings in the neck (lymph nodes etc)
- Percussion: try to percuss for the dullness of the retro-sternal goitre.
- Auscultation: look for thyroid bruit
- Special Test: do Pamberton's Sign
- 9. Legs Looking for peripheral oedema; lower limb reflexes; proximal myopathy.
- 10. Conclude by auscultation of heart and lungs.



- Your next patient in the GP clinic is a 6 years old Jake, brought in by his father as he's having a fever accompanied with rash. He is not taking any medication for the condition. On initial assessment, his vital sign is stable.
- YOUR TASK ARE TO:
- □ Take history from the father (you should not take more than 5 minutes for this
- ► task)
- □ PEFE card will appear on 5 minutes
- Provide the most likely diagnosis and other possible diagnosis.

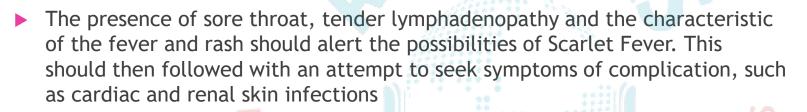
# Physical exam:

- General appearance: alert
- Vitals:
- ▶ HR: 88 bpm
- ▶ ∘ RR: 20 x/min
- ▶ T: 38.4
- ► ENT:
- Ear: tympanic membrane is not bulging, not hyperaemic
- Nose: no discharge
- Throat: perioral pallor, tonsils enlarged, hyperaemic (+), exudate (+)
- Neck:
- Tender lymphadenopathy (submental)
- Skin:
- Rash mainly at the neck and upper limbs, more prominent at the folds with a boiled lobster appearance,
- sandpaper like on palpation
- Cardiovascular; S1/2 normal, no murmur, no pericardial rub
- Respiratory: air entry bilaterally equal, no added breath sound
- ▶ Abdominal examination: soft, non-tender, no organomegaly

#### Hx:

- fever:
- o Occur 3 days ago, suddenly
- o Not sure of the exact degree, but it seems pretty high when you touch his forehead
- o You gave him paracetamol, which made the fever went down for a while, but then get back up again
- o There are no days without fever for the past 3 days.
- rash:
- o Bright red color
- o Not tender or itchy
- o Started around the neck, then spread to the arms
- o Nothing oozing from the rash
- o recognise that the rash is somewhat rough to touch
- also noticed that Jake is a bit tired these days, and have some problem eating for the past 3 days. You also noticed that he has a painful
- red lump on his neck since yesterday.

- ▶ □ The lump is located below the chin, is not particularly large, but it is very tender to touch.sore throat since the past 3 days.
- □ Jake do not have:
- o Seizures
- o Headache
- o Neck stiffness
- o Redness of the eye or any discharge
- o No ear pulling, no ear pain
- o No loss of consciousness
- o No cough or shortness of breath
- o No tummy pain, no changes in bowel habit
- o No other redness on the skin (aside from the rash)
- o No painful urination.
- o No red urine, racing of the heart or swelling anywhere.
- ▶ □ Jake is generally a healthy boy, with no significant past medical issue
- ▶ □ His immunisation history is updated
- generally a healthy and happy family



- give a diagnosis by reasoning what positive findings they found on the history and physical examination findings.
- ► Penicillin for 10 days
- After at least 24 hours of antibiotic exclude child

- ▶ 48 years old Jannet comes to GP clinic with complains of tiredness which started since couple of month ago.it makes her not to be able to do her activities.it gradually gets worse.she lives with her family happily.she doesn't smoke and drinks occasionally .No family history of similar condition.
- a) Take a focused history.
- b) Ask relevant physical examination findings from examiner.
- c) Give Diagnosis and Differentials.

# Physical Examination

- □ 1-General appearance look tired, dull, no coarse features no pallor/thin hair
- □ 2-BMI (27)
- □ 3-Vital signs (PR: 70/min, others: normal)
- ▶ □ 4-Hands
- ▶ □ dry, brittle nails, cold hands.
- □ 5-neck
- ump in thyroid and LN (soft lump in front of neck, no cervical lymphadenopathy)
- □ 7-CNS
- power, tone(Normal) reflex (delayed reflex)
- B 8-CVS Normal
- ▶ □ 9-respiratory Normal
- □ 10-abdomen Normal

H - hemochromatosis, hepatitis □ E - endocrine causes (Thyroid, Addison's, DM) M- malignancy (leukemia, Lymphoma) I- Infections (Infective Endocarditis, HIV, Ross river, fever, Dengue, Malaria) □ F - Chronic fatigue syndrome A - anemia/atypical pneumonia □ D- drugs/ depression O - obstructive sleep apnea □ C - celiac disease



- 1-Tiredness questions
- since when? (a couple of weeks)
- suddenly or gradually?
- Is it progressively getting worse?
- any particular time during the day when you feel more tired? (The whole day)
- has this happened before? (No)
- now does it affect your life? (I cant go to work and have to take off day)
- **HEMIFADOC** Questions

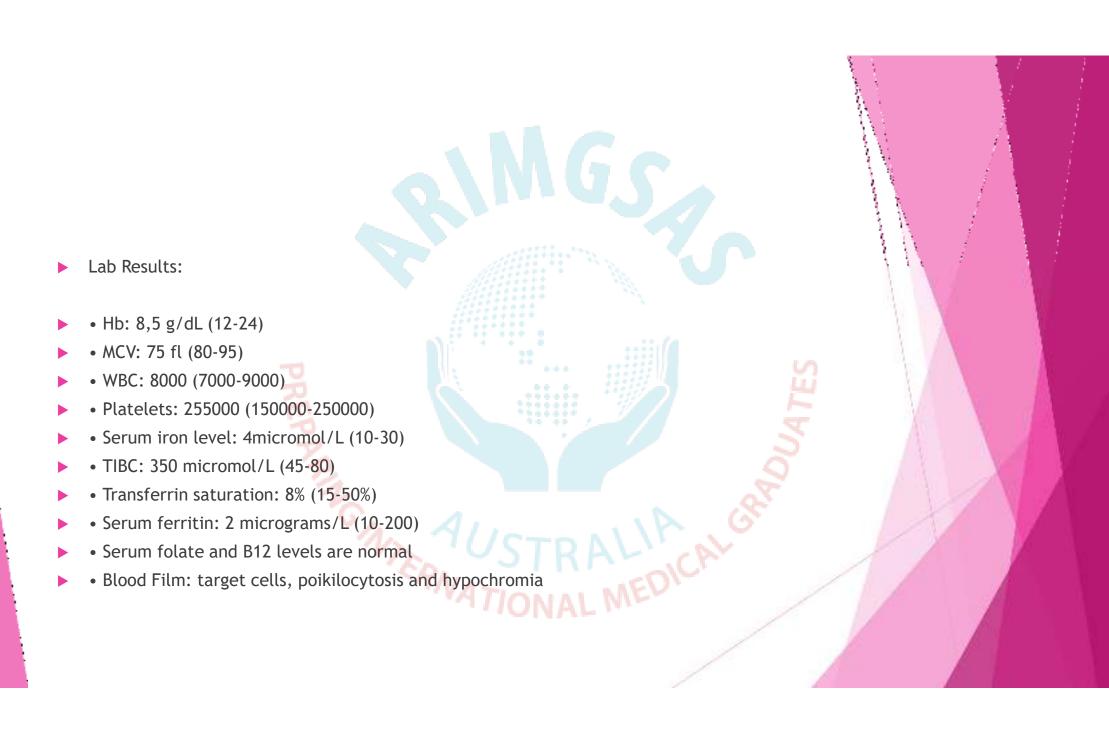
- ▶ 30 year old male presents to GP clinic, referred by the insurance doctor after medical examinations at work. Twice he had high BP readings at work, which settled to normal. He has always been in good health, but has some occasional headaches. After the examination he is worried about having a heart attack, can't sleep properly because of it and has had stabbing chest pains that lasted a few seconds, unrelated to exertion. He took a sleeping tablet last night, which helped him sleep. On examination he has normal BP, cholesterol, BSL, and ECG.
- YourTask is to:
- ▶ 1. Take History
- ▶ 2.Explain patient's condition, give Dx and Management and Answer any questions

- ▶ 1. HOPC, associated Sx, organic DDx, SCADMA
- ALWAYS RULE OUT ORGANIC CAUSES FIRST
- 2. Ensure confidentiality
- ▶ 3. Mood sleep apetite concentration
- ▶ 4. HEADSSS (every case, but selective)
- Most important here: any stress at work or at home, suicidality
- ▶ 5. Psychiatric DDx
- Most important in these cases
- Rule out organic causes:
- ischaemic heart disease if chest pain
- HEMIFADO if tiredness
- DDx of headache
- Rule out depression
- Rule out suicidal ideation

- Differential diagnosis
- Organic causes:
- o thyroid disorders: weather preference, weight change?
- o head injury: any recent injury to the head?
- o infections: any recent fever or infections?
- o substance abuse/withdrawal
- o electrolyte imbalance
- ACS / HEMIFADO / Headache DDx depending on presentation
- Lifestyle stress
- GAD
- Panic attack or disorder
- PTSD
- Adjustment disorder
- Depression

- Explanation
- ► Based on my assessment I believe what you are experiencing is lifestyle stress
- Explain normal effects of stress: physiological and psychological symptoms
- Headaches are the result from muscle tension, BP rise and sleep disruption due to sympathetic arousal
  - Reassure about stabbing chest pain (no warning signs or red flags)
  - Identify sources of stress: overwork, absence of leisure and exercise
  - Identify factors that worsen situation: smoking, alcohol, reduced sleep
- Explain negative role of stress of cardiovascular disease and mental health
- Advise realistic changes for healthier work/personal balance: regular exercise,
- holidays, sleep pattern, hobbies
- Management for mild psychiatric disease:
- Sick leave certificate for work
- SNAP guidelines smoking, nutrition, alcohol, physical activity
- More relaxation: hobbies, holidays, social life
- Sleep hygiene (ASLEEP)
- If necessary, short term benzodiazepines for insomnia (max 2 weeks)
  - Family meeting (with consent)
- 🛂 Centrelink if financial problems
- RRR give reading materials and review soon. No referral.
- Red flags:

- You are a country GP and your next patient is a 57 year old Sandra that came a few days ago complaining about fatigue, loss of stamina, shortness of breath on exertion, weakness, dizziness and pallor. Except for lower back pain for about 6 months which she had been treated with NSAIDs, she had no significant past medical/surgical, family history. The fist time she came you ordered some investigations (FBE, iron studies) and now you have the results.
- Tasks:
- Interpret the investigations to the patient
- Discuss about the provisional diagnosis and DDs with reasons to patient
- Explain management to patient



Lab Results:

- Serum ferritin is the most reliable test for iron deficiency. Serum iron should not be used to give the diagnosis of iron deficiency.
- Explain anaemia with small sized RBCs which is her case, probably due to lack of iron. The blood film showed abnormal shaped RBCs including target cells and they also show decreased colour, indication lack of the pigment that carries oxygen
- DDs of microcytic anaemia
- Thalassemia
- Iron Deficiency Anaemia
- Chronic Disease
- Sideroblastic Anaemia

- DDs for IDA
- Decreased Iron Intake: low socioeconomic status, vegetarian or vegan
- diets, lack of balanced diet or poor oral intake.
- Diminished Iron Absorption: malabsorption (coeliac disease, gastrectomy
- or intestinal bypass, chronic gastritis), medications, that decrease gastric
- acidity or bind iron, chronic renal failure.
- Increased Iron Requirement: growth (young pt), pregnancy, lactation,
- multiparity.
- Gastrointestinal Blood Loss: e.g. medication related (aspirin, NSAIDS),
- malignancy, PU, infections
- Non-GI Blood Loss: menorrhagia, iatrogenic, haematuria, intravascular
- haemolysis

Management

- The essential is to exclude carcinoma of the right side of the colon or PU which are the most important DDs in this patient (age group). Other tests such as faecal occult blood or abdominal US are not required.
- Should perform gastroscopy/colonoscopy, screen for coeliac disease.
- Oral iron therapy, in appropriate doses for a sufficient duration, is an effective first-line strategy for most patients.
- Red cell transfusion is inappropriate therapy for IDA unless an immediate increase in oxygen delivery is required.

Ronnie aged 6 years is brought by her mother Julie to your GP clinic. She tells you that Ronnie had abdominal pain for the last few months and she is quite concerned as her usual GP think that it's not serious and seeks your opinion. On further questioning, Julie describes the pain as intermittent andmainly around the umbilicus sometimes severe enough that Ronnie had to miss school. Ronnie is otherwise well and had no significant medical or surgical problems. Ronnie lives with his parents at

- home and had started school this year.
- TASKS
- ▶ 1. Relevant history
- 2. Examination findings from examiner
- 3. Diagnosis and management

Where is the pain? Can you point with one finger the exact location of the pain? When did it start? How did it happen? What were you doing when the pain started? What type of pain is it? Is the pain travelling to anywhere else? Any associated symptoms like nausea, vomiting, headache or fever? Is it a continuous pain or it comes and goes? Is it related to feeds? Does the pain occur at a particular time? Is it present every day or just on weekdays or weekends? Anything that makes thepain better or worse? How severe is the pain from 1 to 10, 10 being the worst pain? Is this the firstepisode of the pain? Does the pain occur at a particular time? Is it present every day or just on weekdays or weekends? Does the pain wake him up at night?

- Well Paediatric questions. How is her appetite? Any change in her diet? Does she sleep well?
- How is her urination? Any change in the frequency? Any change in colour or smell? Any burning or stinging on urination? How is your bowel movement? Is she passing hard stools? Is it smelloffensive? Is there blood in stool? Is there pain while passing stools?
- Differential Diagnosis questions:
- Constipation
- Childhood migraine equivalent (pain with extreme pallor)
- Lactose intolerance (symptoms related to milk ingestion)
- Intestinal parasites
- Subacute appendicitis
- Psychosocial causes
- UTIs
- BINDS
- Are the immunizations up to date?
- Does her diet contain a lot of fruits and vegetables? Does she drink a lot of fluids?
- Any problems with her growth and development? Is he gaining weight properly? Does it
- affect his sleep?
- Any problems with school? Any problems at home?
- Does she take any prescription or over the counter medications?

- Physical exam questions
- General appearance
- ▶ a. PICCLE
- b. Growth charts (until 12 years old only)
- c. Dehydration
- Vitals signs
- Systemic Exam
- a. Musculoskeletal system
- **b.** ENT
- c. CVS
- d. Respiratory
- e. Abdomen: mass, distention, tenderness, organomegaly, bowel sounds
- ▶ f. Neuro
- Office tests: UDT
- Investigations: FBE, ESR, Urine analysis, TFT, stool analysis (m/c and reducing substances)
- Abdominal Plain X-ray (if constipation is suspected)

#### Management:

From history and examination, your child is most likely having a condition, a non-organic/functional abdominal pain. I can tell this because the child is gaining weight and there is no vomiting, no problem with passing stools, and the child is not constipated.

However, I would like to arrange a few basic blood tests such as FBE, UEC, CRP, Urine analysis and stool analysis. It is very common problem in school aged children. It doesn't have any ill effect on the child's health. So, what you should be doing is, whenever the child gets pain, tell him to take a rest, give Panadoland you can apply local warm packs on the painful area. But the pain is real in the child. Please maintain a diary of whenever the child gets the pain and if it is related to any particular food or diet. The diary should reflect what time of the day the pain occurs, the severity, scoring this from 1 being least severe to 10 being most severe, how long the pain lasts, and what help in relieving it. The numbers of days in a week pain is experienced is recorded. While this may seem to make the child dwell his or her attention on the pain pattern, it also helps to at a stage desensitize him from the effect of pain.

If you find any stressor in school, please let us know, so that we can contact the teacher and find it out. We can arrange a family meeting and involve the child during the discussion. [If there are stressors in the family, do a psychologist referral for insight therapy].

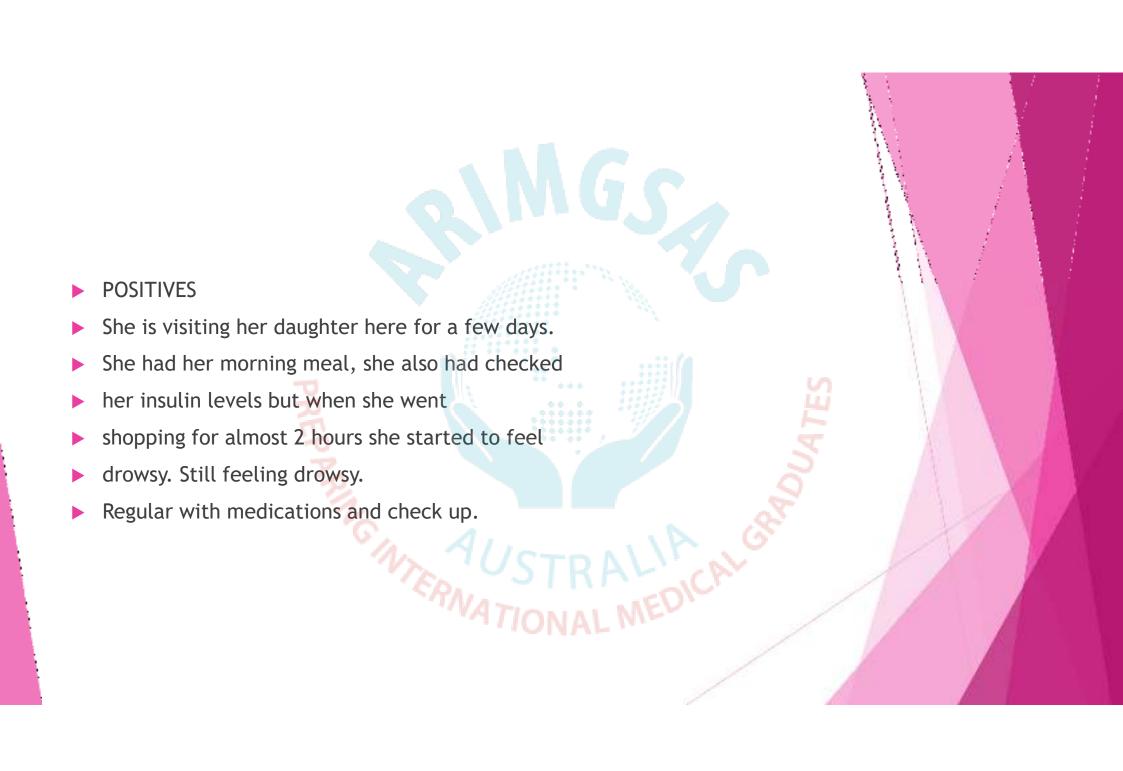
If there is any change in nature of pain, pain persists for hours or any new symptoms develop like nausea and vomiting, diarrhea, pain wakes her up at night then see me immediately. I will review you in 3-4 days to see how the child is doing.

- ▶ 24year old Mike, presents to your GP with complaints of recurrent attacks of shortness of breath. The last attack was on the previous night. He gives a history of a motor vehicle accident 5 months back during which he sustained multiple rib fractures on the left side and also pneumothorax which was treated at the hospital with chest drain and antibiotics.
- □ Tasks
- ▶ 1 Further history
- 2 Most likely diagnosis to patient discuss management with patient.

- Regarding SOB- duration, aggravating/ relieving factors, orthopnoea,
- paroxysmal nocturnal dyspnoea, associated symptoms like chest pain,
- palpitation, dizziness, cough, fever, leg pain, recent travel.
- □ Confidentiality
- Details (had a near death experience)
- Anybody lost lives
- Chest injuries healed well or not
- □ Regular reviews/ concerns
- Property in the incident in the form of night mares and flash backs
- (yes)
- □ Avoidance of similar situation ( yes)
- □ Increased arousal state (yes)
- □ Tremor, sweating, racing of heart.( panic attack)
- a All psych history (worried mood, difficulty to initiate sleep, poor insight)
- □ HEADSS ( abuses alcohol)
- Past mental illness, F/H

- Anxiety disorder now included under trauma and stress related disorders in people who had experienced or witnessed a severe, distressing, psychological event.
- ▶ □ Features- nightmares, flash backs, avoidance of
- similar situation and increased arousal states.
- Physical symptoms due to mind-body relationship.
- □ Referral to psychologist- CBT (Trauma based)
- psychotherapy)
- Lifestyle modifications- diet, exercise, relaxation
- techniques, sleep hygiene, SAD management
- □ Family meeting
- Support groups
- □ Referral to psychiatrist-SSRI if CBT does not work or
- ▶ if comorbid symptoms.

- ▶ 40 Year old lady, Mathilda, was diagnosed with Diabetes 7 years ago, lives in a rural area, currently visiting Melbourne. She presents to your ED complaining of sudden drowsiness. She is on Insulin and Oral hypoglycemic agent.
- ► Task:
- o Take history
- o Immediate Management
- o Long term Management





- HISTORY
- Hey Mathilda, I'm sorry you had drowsiness I would like to discuss in detail about it
- but could I have a moment to check up on you before we start?
- Examiner, would like the know HD Stability of my patient and the Blood Sugar
- Levels.
- I would like to give Mathilda 6 jelly beans, start IV lines and continue monitoring
- vitals and check BSL after 15 mins.
- Insulin and Meal Qs: What were you doing when this happened? Is it the first time?
- ▶ When was your last check with the Specialist? Past history of hospitalization due to
- hyper or hypoglycemia? Did you take your meal in the morning? Check insulin levels?
- DD Qs: Did this happen when you suddenly got up from a seated or lying down
- position?
- Were you in a crowded place? Did you blank out?
- Any funny racing of your heart? Chest pain? Shortness of Breath?
- Vision problems? Heart attack in the past? Any pins & needles? Weakness?

- IMMEDIATE MANAGEMENT & LONG TERM
- MANAGEMENT
- ▶ Rule of 15 (If patient is symptomatic OR BSL <4.0 mmol/L
- Provide 15 g of quick-acting carbohydrate that is easy to consume
- (eg half a can
- of regular non-diet soft drink, half a glass of fruit juice, three
- teaspoons of sugar
- or honey, six or seven jellybeans, three glucose tablets).
- ▶ Wait 15 minutes and repeat blood glucose check if the level is not
- rising, suggest
- eating another quick-acting carbohydrate from the above list.
- Provide some longer acting carbohydrate if the patient's next meal
- is more than
- ▶ 15 minutes away (eg: a sandwich; one glass of milk or soy milk; one
- piece of fruit;
- two or three pieces of dried apricots, figs or other dried fruit; one tub
- of natural low
- fat yoghurt; six small dry biscuits and cheese).
- Test glucose every one to two hours for the next four hours.

- ▶ > If the patient is symptomatic, but the blood glucose or capillary glucose
- cannot be performed to
- confirm that the episode is due to hypoglycaemia, treat the patient as if they
- have hypoglycaemia
- ▶ If the patient cannot safely swallow 15 g of carbohydrate due to their
- reduced conscious state,
- consider the administration of 1 mg of glucagon intramuscularly or
- subcutaneously into the thigh,
- buttock or upper arm.
- ► After 15 mins if BSL rises to >/=4 mmol/L then check in an hour again. Go
- for Post
- hypoglycaemia check up and review of medications.
- Hypo kit: BSL Monitoring equipment, 6-7 Jelly beans (Short acting), A
- Sandwich (Long acting)
- Identification Band, let people around you know the signs and symptoms
- and what to do in each
- case.
- Check your BSL before driving always.
- Red flags: Loss of coordination, drowsy, slurring of speech, seizures.
- ► If unconscious: 50 D 20-30 ml
- ► IV/IM/SC 1ml Glucagon

- You're an HMO and a 58 years old lady Alisha has
- come to see ED for dizziness and palpitation which started 3 hours ago.this is the second time that she experience it.
- Tasks:
- a. Take relevant history.
- b. Ask for physical examination from the examiner.
- c. Ask for ECG from the examiner.
- d. Discuss about your provisional diagnosis and DDx. with the patient.

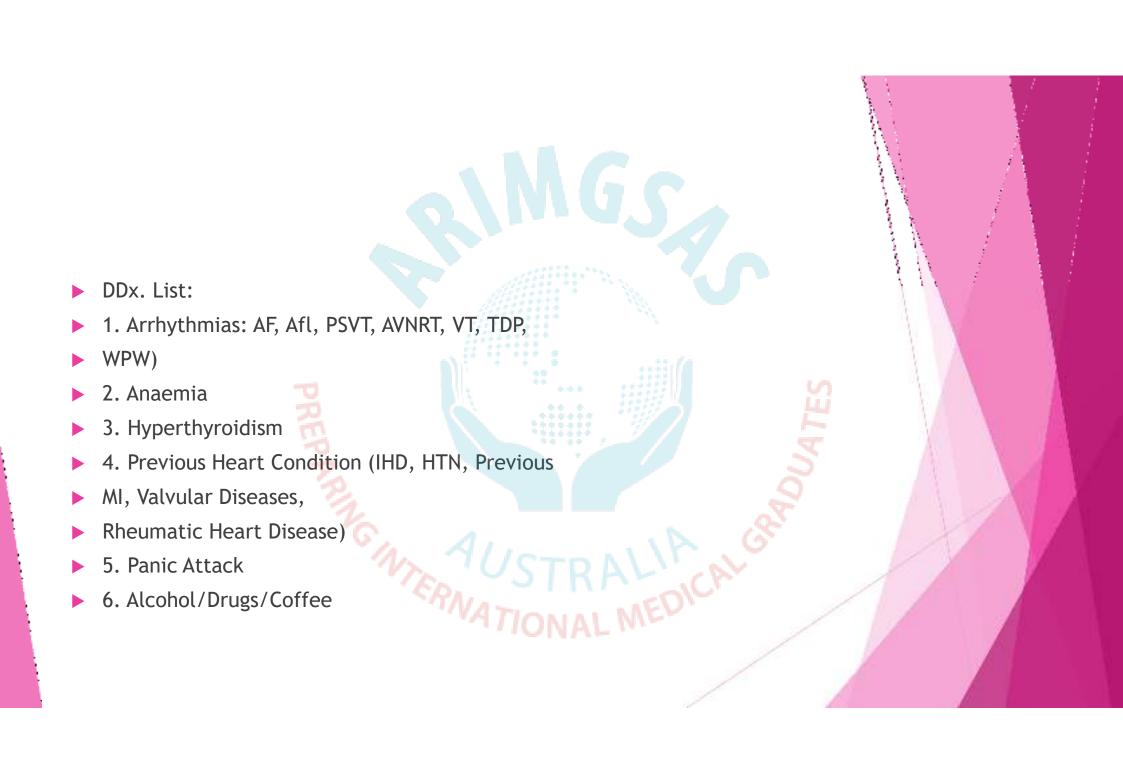
- Physical examination card:
- General Appearance: Patient is restless and irritable.
- V/S: PR: 150/min, irregular, BP: 140/80, RR: 22, T: 37C
- BMI: 31
- Thyroid is normal on examination.
- CVS examination:
- Inspection: Apex beat not visible
- Palpation: no thrill or heave
- Auscultation: Tachycardia with Irregular heartbeat,
- without any added sounds or murmurs
- Pedal Oedema: Negative
- JVP: Normal
- Lungs are clear without any added sound.
- Abdomen: soft, non-tender, bowel sounds were normal

25 mm/s

- History:
- Ask the patient to tap on the table to show their hear beat but
- there's a high chance that they will refuse to do so.
- Define vertigo vs. dizziness. Ask the patient to tap on the table. Ask if
- it's the first episode or not, how long it usually lasts. Ask what he was
- doing at the time of the attack. Does he know what brings them on?
- Any SOB, chest pain, LOC, N/V? Any stress? Previous history of
- recurrent sore throats? Ask about the amount of coffee and energy
- drinks used during the day. Ask about age of menopause to rule it out
- as a DDx. Ask SADMA

Diagnosis: Atrial fibrillation Atrial fibrillation is an irregular and often rapid heart rate that can increase the risk of stroke, heart failure and other heart-related complications. During atrial fibrillation, the heart's two upper chambers (the atria) beat chaotically and irregularly — out of coordination with the two lower chambers (the ventricles) of the heart. Atrial fibrillation itself usually isn't life-threatening, it is a serious medical condition that sometimes requires emergency treatment. It may lead to complications. Atrial fibrillation can lead to blood clots forming in the heart that may circulate to other organs and lead to blocked blood flow (ischemia).



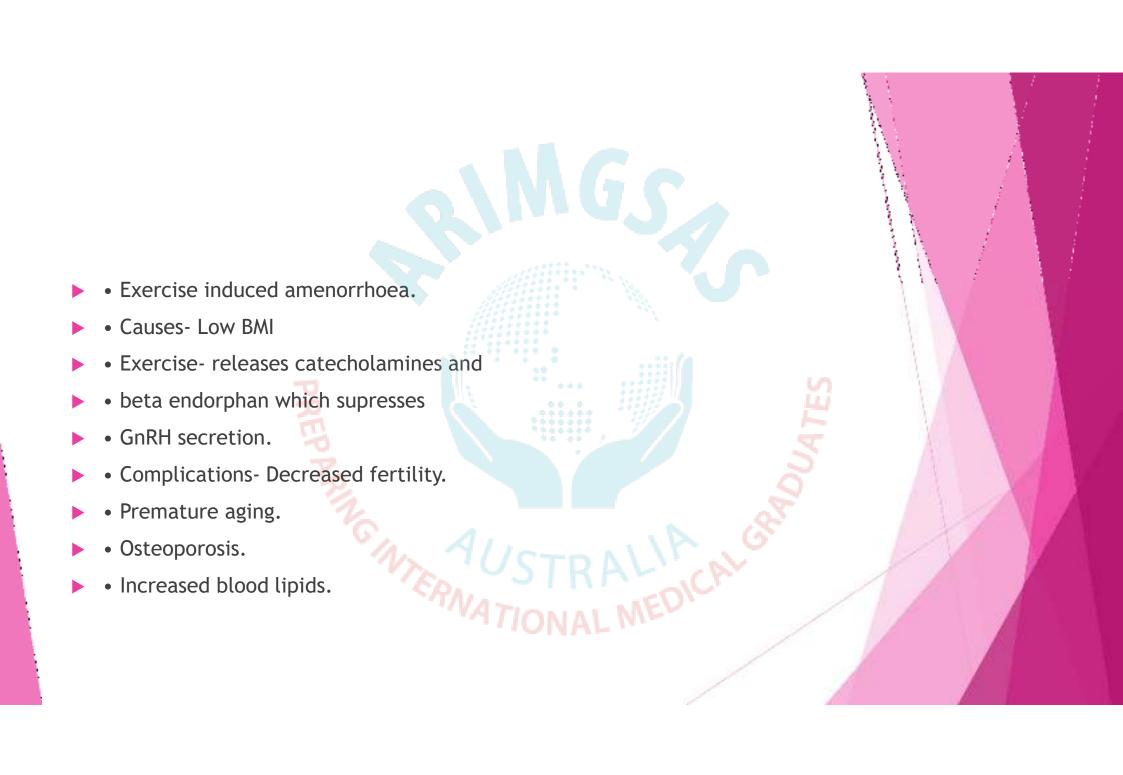


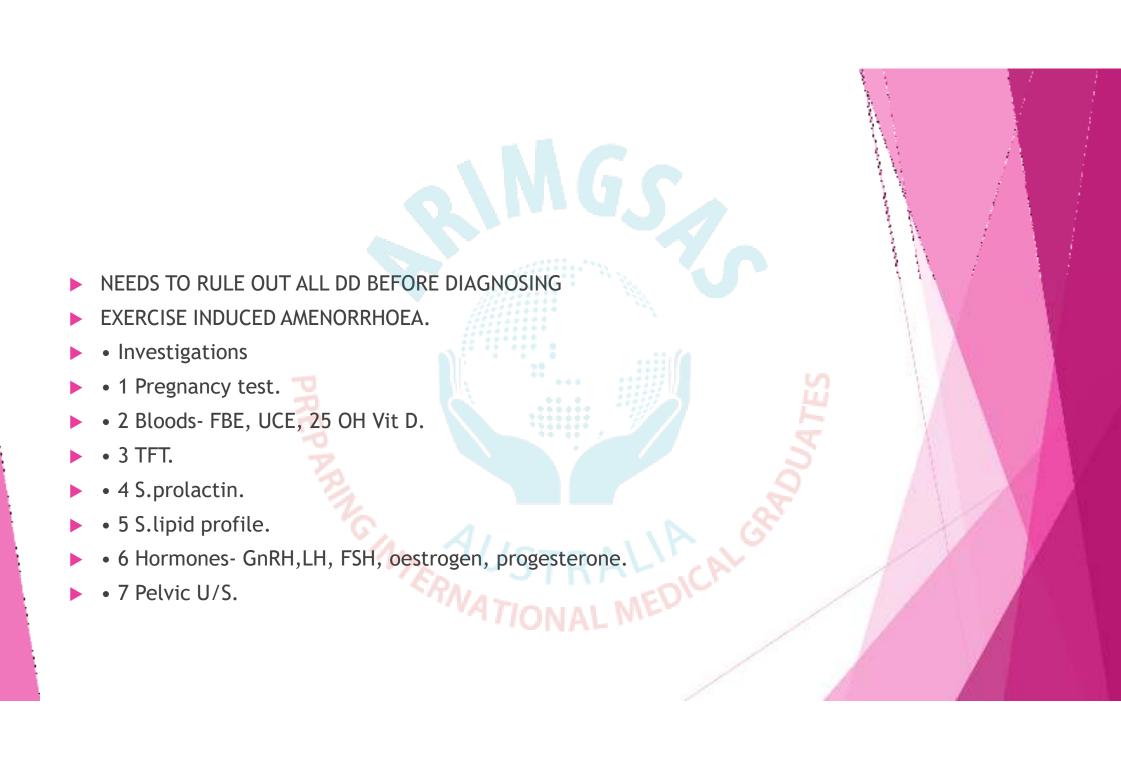
## Case 17

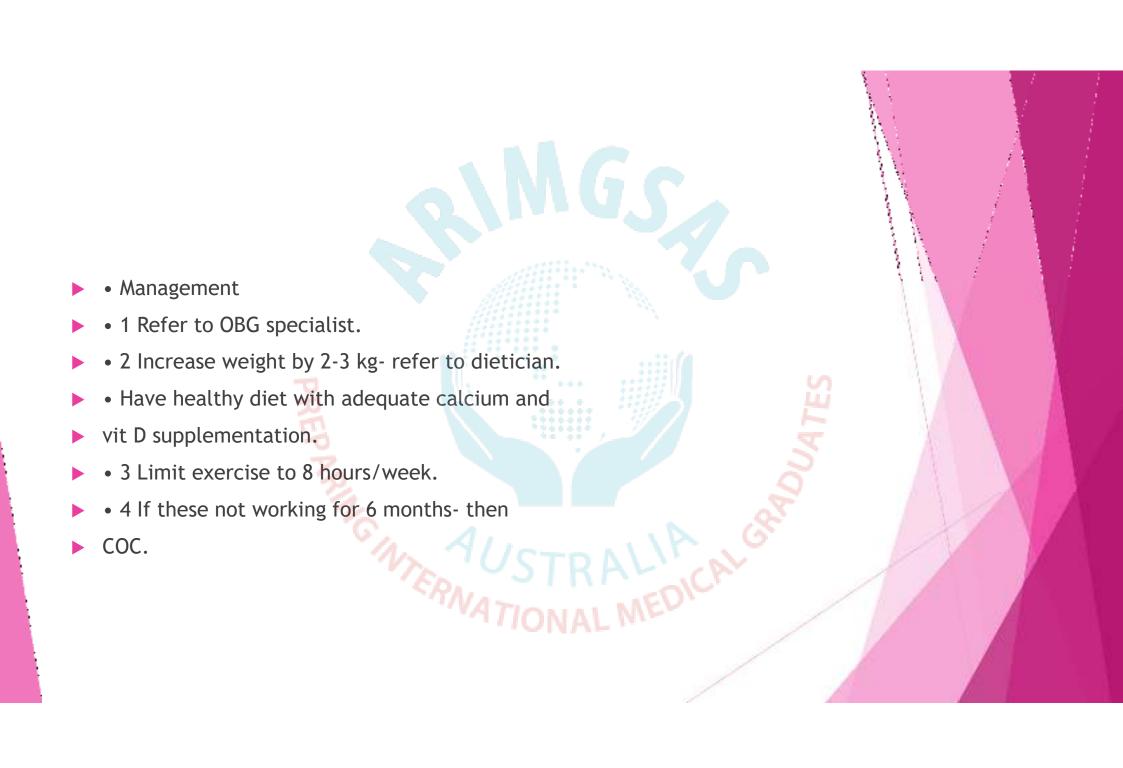
- Maria, a 25yr old, is your next patient at your GP. She complaints of absence of periods for the past 4 months. She has come to you as her husband wants to start a family soon.
- TASKS
- 1 Further history from Maria.
- 2 Explain the condition to her giving her the reasons.
- 3Discuss further management with her.



- H/O periods- menarche, regularity, severity, pain, clots.
- Sexual H- R/o pregnancy, use of oral pills.
- PCOS- weight gain, acne, hirsuitism.
- Premature ovarian failure- menopausal symptoms.
- Thyroid- weather preference.
- Hyperprolactinemia- headache, blurring of vision, nipple discharge.
- · Eating disorders- crash dieting.
- Exercise- number of hours of exercise (+VE FOR SWIMMING 5 KM /DAY)
- BMI (19)
- Stress at work/ home.
- Other M/S illness.
- Medications.



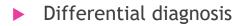




## Case 18

you are an HMO in ED and your next patient is a 48-year-old female, Rya, with chief complaint of right upper side tummy pain which startedlast night after having dinner.she has nausea but hasn't vomited yet.

- Tasks
- History
- PEFE
- Diagnosis and Differential
- Investigations

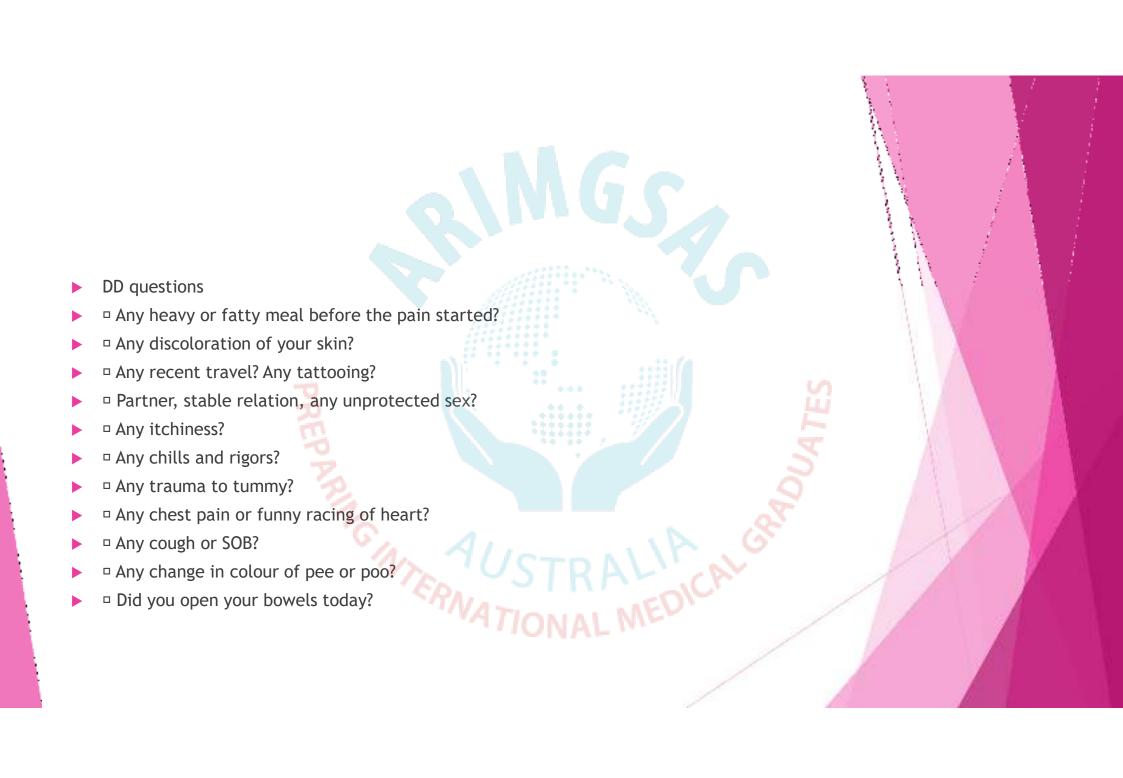


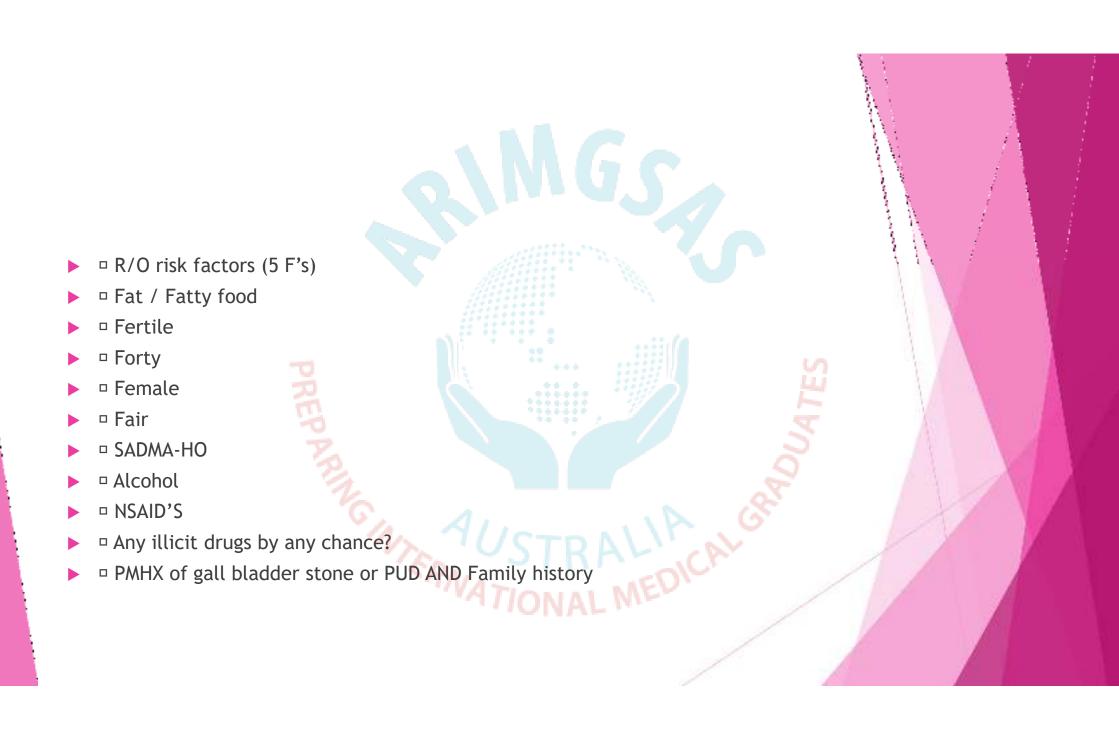
- Cholecystitis
- Cholangitis
- Hepatitis
- □ Hepatic Ca
- Pancreatitis
- Pancreatic Cancer
- ▶ □ PUD
- □ Pyelonephritis, ureteric colic
- ▶ □ LL pneumonia
- ► □ MI

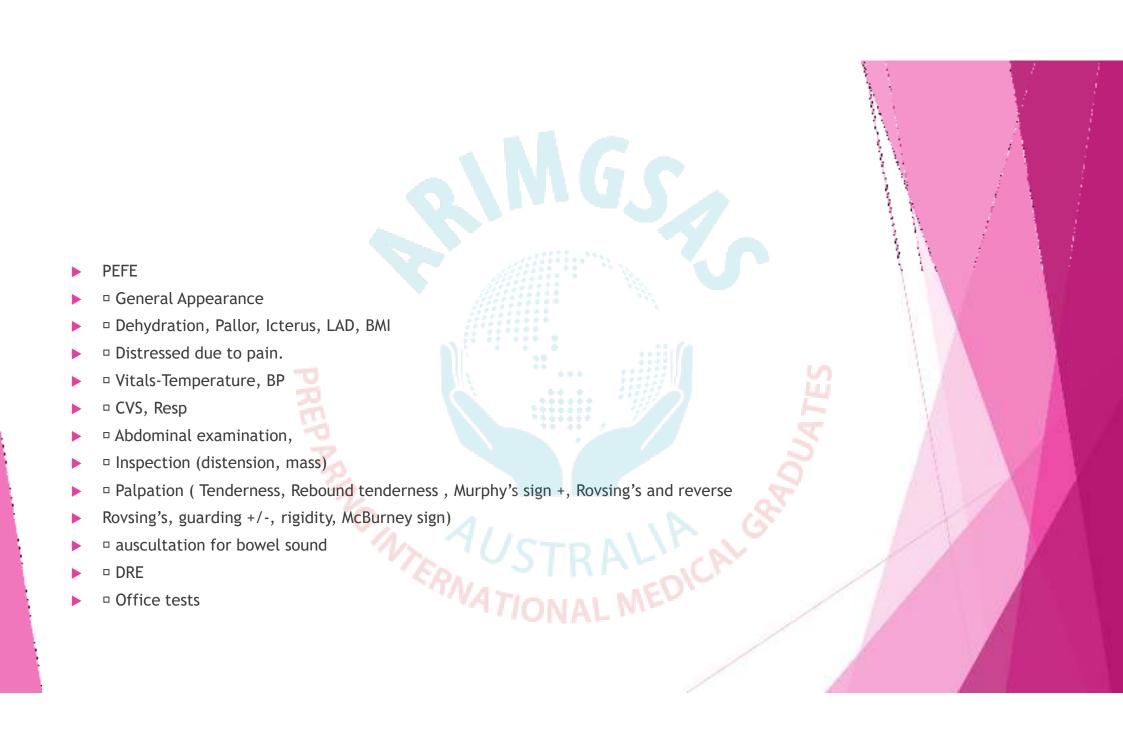












Diagnosis and differentials There could be many reasons for your abdominal pain but From your history and examination most likely you have a condition called as cholecystitis, inflammation of a gallbladder .Gallbladder is an organ that stores bile which is secreted from liver and needed for digestion . I was even thinking about cholangitis, but you do not have fever, chills...., Hepatitis but no yellowish discolouration of skin-----all other DD's. I would like to run some investigations to confirm my diagnosis USG( pericholecystic fluid, >4mm gallbladder wall thickening) □ Full blood examination - LFT Lipids Serum Lipase / Amylase □ X-rav Treatment > INITIALLY (applies to all acute abdomen cases) ➤ Bed rest > IV fluids > NPO > Analgesia > Antibiotics □ when inflammation is settled → Cholecystectomy