Family Medicine Questions

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Note: Some of the questions were answered based on the Past Year Questions, and some of them were based on the slides, I tried to be accurate as much as I could.. best wishes!

Introduction

• EBM: Define, steps, talk about it:

- how to actually practice EBM (Steps)? 5 A's

Asking

A~~ssessing~~

Appraising

Applying

Accessing

- Levels of EBM:

Level	Definition	Example
A **V. Strong**	Recommendation based on *consistent* and good quality patient oriented evidence	Meta-analysis
B **Acceptable**	Recommendation based on *inconsistent* or limited quality patient-oriented evidence	Case (CC) /Cohort
C **Weak** **Evidence**	Recommendation based on *consensus*, usual practice ,opinion, disease-oriented evidence and case series for studies of weaker diagnosis, treatment, prevention or screening	Expert opinion

• **Define**:

- Case control:

compares people who have a specific disease (cases) with those who do not (controls) to establish whether their past exposure to possible disease RF differed

- Meta-analysis:

Uses statistical techniques to combine evidence from different studies to produce more precise estimation of the intervention effect on the accuracy of a test.

- Systemic review:
summary of evidence in which 1ry studies are systematically identified, apprized according to its rigorous scientific methods to eliminate systematic bias or random errors

- EBM:
integration of best research evidence with clinical expertise and patient values

- Cohort study:
A study which follows forwards over a fixed period of time two groups who have different exposure to an agent of interest but are otherwise matched

- Family Medicine:
medical specialty that provides **continuing** and **comprehensive** health care in a **personalized manner** to all ages and families regardless of the presence of disease or nature of the presenting complaint

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• Primary care characteristic:
5 A's, 3 C's:
-**A**vailable
-**A**ccessible
-**A**ffordable
-**A**ppreciated and understood
-**A**ccountable
-**C**omprehensive
-**C**oordinated
-**C**ontinuous

• Family Physician Skills:
1) The solution of undifferentiated problems
2) Preventive skills
3) Therapeutic skills
4) Resource management skills

Prevention

• Levels of prevention and example of each one:
–Primary Prevention: sanitation, immunization, health education.
–Secondary Prevention: Identifying presymptomatic disease (or disease risk factors) before significant damage is done e.g. screening.
–Tertiary Prevention: Management of established disease so as to minimize disability e.g. treatment of hypertension to prevent stroke.
–Screening: detect condition before symptoms occur in the hope of altering the natural history of the disease. It is an application of certain procedures to population by doctor initiative with the aim of identifying asymptomatic disease or people at particular risk from it.

• Quaternary prevention, definition, 2 examples:
- Definition: it is a process that explicitly considers and thus enables avoidance of iatrogenic harm, 'an action taken to identify a patient or a population at risk of overmedicalization, to protect them from invasive medical interventions and provide for them care procedures which are ethically acceptable.

• 65 yo man/woman, what are the screening tests, PMH Free?
• 68 years old woman has children, came to the clinic just check-up?
• 68 years old man, what are the preventive services to do?
• Screening tests for 45 year old female:
• Screening tests for 50 year old female:
• pt is 68 year old, what preventive care are you going to provide her?

Specific for the male	Specific for the female
- *Colorectal cancer*: Colonoscopy every 10 year after 50, Sigmoidoscopy every 5 year - *Prostate cancer*: at age 50, (if high risk at 40-45 yr), done every 2-4 y	- *Breast cancer* – mammogram (>40 years, every 1-2 years) - *Cervical cancer* – Pap smear (between 21-65 years every 3 years) - *Osteoporosis*: <65 yr (if RF present, and all >65 yr)

For both	- Hypertension - Dyslipidemia – lipid profile - Diabetes - Thyroid diseases - Vision and hearing screening
Adult vaccines	- Influenza: annually for all adults - Td/Tdap: for all adults >19 - Varicella: >13 yr - HPV: up to 26 yr in female, and 21 in males (3 doses) - Zoster: >50 yr - Pneumococcal: 19-64 yr (with risk), and all >65 yr - Hepatitis vaccine

• Risk factor for CVD:
- Smoking
- Old age >50
- Obesity >30
- Sedentary life-style
- HTN
- Dyslipidemia
- DM

• How to assess CVD risk:
- by using Framingham risk score

• Prevention and screening in 9th month age:
- Vaccinations are mentioned below
- Screening: mainly Developmental assessment (Separation anxiety, pincer grasp, start to crawl, standing with support)

• *Mention screening tests done for a newborn:* ➢ Congenital Hypothyroidism ➢ Benign Hyperphenylalanemia ➢ Phenylketonuria ➢ G6PD	➢ Hearing problems ➢ Transferase Deficient Galactosemia ➢ Retinoblastoma ➢ congenital cataracts

• Primitive reflexes at 3 month of age:
- Asymmetrical tonic neck reflex (ATNR – 3-4 month)
- Plantar grasp
- Palmar grasp (3-6 month)
- Mororeflex (3-6 month)

• 27 yo female 165 cm, 82 kg, BMI 30, RBS 120, TG 155, BP 135/80, what medical diseases she might develop?
- DM - HTN
- Dyslipidemia

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o What vaccines are given at each age?
• 1st contact: BCG
• 2nd month: DTaP, HiB, HBV, PCV, IPV, Rota
• 3rd month: DTaP, HiB, HBV, PCV, IPV, Rota, OPV
• 4th/5th month: DTaP, HiB, HBV, PCV, Rota
• 6th month: Td
• 9th month: OPV, Measles, Vit.A
• 12th month: MMR
• 18 month: OPV, DTP, Vit.A, MMR
• 6 years: Td, OPV
• 16 years: Td

Vaccine	Age group
BCG	At Birth
DTaPHiBHBV	2,3,4 months
DTwP	18 months
PCV	2,3,4 months
OPV	3,4, 9, 18 months; 6 years
IPV	2, 3 months
Measles	9 months
MMR	12, 18 months
Rotavirus	2,3, 4 months
Td	6, 16 years
VitA	9, 18 months
Influenza	Children and elderly

• measure the percentile of the head circumference ,length ,weight

• A woman presents to the clinic with two children with questions about the influenza vaccine. The first child is 4 months old and the Second is 5 years old. What is your recommendation regarding vaccinating for influenza to these children?

- 4 Months old: Don't give the vaccine
- 5 Years old: Give the vaccine

o Contraindications of vaccines/Absolute/Relative/False/True

Contraindications	Misconceptions
Absolute: • Serious allergic reaction (e.g., anaphylaxis) after a previous dose of the same vaccine • Serious allergic reaction (e.g., anaphylaxis) to a vaccine component **Relative**: • Moderate to severe acute illness, with or without fever • History of Guillain-Barre syndrome within 6 weeks of previous influenza vaccine	Contrary to misconception, vaccine administration is acceptable in the following clinical scenarios: • Mild acute illness, with or without fever • Mild to moderate local reaction or low-grade to moderate fever after previous dose • Current antimicrobial therapy • Convalescence from acute illness • Recent exposure to an infectious disease • History of penicillin allergy • History of other non-vaccine allergies • Relative with vaccine allergy • Receiving allergen immunotherapy Mild egg allergy (e.g., rash) is not a contraindication to injectable, inactivated influenza vaccine.

• Pt came to your clinic, and you had his test results, name 3 things that you will have to warn the pt about and start treating him?

1-Pre DM
2-Pre HTN
3-dyslipedemic

• A 30 year old male patient came to the clinic for the first time. He has no complaints, and no personal history or family history of DM, HTN, or CHD. At what age would you start screening for:

- DM? 45
- HTN? 18
- Dyslipidemia? 35

DM

• Care for diabetic foot:

- Counseling yearly, examine it
- Wear fitting shoes, clean dry socks and change them daily, Wear socks to bed.
- Shake out your shoes and feel before wear.
- Bathe feet in warm, never hot water. Be gentle
- Moisturizing by cream but never BTW toes
- Cut nails in horizontal line
- Keep away from toys, from heat source.
- Never treat cones or calluses yourself .
- Never walk barefoot.

• Types of DM: DM I, II, Gestational, MODY, LADA..

• Risk factors:

1) Obesity
2) Family history of D.M
3) Age > 40 years plus one other high risk condition
4) Previously identified I.G.T
5) Hypertension, Hyperlipidemia
6) Gestational DM Hx or delivery of macrosomia baby over 4.5 kg
7) Classic symptoms, polyuria, polydipsia, Fatigue,
8) Recurrent skin, genital or U.T.I

• DM Tests/Tests Done for follow up:

- FPG
- 2 hr blood glucose
- Random blood glucose
- A1C
- LFT
- OGTT
- Hemoglobin A1C
- Fasting lipid profile
- Serum creatinine, GFR
- TSH

• Medications (Groups +1 Example):
- Biguanide – Glucophage – Metformin (initial)
- GLP-1 receptor agonist – Dulaglutide, Liraglutide, Albiglutide
- Basal insulin
- Sulfonylurea – 1st gen.: Tolazamide, 2nd: Glipizide, 3rd: glimepride
- Thiazolidinedione – Rosiglitazone, Pioglitazone
- DPP-4 inhibitors – Sitagliptin, Vildagliptin, Saxagliptin, Linagliptin
- SGLT inhibitor – Canagliflozin, Dapagliflozin

• Question about OGTT (Oral glucose tolerance test) Curves:
- for equivocal and during pregnancy
- irrelevant for symptomatic patients
- administered after at least 3 d of unrestricted diet
- blood sample is taken and 75 gm of glucose in 250 mls of water is administered, 2 hr after the blood sample is taken

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• Fasting blood glucose first read 110 A week after 120 What's is your management? Pre-diapetic, we give metformin & manage lifestyle and risk factors, and repeat the test

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• 60 years old male his HbA1C 7.5, blood pressure 145/80, pulse 80 , otherwise normal, What drugs you will prescribe?
- Metformin for DM
- ACEI for HTN

• How would you educate the pt once he's been diagnosed?

• What steps would you take to Mx someone who has HBA1C of 7.5?
- lifestyle
- try monotherapy: metformin

• What are the 4 diagnostic tests for DM?
A: 1- Fasting plasma glucose >=126 (7.0 mmol/L)
2- 2h plasma glucose >=200 (11.1 mmol/L) during OGTT
3- HBA1c >= 6.5
→ In the absence of symptomatic hyperglycemia, the diagnosis of diabetes must be confirmed on a subsequent day by repeat measurement, repeating the same test for confirmation. However, if

2 different tests (eg, FPG and A1C) are available and are concordant for the diagnosis of diabetes, additional testing is not needed
4- Classic diabetes Sx (thirst, polyuria, weight loss, blurry vision) + random plasma glucose >=200 ➔ from the first time

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• 26 year old patient presented to clinic to do FBG, the lab reveal FBG (110mg/dl), PMH (free), FH (free)
- What is the diagnosis? Pre-diabetic
- What is the management? Lifestyle modification, metformin

• Pt complains of polyuria , polydipsia ….his fasting blood sugar was 135mg/dl and BP 145\95
- What is the diagnosis? Diabetic + Hypertension
- What is the goal blood pressure for her according to JNC8? < 140/90

• 27 yo female, 165 cm tall, 82 kg, BMI 30, random blood sugar was 120, triglycerides was 155, BP was 135/80, what are the medical diseases she's at risk of developing?
- HTN – DM - Dyslipidemia

• A 42 year old female patient presents to your clinic. She has a history of DM. Lipid profile reveals the following:
LDL = 200 mg/dL
HDL = 34 mg/dL
Triglycerides = 190 mg /dL
- What is the ideal LDL to this patient?
It should be less than 100 mg/dL
- Mention 2 ways to raise this patient HDL.
Life style modification: Appropriate diet, exercise (150 min/ week) …,
We can also give medications to raise the HDL: (eg. Niacin)

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o Case about woman how have BMI:27 and her mother and sister had gestational DM.
• Write 2 advices to her to prevent her from having gestational DM?
- lifestyle, lower BMI, screening,..
• What the risk factor for Gestational DM in this woman?
- FHx, BMI

• When we should do test for gestational DM in pregnant woman?
- between 24-28 weeks (3rd trimester)

• BP 125/89, FBG: 110 a week after it became 120, what is your Mx?
- pre-diapetic: lifestyle + metformin

• Complication of DM micro and macro:
- micro: nephropathy, neuropathy, retinopathy
- macro: brain and heart: CVD, PVD, Stroke..

HTN

• 8 years' boy, his BP 110/65 How would you manage him?
- I think there is something wrong with the question, but any way we manage by adjusting lifestyle for 6 months before giving medications

o Hypertension main drug groups: ACEI/ARBS, thiazide diuretics, CCB

• ttt of HTN with DM:
- DM: Metformin
- HTN: ACEI

• ttt of HTN with MI:
-B-blockers
-ACEI
-LMWH(enoxaparin)
-Aspirin

• ttt of HTN with HF:

a) HFrEF (Systolic HF):
- beta-blocker: Bisoprolol, Carvedilol +
- ACEI/ARBS +
- Aldosterone antagonist +
- Loop diuretic (if fluid overload),
- CCB not recommended

b) HFpEF (Diastolic HF):
- Beta-blockers no longer used as monotherapy
- we give Diuretics to control HTN
- if persistent after Mx of volume overload: give ACEI/ARBS/BB

• ttt of HTN with stroke:
- the aim to prevent further attacks
- Diuretic + ACEI

• ttt of HTN with CKD:
- ACEI/ARBS

• A HTN case BP150/90 How to confirm it?
- Home: 10-14 reading and take the average
- Office: 3 constitutive reading above >130/>80 in office and 1 week duration between every reading
- ABPM, and take the average
• What is the investigation you want to do for her? Mentioned below

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• Mention 5 causes if secondary HTN:
- Renal Causes, OSA, COA
- OTC medications: OCP, corticosteroids, NSAID, Anti-depressants
- Illicit drug use: Cocaine
- Cushing, primary aldosteronism, Pheochromocytoma
- Other Endocrine: Hyper/Hypothyrodism, CAH

• Mention 5 causes of drug induced HTN:
- OCP
- NSAID
- Anti-depressants
- Corticosteroids
- Tacrolimus
- Erythropoietin
- Weight loss medications

• a patient is newly diagnosed with hypertension, what investigation would you like to order ? Mentioned below

• what lifestyle modifications are you going to advise about?
- Exercise
- DASH Diet
- Stop smoking, alcohol
- Reduce Weight

• When we exclude secondary HTN: “Signs of primary/resistant”
- Extreme age
- Family history
- Resistance HTN
- S/Sx of secondary causes

• Patient with BP 180/100 and heavy smoker aged 59, how to manage and what preventive tests you would do.
- Mx: life-style modification with combination of anti-hypertensives
A: I forgot the scenario and if he was asymptomatic or with end organ damage > the management differs.
- Preventive tests : life style modification / CVS risk assessment / DM screening/ colorectal cancer screening / lung CT for lung ca / Abdominal U/S for AAA / Lipid profile

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• Drug of choice for 53 yo hypertensive woman: Thiazide diuretics

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• Complications of HTN: (TOD)	- Kidney: CRF
- Heart: LVH, Angina, MI, HF	- Blood vessels: PAD
- Brain: Stroke, TIA	- Eyes: Retinopathy

• Define HTN:
- persistent, no physiologic elevation of systemic blood pressure
• Stages of HTN:
- Normal: 120/80
- Elevated BP: 120-129/<80
- Stage I: 130-139/80-89
- Stage II: >140/90
- Emergency: >180/120 + TOD

o Investigations for HTN/Investigations of newly diagnosed HTN:

• Basic lab tests:

- Electrolytes
- Serum Creatinine
- Fasting glucose
- FLP (Fasting lipid profile)
- TSH
- Urine dipstick
- ECG

• Optional:

- Echocariography
- Uric acid
- Urine albumin to creatinine ratio

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o Case of resistant HTN, Definition, Causes, Mx:

• Definition: BP >130/80 despite adherence to an appropriate 3 drug regimen (including diuretic) in which all drugs are dosed at 50% or more of the maximum recommended hypertensive dose, or BP that requires atleast 4 medications to achieve control (BP <130/80)

• Causes "from the internet":

- Abnormalities in the hormones that control blood pressure.
- renal artery stenosis.
- obstructive sleep apnea (OSA)
- Obesity or heavy intake of alcohol or other substances

• Management "from the internet":

- Lifestyle adjustment
- Take medications properly
- Renal denervation

• Medications to take post MI + Stent?

- Aspirin + Clopedogrel
- Statin
- ACEI
- Beta-blocker

• What are the lifesaving measures in acute MI / Emergency?
-B-blockers -ACE-I -LMWH(enoxaparin) -Aspirin

• Does smoking elevate BP? Yes, it cause a transient increase in BP

• BP 135/80, what is your Mx?
- Stage 1 HTN - Lifestyle + Anti-hypertensives

• A HTN PT FOR 10 YEARS, CAME WITH BP > 160/100 DESPITE GIVING THIAZIDES, LIST 5 CAUSES: "nearly same as pseudo-HTN"
1. Non-compliant on his medications
2. Inadequate doses
3. Improper BP measurement
4. Drug actions and interactions
5. Excess alcohol intake, dietary non compliance

• 54 yo male with multiple high BP >150/90, what investigations will you order? Mentioned Above

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• *A patient 40 years old comes to you complaining of sore throat and runny nose, you examined his BP and it was 150/90 what is your appropriate management for his BP ?*

➢ establish 2 more readings, one week apart. if sustained elevation of BP > 140/90, diagnose the patient with Hypertension and treat accordingly with antihypertensive drugs (ACEI, ARB's, CCB, and thiazide diuretics)

• A 56 year old male patient with HTN was started on DASH diet.
- What does the abbreviation stand for? Diet approach to stop hypertension

- Mention 4 components of the diet?
- High potassium, magnesium, calcium, protein, fiber
- High vegetables, fruits, grains, fish
- Low sweets, red meats
- Low in saturated fat, total fat, cholesterol

Diarrhea

• HUS case (Hemolytic Uremic Syndrome):
- mcc of AKI in children, also leads to hypertension
- mcc: EHEC (70%)
- progressive renal failure + microangiopathic hemolytic anemia and thrombocytopenia
- 90% in children has diarrheal prodrome + production of shiga toxin

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• Case of 18 months old child irritable, sunken eyes … (mild to moderate dehydration signs) what's your management ?
a) Mx of Dehydration: Deficit repletion (rehydration), Maintenance fluids, ongoing losses
- mild-moderate: ORS – 50-100ml/kg over 4 hr
- severe: IV 20-30 ml/kg of isotonic saline
b) Nutrition: encourage breastfeed, take solid foods
c) Zinc supplementation
d) Antibiotics: not commonly indicated

• Dehydration S/Sx:
- Dry mouth and tongue
- Sunken eyes
- Poor skin turgor
- irritability
- Extreme thirst
- Less frequent urination
- Dark-colored urine
- Fatigue
- Dizziness
- Confusion

Smoking

• Pt don't want to quit smoking, what's your reaction? “5 R’s”
- **R**elevance
- **R**isks
- **R**ewards
- **R**oad-blocks
- **R**epetition

• Smoking cessation 5 A’s:
- **A**sk about tobacco use
- **A**dvise quitting
- **A**ssess readiness to quit
- **A**ssist smokers ready to quit
- **A**rrange for follow up

• Smoking cessation + fear of weight gain:
- Behavioral counseling including diet, activity
- Buproprion (have temporarily blunted weight gain)

Headache

• Mention Red flags for headache?
Sudden severe
Systemic signs
Neurological signs – papilledema
Onset (1st) above 50, below 5
Onset (1st) after trauma, exercise
Family member similar new onset

• Cluster Vs Tension Vs Migraine:

Classification	Cluster	Migraine	Tension
Onset	Sudden - min	Gradual - hours	Gradual-hours
Location	Unilateral	70% Unilateral	Bilateral
Duration	15 min – 3 hr, repetitive	4-72 hr	Hours
Quality	Deep, burning, stapping pain	Dull, throbbing	Waxing pressure, tightness
Severity	very severe	Moderate-severe	Mild-moderate
Autonomic Sx	✓ (ptosis, rhinorrhea, lacrimation..)	✓	✗
N/V	✗	✓	✗
Photophobia	✗	✓	✗
Phonophobia	✗	✓	✗
Triggers	✗	✓	✗
Others	✗	✓ (pre-monitory Sx and Aura)	✗

• A 30 year old male patient presents to the ER at 3 A.M complaining of severe unilateral headache around his eye. The patient also have rhinorrhea.

• Patient complains of unilateral headache which occurs in periodic cycles only several months out of the year mainly located behind one eye and associated with nasal congestion on the same side.

A. What is the most likely diagnosis? Cluster headache

B. Mention 3 lines of management to this patient?

- 100% O2, - Triptans (Eg.sumitriptan),
- Ergot derivatives.

C. Mention 2 causes of unilateral headache? GCA, Trauma, lesion

o Headache, 55-year-old with vomiting and sleep affected 3 weeks ago, what's, your management?

• Diagnosis: Migraine

• Mx:
- Lay in a dark room, sleep
- Analgesics: paracetamol, aspirin
- Antiemetic
** unresponsive cases: ergotamine, or triptans (sumatriptan – selective 5-HT1 agonist)

• Prophylaxis:
- estrogen containing preparations – caution
- clear cut dietary triggers
- Beta-blockers: propranolol (for 3-6 m)
- anti-depressant
- anti-convulsing
- CCB

Back pain

• patient with low back pain radiating to the legs
- Should we do MRI? Yes, but mainly we tend to treat conservatively, but if there is red flags or if the conservative management didn't work then we do MRI, & because radiculopathy could be from disc prolapse

o 22 y. male Pt. have lower back pain since 12 years he wakes up with back stiffness that resolve after 30 min and it improves after exercise .
• What's the diagnosis? Ankylosing spondylitis
• What is the next step?
- Investigations: Schober's test, on x-ray spine you might see sclerosis, erosions on sacroiliac joint, MRI, blood test for HLA-B27
- Mx: mainly NSAID and pain relievers, DMARD

• 50 years old male patient presented with sudden **localized** back pain,what is your DDx?
-Infection
-Malignancy
-Compression fracture

• A 55 years old male patient came to your clinic complaining of lower back pain that *decreases when leaning forward*. He has no sensory or motor deficits. On examination the pain *increases with back extension*, What is the most common cause to the patient complaint?
Dx. Spinal stenosis
Note: Spinal stenosis is relieved by flexion and exacerbated by extension, unlike disc prolapse which is exacerbated by flexion and relived by rest

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• case about back pain diagnosis => was muscle spasm
- muscle spasm features: backpain, gradual, no red flags/neurological manifestations, and doesn't radiate below knee

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• Red flags of back pain: "TUNA-FISH"
- **T**rauma
- **U**nexplained weight loss
- **N**eurologic Sx
- **A**ge >50
- **F**ever
- **I**V drug use
- **S**teroid use
- **H**x of cancer

Contraception

• Menorrhagia, least suitable contraception, other methods to be used?
- Barriers
- Other are mentioned below

• Case of combined oral contraceptive pills counselling :
1- What's the tests you should order before prescribing the pills?
2- How to explain the use of pills to her? (Initiation Methods)

• Pt with hepatocellular adenoma & she need contraception method:
- whats the method ? barriers, IUCD,.. etc
- what the absolute and relative contraindication for her case:
Relative: progesterone only pills
Absolute: combined pills

• 20 y old Female pt came asking for DMPA and wants to be pregnant after 6months, write down two reasons why you would advise her not to use this method..
A: 1- Because it causes delay in the return to fertility (may be delayed p to 18 months
2- Reduce BMD specially in young women who have not yet attained their peak bone mass.

• Type of contraception's:
- Natural family planning: FAMs, Lactational amenorrhea
- Mechanical Barriers: Condoms, diaphragm, cervical cap, spermicidal agents
- Combined Hormonal contraception (CHC): OCPs, vaginal ring, transdermal patch
- Progesterone only: POPs, DMPA, Implants, LNG-IUS

Antenatal care

• Case of Antenatal care : 26 yo pregnant women, LMP : 15 may
What's the tests you should order for her?
- measure BP, Weight
- Assess fetal growth and fetal heart rate, presentation and activity
- Urine dipstick for protein
(these are the routine evaluations for multiple visits)
- 1st trimester: nuchal translucency
- 2nd: Quadruple test: AFP, uE3, hCG, inhibin A

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o Explain what you would do in first book visit:
• Take detailed Hx + PE
• Confirm intrauterine pregnancy + # of fetuses
• Estimate EDD
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• Lab evaluation:
- Rhesus type and antibody screen
- Hematocrit or hemoglobin and MCV
- Document rubella/varicella immunity
- Urine protein/culture
- HBV/HIB/Syphilis/Chlamydia
- Cervical cancer screening
• Schedule ANC visits: for nulliparous without complications:
- every 4 w until 28 w of gestation
- every 2 w from 28-36 w
- then weekly till delivery
• Discuss screening tests for aneuploidy
• 2^{nd}, 3^{rd} trimester visits to assess fetal growth & maternal well-being

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• A 28 year old female patient, G3P2 presents to the clinic for her first antenatal visit. She has a history of gestational diabetes in her previous pregnancy.
- When do you screen her for gestational diabetes in this pregnancy?
Between 24-28 weeks of gestation
- What is the ADA 2016 current recommendations for screening for gestational diabetes?
By doing oral glucose tolerance test:
The 1 step approach: Give the patient 75 g of glucose and measure the results, The 2 step approach: Give the patient 50 g of glucose then measure the results, then give her 100 g of glucose & measure results

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• Pregnant women with DM on oral agents (sulfonylurea) and her hba1c= 7.5 + TSH 3.5, and this is her first antenatal visit .
What would you do and what tests would you order?
- Glycemic control: convert to insulin and stop sulfonylurea
- Give here folic acid: 1mg/day
- Because TSH=3.5 →measure TPO Abs →if Abs present ,give thyroid hormone if they have had recurrent miscarriages and some experts recommend to treat them with thyroid hormone even w/o history of miscarriage

- If you won't treat with thyroid hormone, repeat TSH every 4w during the first trimester and once during the 2nd and 3rd.
And order these tests (1st antenatal care visit tests)→ Rh antibody screen/ CBC/ Rubella IGg Ab/ Varicella Ab/UA and culture / urine protein/ HBs Ag/ TSH (ordered).

Thyroid diseases

• High TSH with normal T4 what's your management?

• 65 years female patient.. TSH 7 with normal T4 and T3 and without any symptoms, What's your management?

• Case of Fatigue, weakness with normal T3,T4 levels but with increased TSH:

- Dx: Subclinical hypothyroidism (SH)
- normal T4,T3 and elevated TSH
- mainly asymptomatic, and requires no treatment, if symptomatic we might consider Levothyroxine, or to prevent to progression from subclinical to overt hypothyrodism

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• Causes of hypothyroidism:

- Radiation therapy
- Hashimoto-thyroiditis
- Iodine deficiency
- Thyroidectomy (partial/complete)
- Medications: Amiodarone, Lithium, Sulfonylurea

• What would you order to know if the pt has hypothyroidism and what would you ask her? Signs and symptoms?

- TFT
- S/Sx of hypothyroidism:

1. Fatigue , weakness .
2. Menorrhagia, weight gain , loss of appetite , Constipation
3. Cold intolerance.
4. Slow mentation ,
5. Muscle weakness, arthralgia.
6. Diminish hearing. 7. Bradycardia, Coarse hair , Hoarseness , CTS , slow relaxation of deep tendon reflexes .

URTI

Case about a child and diagnosis is croup

A: the diagnosis was MILD CROUP

Management: Antipyretic, oral fluids, humidified air & corticosteroids

- Case of 6 years old child have pharyngitis, temp 38.5,

1- What's your management?

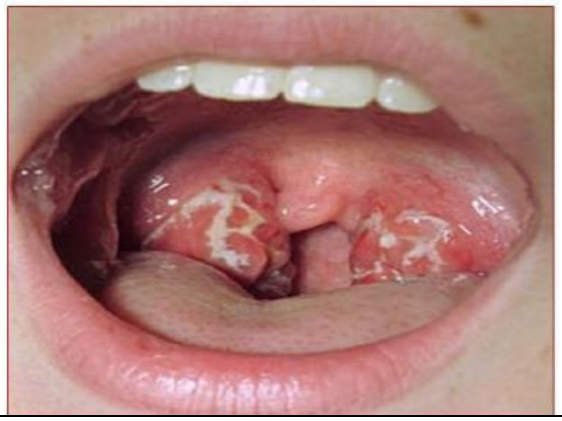
- should be based on the centor score:

in this case age 6 (+1), picture – exudates (+1), Temperature (+1), No other Sx (+1): Amoxicillin (antibiotic of choice)

No cough or other S/Sx of viral URTI	+1
Tender Enlarged anterior cervical LN (>1cm)	+1
Temperature >38	+1
Age 3-15 year	+1
Tonsillar exudates/swelling	+1
Age >45	-1
If 0-1: no culture or antibiotic if 2-3: do culture and treat if positive if >4: do culture, empiric treatment till results appear	

2- What's the preventive measures you should do for this child (not related to this case, in the lecture of prevention):

- Obesity (BMI - >6 years)
- Diabetes
- Hypertension
- Dyslipidemia (FLP at 9-11 once, and once at 17-21)
- Dental caries (up to 5 years)
- Vision (3-5 years)



- S/Sx & Mx of a child with pharyngitis?
- case of 8 month infant pharyngitis of centor score =1 taking Amoxicillin and anti histamine ,,what would you recommend:

• a case of a male patient coming to clinic with 1 day history of sore throat and runny nose, temperature is 36.5, what's you management for this patient?
• 10 y boy with viral infection of sorethroat & cough what is your Mx?
• 22 Year old female pt came to your clinic with sore throat, no fever, no anterior cervical adenopathy, no tonsillar exudate and no cough, what to do ?

- S/Sx: cough, headache, fever, tender LN, swollen tonsils, N/V, pain on swallowing
- Mx: calculate the centor score and treat according to the score

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• 40 yo female, complain of sore throat + runny nose of 1 day duration, she didn't cough and her temp was 37.1, what is your Mx:

- According to centor, this is mostly viral, so educate the patient and tell her no need for antibiotic and only 20% are bacterial, tell the patient to gurgle with water and salt, ue decongestants if needed and if pain really severe we give SINGLE IM shot of dexamethasone, and if the Sx didn't resolve or became severe in the next 3-5 days he should re-admit

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• child who came with Upper respiratory infection was look like viral infection ((low grade fever – erythema)) in the case and his mother want to give him antibiotic
- Will you give him antibiotic? No since its viral so centor score 1 mostly, so no need for antibiotics or culture

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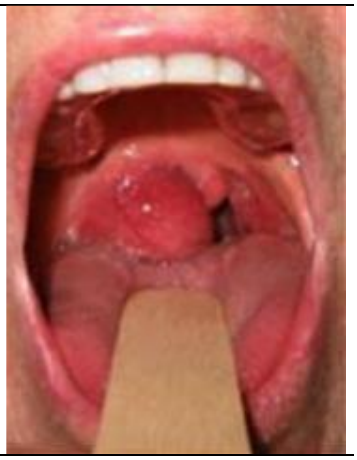
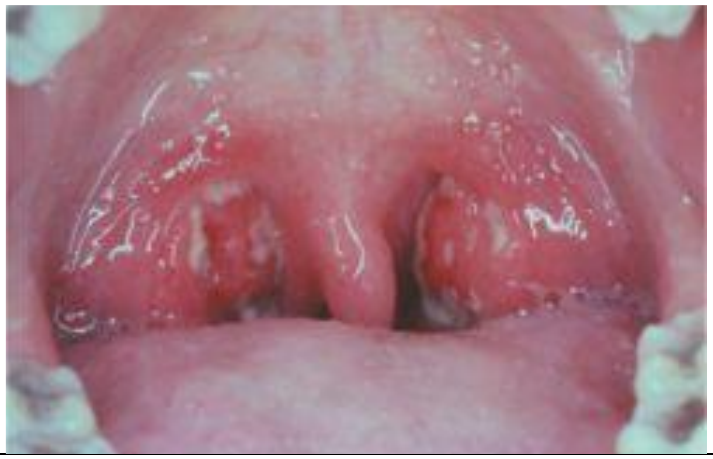
• MANAGEMENT OF A 20 YEAR OLD FEMALE WITH RUNNY NOSE & LOW GRADE FEVER COUGH
**According to Centor Criteria:
❖ *centor criteria = 1, therefore it's a viral infection*
**Management :
- Conservatively
- NSAIDs / Acetaminophen: for fever (symptomatic relief)

• *How would you manage a Pt presenting with acute Otitis Media ?*
- conservative management and symptomatic relief, avoid antibiotics.
Note: the Dr. mentioned more details about the management of AOM, we advise to look further into It, as we cant remember what he exactly said.

• The following pt presented with muffled "hot-potato" voice, and pain on opening his mouth.
- What is the diagnosis? Peri-tonsillar Abscess
- what is the treatment? Drainage + Antibiotic



• This is a picture of 5 year old boy, what is your first line of Mx?
Depending on Strep score (Centor score) : antibiotics



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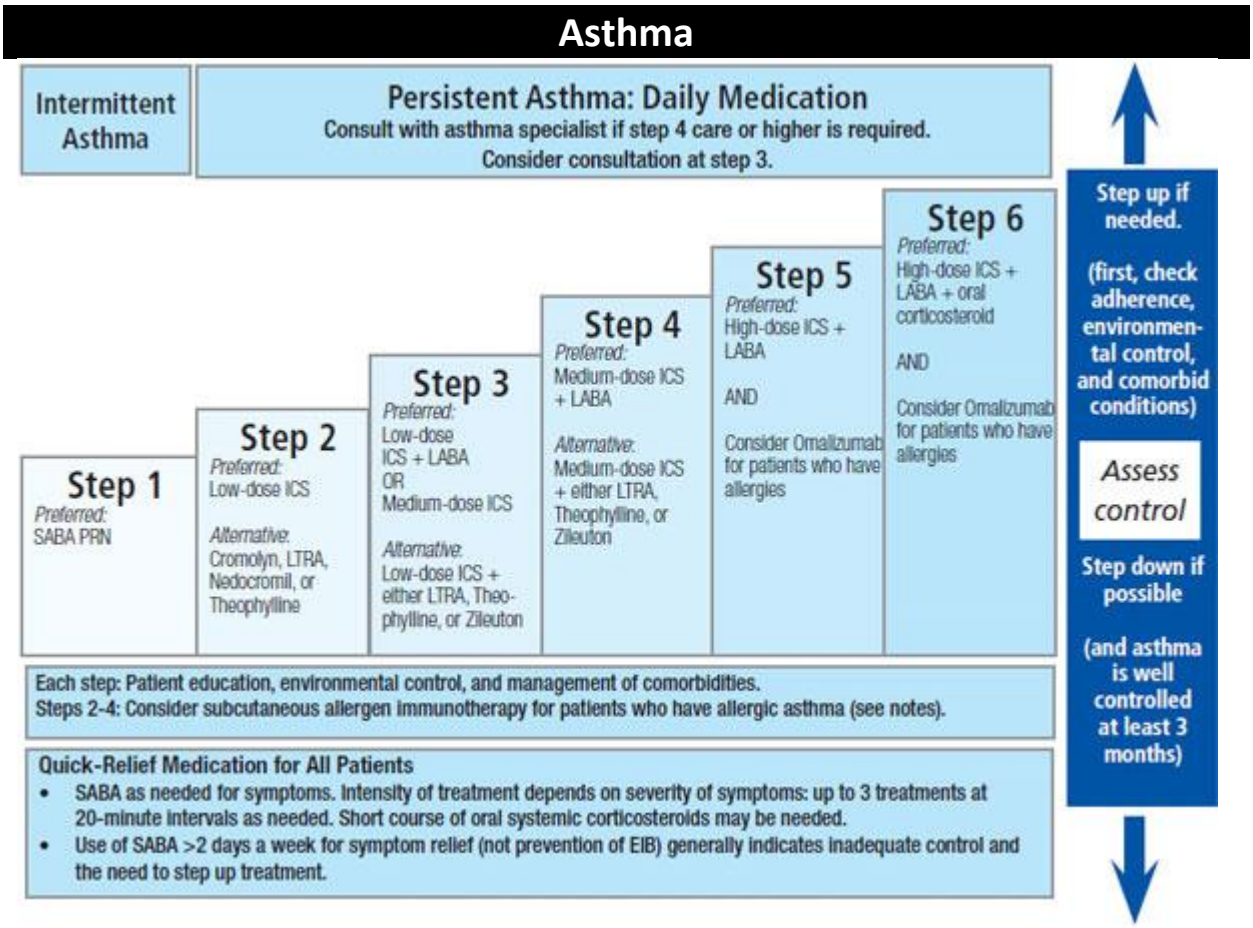
14 year old male patient presents to the clinic with his mother. He is complaining of sore throat that started 2 days ago, his temperature is 38.2.Throat examination reveals pharyngeal erythema. There is enlarged posterior cervical lymph nodes. Abdominal examination reveals a mass in the left upper quadrant.
• What is the cause to this patients symptoms?
- Infectious mononucleosis.

• Bacterial tonsillitis and its treatment: Amoxicillin (based on centor)



• Female patient with asthma in step 2 of treatment, but still uncontrolled, what are the possible causes?

- poor inhaler technique
- poor medication adherence
- incorrect diagnosis
- comorbidities, complicating conditions

• Case of asthmatic patient on salbutamol with recurrent attacks.

- Is the disease controlled (stage)? Not controlled (recurrent)
- What is the next step in management? Avoid triggers and Add corticosteroids (mild-moderate)

• 3 years old child presented to you with mild wheezing, what's the history that will suggest this is a case of asthma:

- Atopy
- FHx
- other respiratory Sx

• Asthma exacerbation case, how would you treat it:
- Assess medication adherence and poor inhaler technique, Use reliever medication and According to the case you have to assess current treatment step and stepping up in the treatment (because he has exacerbations) For example if the pt was step 2 with new exacerbations > you have to add LABA or increase the dose of ICS to med dose.

Dizziness

• Case about dizziness: 60 years old male complains of spinning sensation without hearing impairment:
- Dx? BPPV (Benign paroxysmal positional vertigo)
- Mx? Epley maneuver

• Patient presented with dizziness and spinning sensation when she moves her head that lasts for seconds and resolves without moving her head.
- Dx? bpp vertigo ,,
- how to confirm? Dix hallpike maneuver ,
- Mx? Epley maneuver

• Definition of benign paroxysmal positional vertigo:
BPPV is due to free floating crystals within the lumen of the semicircular canals of sudden positional induced vertigo that decreases after 10-60 seconds and its reproducible by head positioning. The vertigo is intense and nausea is common / without hearing loss and it is episodic .

• Difference between central/peripheral vitiligo?

Symptom	Central	Peripheral
Onset	Slow	Sudden
Vertigo severity	Less severe	More severe
N/V	Moderate	Severe
Compensation Speed	Slow	Rapid
Hearing loss	Rare	Common
Neurological Sx	Common	Rare
Imbalance	Severe	Mild
Nystagmus	Bidirectional	Unidirectional
Fatigable	No	Yes

Metabolic Syndrome

• **Metabolic Syndrome**: 3 or more of the following:
- Large waist: 35 inch (89 cm) for women, 40 inch (102 cm) for men
- High TG: >150 mg/dL
- Reduced HDL: <40 mg/dL
- Increased BP: >130/85
- Elevated FBS: >100

• Metabolic Syndrome (definition, management):
- Definition: is a cluster of conditions that occur together, increasing your risk of heart disease, stroke and type 2 diabetes
- Mx: Lifestyle (physical activity, weight loss, diet, stop smoking, manage stress)

• Nahed is 35 years old female BMI 30 waist circumference 95, BP 130/80, HDL 65, fasting blood glucose 100, TG 100
- Does she have metabolic syndrome, explain, why? No

Osteoporosis

• Indications for screening:
- Age >65 or older
- Age >60 who have risk of fractures
- RF: female, early menopause, smoking, chronic steroid use, sedentary life-style

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• Causes of osteoporosis: idiopathic (it's idiopathic :P), secondary:
- Endocrine: DM, hyperthyroidism, hyperparathyroidism
- GI: chronic IBD, malabsorption, malnutrition
- Bone marrow diseases: bone METS
- Rheumatology: RA, Marfan
- Other: immobilization, chronic alcoholism, organ transplantation

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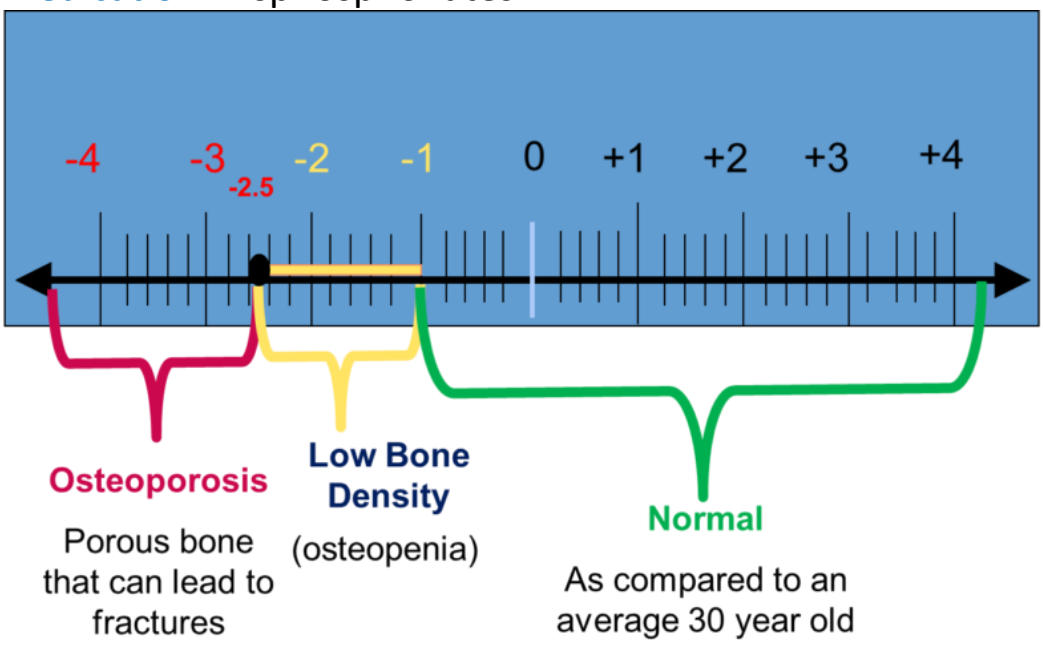
• Patient with -2 t-score, what is the Dx, Mx?
- Dx: Osteopenia
- Mx: Lifestyle, exercise, vit D supplementation, stop smoking, diet
- Medication: Bisphosphonates



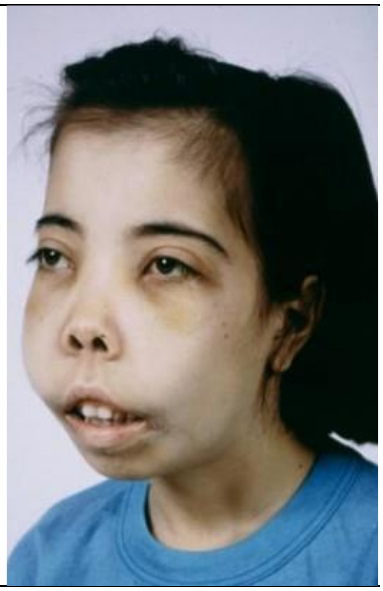
• Indication for treatment for osteoporosis:
- Postmenopausal women
- Men with Hx of vertebral or hip fractures
- if the t-score is below -2.5

Anemia

• *Mention the possible causes of Macrocytic anemia?*
➢ Vitamin B12 deficiency
➢ Folate deficiency
➢ Alcoholism
➢ Liver disease

• What the diagnosis? Thalassemia

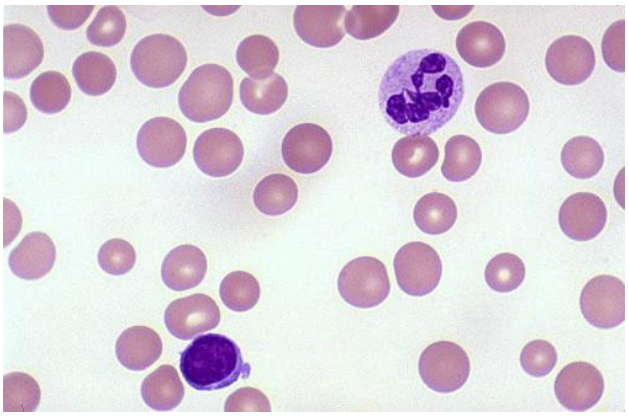
• Mention two symptoms the patient come with:
- Irritability
- SOB, weakness
- deformity of facial bones
- Jaundice, dark urine
- Slow growth



• female patient with HB 9 and MCV 70 mention three DDx
(IDA , Thalassemia , Anemia of chronic illness)

• Causes of Macrocytic anemia. (3 points)
-Vit. B12 Deficiency
-Folate Deficiency
-Alcohol
-Liver Disease
-Hemolytic Anemia

• A 50 year old patient present to you complaining of dizziness and general fatigue. He has a history of crohns disease and terminal ileum resection. CBC and blood film reveals the following:
Macrocytosis (MCV = 110)
Hypersegmented neutrophils



- What is the diagnosis and what's the cause? Macrocytic, megaloblastic anemia due to vitamin B12 deficiency.
- From the history, what features does this cause have that helps you to differentiate it from other causes? Neurological symptoms, eg. Loss of vibratory sensation due to dorsal column damage.

• causes of iron deficiency anemia in postmenopausal woman:
- most commonly malabsorption

Cardiac/Chest

• RED FLAG OF Chest pain:
- Hypotension/oliguria/pulmonary edema
- Tachycardia/Tachypnea/Hypoxia
- ECG Changes
- New Systolic mitral murmur
- Arrhythmia in young age
- Mediastinal widening on X-ray

• COPD Staging and Mx:

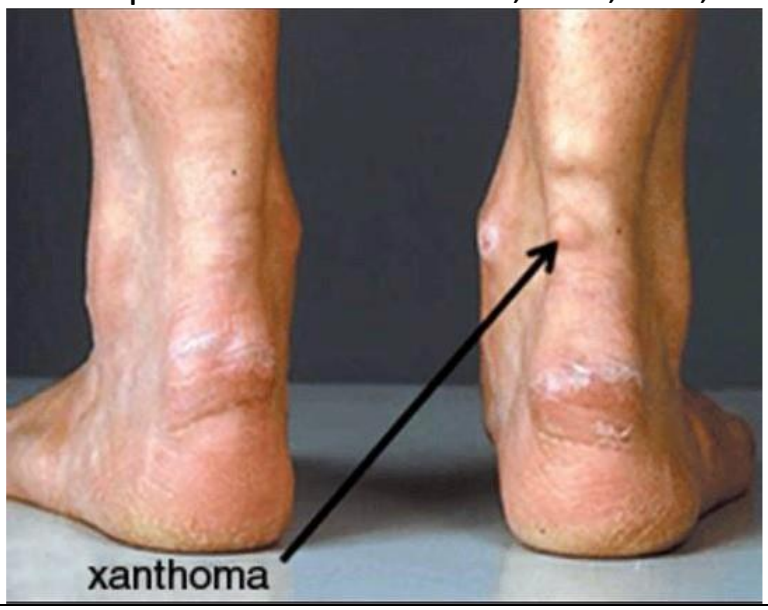
Other

• RED FLAG OF DYSPEPSIA:
1. New onset indigestion > 55 years of age
2. Unexplained persistent vomiting
3. Hematemesis / Melena
4. Unintentional weight loss
5. Worsening dysphagia
6. Odynophagia
7. Exertional epigastric pain
8. Anorexia
9. Anemia

• Male patient that complains of heartburn that increases when lying down used to decrease with anti-acid but recently it doesn't , waist circumference was 125 cm…:
• What is the diagnosis ?
• Mention two red flags from the case.

• 22 years old male with epigastric pain for 1 month without any other symptoms, what is the algorithm for Mx:
My answer :
-Trial of ppi => not improved
=>endoscopy
-other tests :LFTS, ECG, Chest xRay
-Improved-->continue ppi

• A 50 year old patient present to your clinic for the first time, he has no complaints. Examination reveals a lesion as seen in the picture.
- What is the diagnosis? Achilles tendon xanthoma
- What lab test would you order? Lipid profile
- What is the importance of detecting this lesion? Detecting this lesion reveals underlying hypercholesterolemia, by treating that we can prevent further complications such as CVD, HTN, CVA, etc.



Best Wishes!