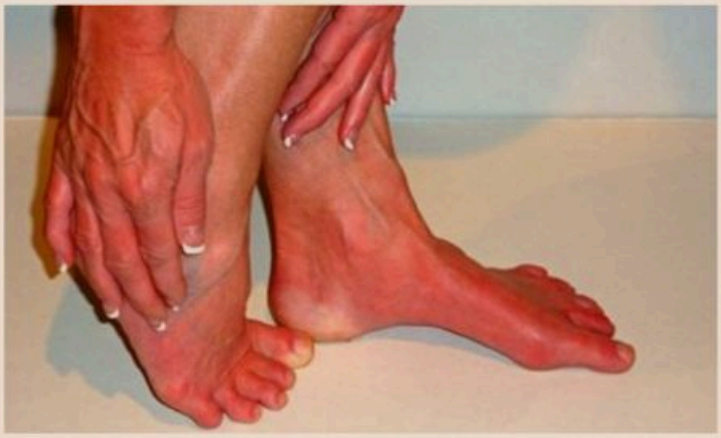
Static Internal Medicine 2021 6th year

Station (1)



Picture of erythromelalgia to old patient with CBC showing hemoglobin 19.7 :

1- describe the picture: erythromelalgia

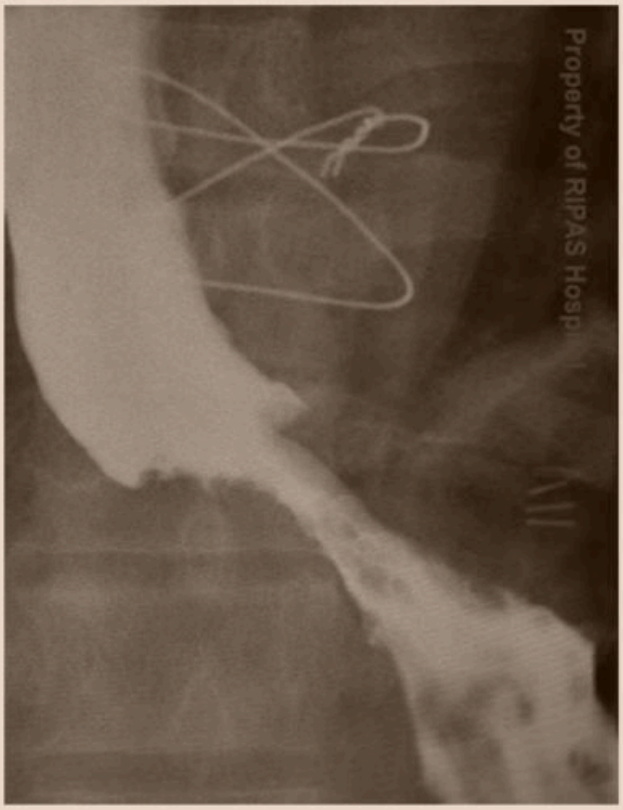
2- dx and ESR level: polycythemia rubra vera (low ESR)

3- mutation? jack 2

4- first line ttt: venisiction

5- complications: myelogibrosis, thrombosis.

Station (2)



picture of barium swallow to old patient with history of longstanding GERD, weight loss and dysphagia for both liquids and fluid.

1- name of this investigation: barium swallow

2- dx: esophagial adenocarcinoma

3- risk factors of GERD: hiller's myomitomy, pneumatic dilatation, obesity, pregnancy and nitrates

4- other complications of GERD: esophagitis, barret's esophagus and chronic cough.

5- ttt of GERD: PPI

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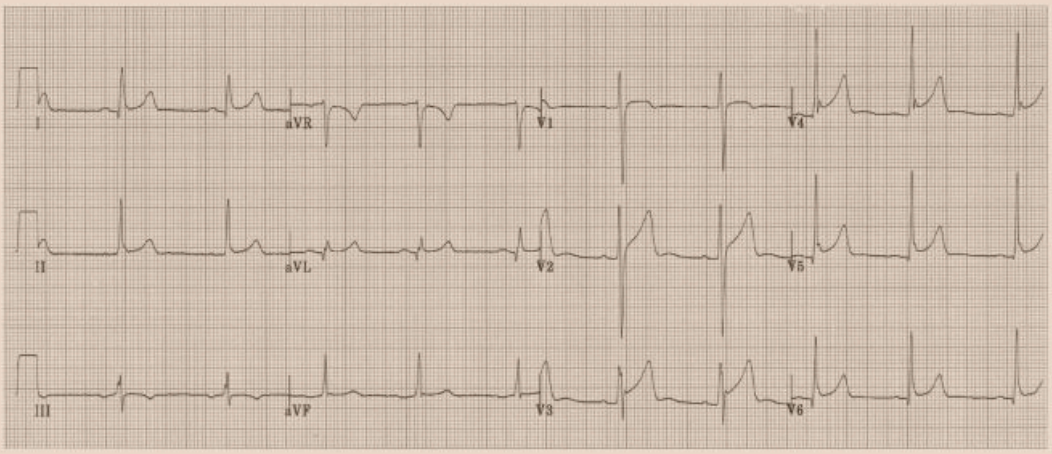
Station (3)



* 27 y/o female patient presented with chest pain relieved by leaning forward, with ECG:

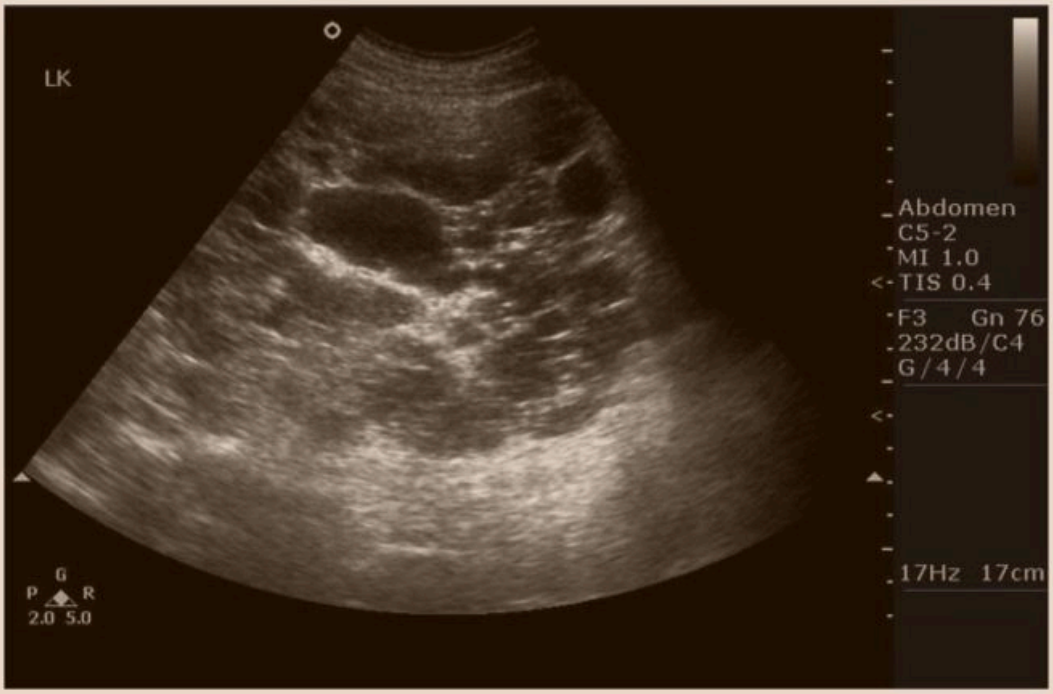
1- findings on ECG: diffuse ST elevation (concave upward) in all leads + PR deprssion

2- dx: acue pericarditis

3- four causes of life threatening chest pain: aortic dissection, tension pneumothorax, massive PE, STEMI

4- most common cause: viral infection (coxaci b virus)

Station (4)



* 34 y/o patient with hx of intracranial hemorrhage with kidney ultrasound:

1- dx from U/S: polycystic kidney ds

2- mode of inheritance: autosomal dominant

3- cause of intracranial hemorrhage: intracranial aneurysm

4- funding you expect to see in liver: liver cyst

5- ttt of his kidney ds: hemodialysis

Station (5)

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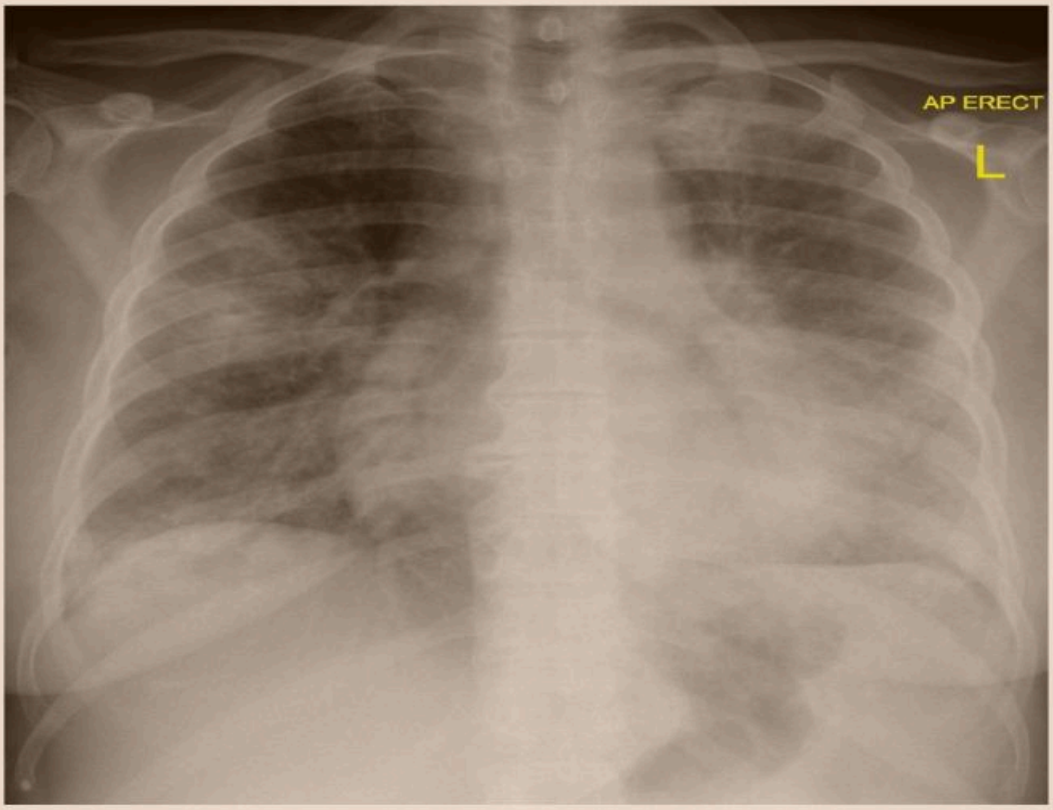


57 y/o Patient present with fever, dry cough,he is conscious, vitally staple, and his urea 6.7 mmol. electrolytes show hyponatremia:

1- what do you see in CXR: intestinal infiltrate with reticuolo nodular pattern

2- dx: atypical pneumonia

3- organism: legionella

4- severity and need of admission: from hx patient is conscious, vitally staple, 57 y/o and his urea 6.7 mmol) score= zero, no need for admission

5- ttt: erythromycin

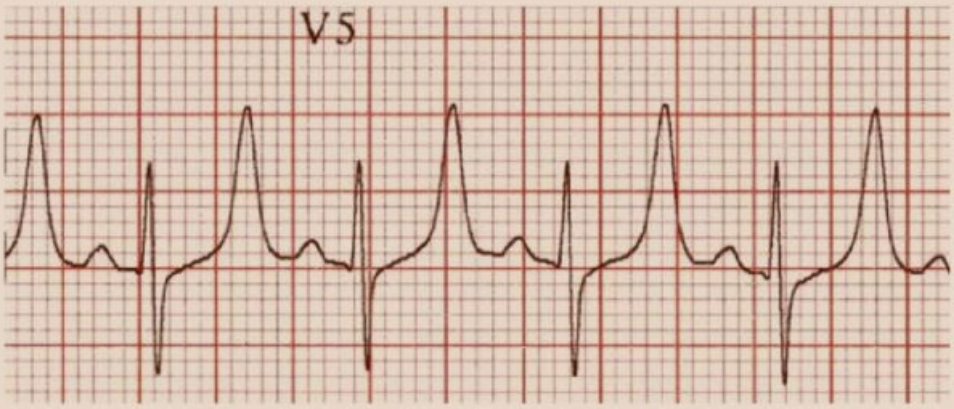
Class of 2021 // Salem Raida

Static 6th year 2020

station 1

A 50 years-old patient with T2DM and ESKD comes for his 1st dialysis session this week. ECG is done and shows

:



Q1. What ECG findings do you see?

a. sinus tachycardia
b. Tented (or peaked) T wave
c. prolonged QT interval
d. PR-depression

Q2. What is your diagnosis?

..... Hyperkalemia.....

Q3. Mention two possible mechanisms for this diagnosis in this particular patient?

..... - Decreased renal potassium excretion.....

..... - Increased tissue breakdown.....

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.....- Increased tissue breakdown.....

.....- High potassium diet.....

.....- Drug-induced (e.g. NSAIDs or Beta Blockers).....

Q4. Mention two other ECG findings could this diagnosis possibly result into?

..... Wide QRS, . - AV block, BBB,..... - Sinus bradycardia., AFib.... - Sine wave.... - VF. - Asystole.....

.....

Q5. What is your immediate intervention?

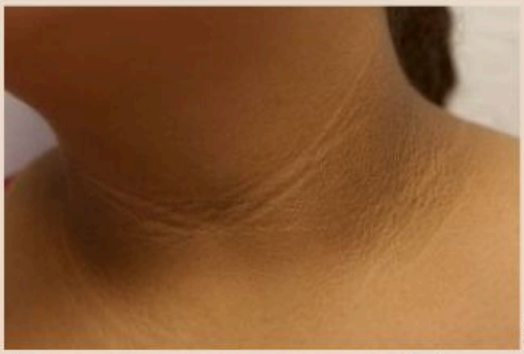
..... a. IV Calcium gluconate (cardioprotective) 10 ml in 10 % in 10 min
..... b. 10 units Insulin with dextrose.....

... c. 10-20 mg beta agonist albuterol inhalation .....

.....d. diuretics and dialysis.....

Station 2

A patient with long standing diabetes mellitus type 2 on insulin therapy



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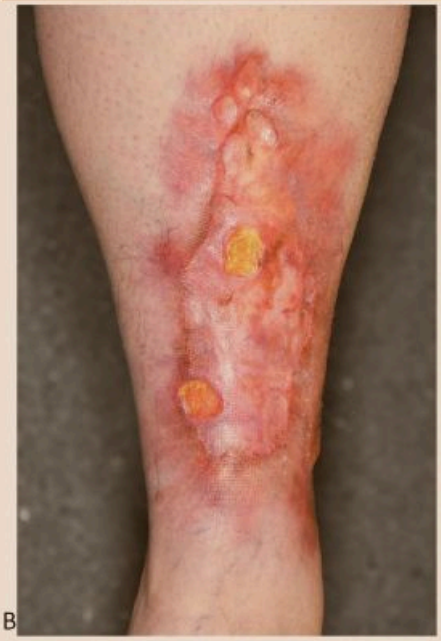

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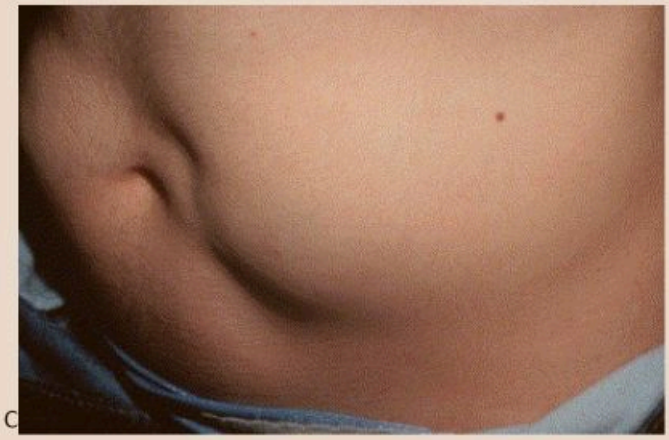

C

1- What are the signs in these pictures?

a. ....acanthosis nigricans.....

b. .....necrobiosis lipoidica diabeticorum.....

c. .....lipodystrophy.....

2- What is the likely cause of sign c and how you would advise this patient to avoid it from occurring once again ?
.....due to repetitive insulin injection at the same place
advise the patient to switch the injection site from time to time
.....

3- Mention three eye complications of DM ?
a. .....retinopathy.....
b. .....cataract.....
c. .....macular edema
d. Glaucoma
e. Papillopathy
f. Iris neovascularization.....

4- If this patient develop drowsiness, tremors, sweating, palpitation. What is the most likely diagnosis and cause for that?
...hypoglycemia due to either increased insulin dose or fasting.....
.....

5- If this patient develops morning hyperglycemia and a blood sugar of less than 70mg/dl at 2 AM, what is the name of this phenomenon and how you would manage ?
.....Somogyi phenomenon states that early morning hyperglycemia occurs due to a rebound effect from late-night hypoglycemia
Treat by reduce evening or bedtime insulin
.....

Station 3

A 20-year-old female patient was admitted in October with a 3-month history of persistent vomiting between 5 and 15 times a day and weight loss. She was dehydrated and unable to tolerate oral intake due to nausea and vomiting. Her bowel motions were normal; she had no problems with micturition or symptoms of infection, however had noticed significant weight loss in the preceding few months.

Station 3

A 20-year-old female patient was admitted in October with a 3-month history of persistent vomiting between 5 and 15 times a day and weight loss. She was dehydrated and unable to tolerate oral intake due to nausea and vomiting. Her bowel motions were normal; she had no problems with micturition or symptoms of infection, however had noticed significant weight loss in the preceding few months.

She had known hypothyroidism and had previously been referred directly to the gastroenterologists for persistent vomiting. She underwent an oesophagogastroduodenoscopy (OGD) which showed gastritis and therefore, she was started on proton pump inhibitor therapy. A blood test showed negative tissue transglutaminase antibodies, positive gastric parietal cell antibodies and she was scheduled for a CT enterograph.

Given this history she was treated as ongoing gastritis with vomiting secondary to the above. She had a sodium level of 133 mmol/L and low blood pressure and this was felt to be secondary to dehydration. This was treated with intravenous fluids and she was subsequently discharged on antiemetics.

The patient presented again 4 months later with persistent vomiting with some fresh blood at the end due to a Mallory-Weiss tear. She mentioned ongoing weight loss from 50 kg in August to 41 kg currently and ongoing lethargy. She described some right-sided abdominal pain and a pregnancy test was negative. She denied thyroxine abuse or forced vomiting. The patient was unsure about any relevant family history. She was a social smoker and denied any alcohol intake.

On examination she was very thin, hypotensive and tachycardic. She was clinically dehydrated and was noted to have some mild skin pigmentation.

Investigations

Her sodium levels were 129 mmol/L (normal 133–146 mmol/L), potassium levels normal at 4.9 mmol/L (3.4–5.3 mmol/L), C reactive protein (CRP) 16 (<5), haemoglobin 12.4 g/dL (12.5–16 g/dL), white cell count (WCC) 11.6 (4–11×10^9/L) and she had a mild eosinophilia. Given the history and findings a random cortisol was requested which came back at 2 nmol/L (102–535 nmol/L). Liver and renal function tests were normal. Thyroid stimulating hormone (TSH) was 33 mU/L (0.27–4.2 mU/L) and blood glucose was 4.5 mmol/L (4–6 mmol/L).

1- What are the differential diagnoses ?
   a. Addison disease
   b. Secondary or tertiary adrenal insufficiency

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1- What are the differential diagnoses ?
   a. Addison disease
   b. Secondary or tertiary adrenal insufficiency
   c. Celiac
   d. Hereditary myopathies
   e. Anorexia nervosa
   f. SIADH
   g. Neurofibromatosis
   h. Peutz jegher syndrome
   i. Sheehan syndrome……

2- What are the investigations to confirm the diagnosis ?

   a. measuring 8 AM serum cortisol and plasma ACTH, and a high-dose 250 mcg ACTH stimulation test (short synacthen test)

   b. If adrenal insufficiency is confirmed and ACTH levels are normal or high, do plasma renin activity [PRA] or renin concentration and serum aldosterone
   c. The underlying etiology of the adrenal insufficiency should then be determined and localized

3- What is the most likely diagnosis

   Addison disease

4- What is your treatment ?
   a. Hydrocortisone 15 mg on waking and 5 mg at 6 pm
   b. Fludrocortisones 0.05 – 0.1 mg daily

5- What are the associations that you may find with this patient?

   There are two types of APS ; type 1 and type 2 (Schmidt's syndrome) in which Addison is the a main association

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Table 1

Table showing the conditions associated with Addison's disease and autoimmune polyendocrine syndromes (APS) types 1 and 2

Addison's disease	APS type 1	APS type 2
Conditions associated		
Thyroid disease, coeliac disease, pernicious anaemia, type 1 diabetes mellitus, gonadal failure, vitiligo, alopecia, myasthenia gravis	*Main*: Addison's disease, hypoparathyroidism, chronic candidiasis (mucocutaenous) *Other*: gonadal failure, hepatitis, atrophic gastritis, pernicious anaemia, malabsorption, alopecia, type 1 diabetes, autoimmune thyroid disease, diabetes insipidus, hypopituitarism	*Main*: Addison's disease, type I diabetes mellitus, autoimmune thyroid disease *Other*: gonadal failure, vitiligo, pernicious anaemia, alopecia, myasthenia gravis, arthritis (seronegative/rheumatoid), diabetes insipidus

Station 4

An 18 year old girl was referred to our centre with recurrent lymphocytic exudative pleural effusion. She was on anti- tubercular therapy for past 2 months and was not responding to treatment. She had already been aspirated for pleural effusion four times before she was referred to our centre.
She was having complains of intermittent fever, loss of appetite, significant weight loss, fatigue and joint pain since 4 months with respiratory symptoms of progressive breathlessness, non-pleuritic chest pain and dry cough since one month.
Otherwise she was normotensive and nondiabetic. There was no history of haemoptysis or trauma to chest. Past history was suggestive of two units of blood transfusion and right sided hemiparesis that improved by its own.
On examination, the patient conscious and dyspnoeic .
General physical examination was showing bilateral butterfly rash on cheeks with subnormal body mass index (17.6kg/m2). Jugular venous pressure was raised. On respiratory system examination, breath sound intensity was absent on bilateral basal regions with stony dullnesson percussion and decreased vocal resonance. Other systemic examinations were unremarkable except for non-tender hepatomegaly.

1- What are the emergency baseline investigations that you would order ?
   a. CBC
   b. Chest x ay
   c. Kidney function test
   d. ECG
   e. ECHO
   f. CECT

2- What are the differential diagnoses ?
   a. Pulmonary embolism
   b. Pneumonia
   c. Pleuritis with pleural effusion

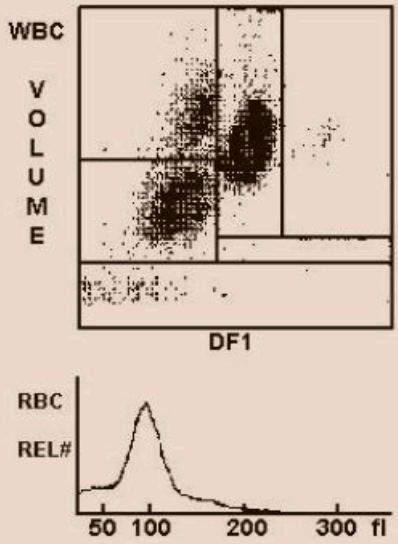
3- What is your diagnosis with your in-hospital management ?
   Lupus pleuritis
   RX / methylprednisolone (Solu-medrol) 1 mg/kg/day

4- What are the investigations to confirm the disease ?
   ANA, Anti double stranded DNA, Anti smith. C3&C4 levels, CBC, coombs test, urine analysis & antiphospholipid antibody domains

5- How you would expect this disease to progress during pregnancy? and what is the drug that the patient should be on ? and what is the base line investigation that you order before starting the management ?
The disease flare occurs in first trimester and in the postpartum period ,so the patient must complete her management.
DOC is hyrdoxychloroquine (plaquenil)
Base line test is fundoscope for retinopathy (also CPK & ECG)

Station 5

A twenty year old lady presents to the outpatient department with abdominal bloating and chronic diarrhea since childhood. Patient has excessive menstrual bleeding associated with clots. On examination she looks pale no lymphadenopathy. There is intense itchy skin rash over extensor aspects of her knees. The following CBC is attached.



WBC	9.9	H		
	%			#
NE	73.9		H	7.4
LY	15.8		L	1.6
MO	8.4			0.8
EO	0.5		L	0.0
BA	1.4			0.1
RBC	3.81	L		
HGB	11.1	L		
HCT	33.3	L		
MCV	87.3			
MCH	29.2			
MCHC	33.4			
RDW	22.7	RH		
PLT	354			
MPV	10.9	RH		

1- What is the abnormal finding on this patient CBC
RBC, HGB, MCH, MCHC are low & RDW is high

2- What is the type of anemia in this patient & what is the differential diagnosis ?
Microcytic hypochromic anemia due to IDA
DDX : drug induced gastritis and celiac disease or any malabsorption

3- What are the investigations needed in this patient ?

Serum iron, ferittin, TIBC, bone marrow stain, stool lipid assay
Serum IgA endomesyal antibody , tissue transglutamase antibody
OGD with duodenal biopsy

4- How to treat anemia
Ferrous sulphate 200 mg three times daily in fasting with vit c containing juice for 3-6 months
Follow up CBC after 2 weeks and ferritin after 3 months

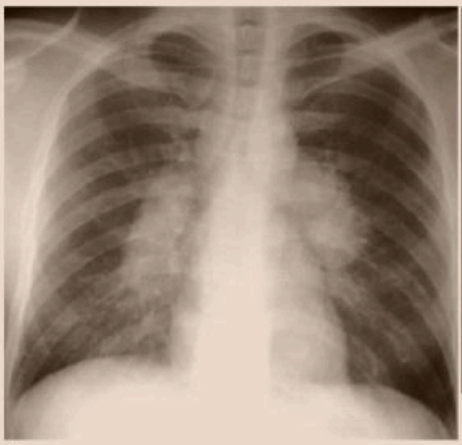
5- If this patient developed anorexia and you've observed abdominal mass in your abdominal examination , what you should suspect ?
Enteropathy associated T cell lymphoma

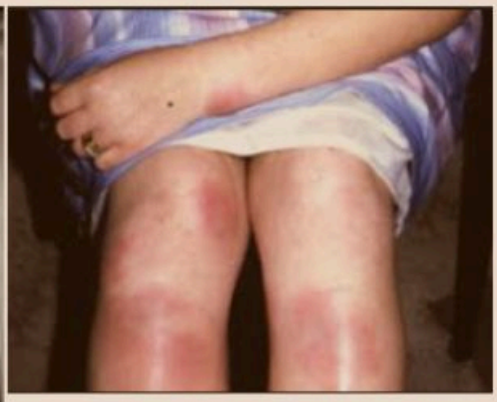
Station 6

A 56-year-old female presented to her primary care physician with complaints of dyspnea on exertion and increasing cough. She reported no fevers, chills, night sweats, or hemoptysis, however, did relate an approximate 20-pound weight loss over 6 weeks prior to presentation. She reported no history of sick contacts or recent travel.

Physical Examination: The patient's general exam was within normal limits except for multiple, scattered erythematous to violaceous and tender skin nodules on her bilateral extremities. Her lungs were clear to auscultation and she had no palpable adenopathy. Initial Laboratory Values: White Blood Cell Count 5.07 x 103/uL, Hemoglobin 12.3 g/dL, Hematocrit 38.2%, Platelet 59,000. Total Bilirubin 0.5 mg/dL, AST 30 U/L, ALT 21 U/L, Alkaline Phosphatase 68 U/L. Angiotensin Converting Enzyme 41 U/L. ANA and Rheumatoid factor were negative. Her chemistry panel revealed no abnormalities.

Pulmonary Function Tests: FVC 3L (88% predicted), FEV1 2.54L (94% predicted), Total Lung Capacity 4.64L (86%) predicted. The rest of her spirometry tests were normal. Imaging: Chest X-Ray taken demonstrated evidence of micronodular interstitial densities throughout bilateral lung fields with apical fibronodular granulomatous changes. Follow-up Chest CT revealed innumerable centrilobular micronodules throughout the lungs predominantly in the upper lobes. Mediastinal and hilar adenopathy was also noted.





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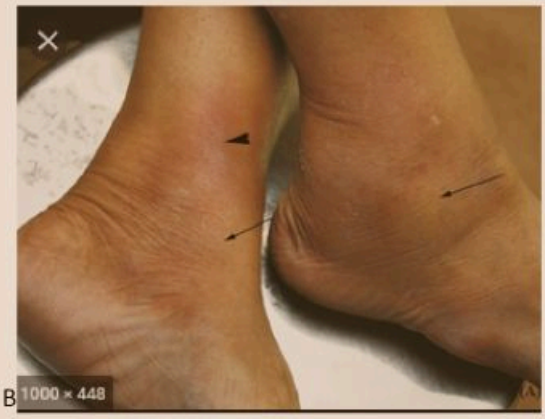


B

1- describe the three pictures ?
   a. .....erythema nodosum.....
   b. .....arthropathy .....
   c. .....bilateral hilar lymphadenopathy.....

2- What is the most likely diagnosis ?
   Sarcoidosis

3- What are the stages of this disease and what is the most common stage at presentation ?

a. stage 0, with a normal appearance at chest radiography;
b. stage 1, with lymphadenopathy only;
c. stage 2, with lymphadenopathy and parenchymal lung disease;
d. stage 3, with parenchymal lung disease only;
e. and stage 4, with pulmonary fibrosis
and the most common stage is stage 1

4- Does the diagnosis need a lung biopsy to confirm the diagnosis ?

Sarcoidosis is **clinical diagnosis** but
With less characteristic presentations, positive biopsies are needed.
If you are asked to specify the investigation most likely to confirm the diagnosis, only transbronchial biopsy will determine whether noncaseating granulomas are present or not.)

5- What are the indication of steroid therapy in during the disease process ?
a. Persistent Hypercalcaemia
b. Continuing deterioration of lung function
c. Eye involvement
d. Myocardial sarcoidosis
e. Neurological involvement
f. Heerfordt waldenstrom syndrome

Station 7

A 43 year old male patient presented to your clinic with yellowish discoloration all over his body, newly discovered diabetes, and infertility . his brother died from liver disease when he was 50 year old . liver enzymes and bilirubin were elevated .

Q1. What is the most likely diagnosis ?
Hereditary hemochromatosis

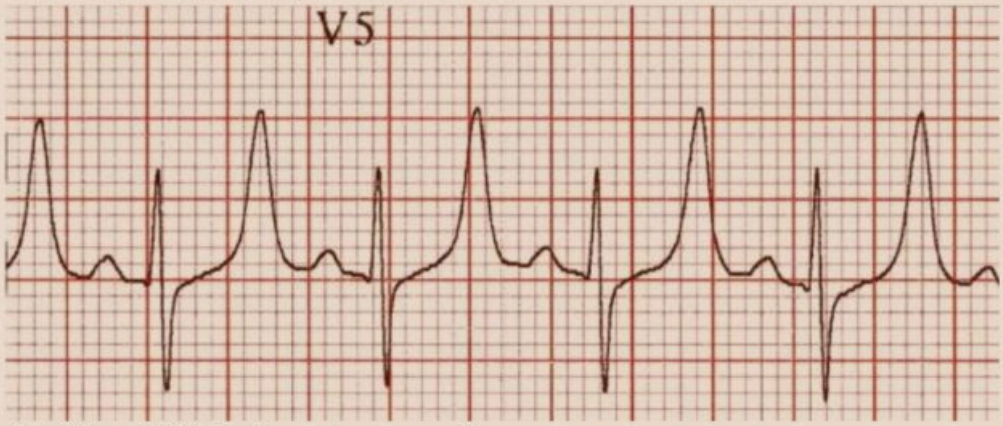
Q2. What is the gene responsible for this mutation and what is the chromosome that carry this gene ?
HFE gene located in chromosome 6

Q3. How to diagnose and confirm the diagnosis ?
Serum iron, Ferritin , transferrin saturation , liver biochemistry
Confirmation by gene study

Q4. Treatment
Venesection and desferrioxamine (desferal)

Q5. What are the manifestations of the disease that usually improve or disappear with treatment ?
Cardiomyopathy and skin pigmentation

50-years-old patient with T2DM and ESKD comes for his 1st dialysis session this week. ECG is done and shows:



Q1. What ECG findings do you see?

A .....

B .....

C .....

D .....

E .....

Q2. What is your diagnosis?

.....

Q3. Mention **two** possible mechanisms for this diagnosis in this particular patient?

.....

.....

Q4. Mention **two** other ECG findings could this diagnosis possibly result into?

.....

.....

Q5. What is your immediate intervention?

.....

.....

1.
   - sinus tachycardia
   - Tented (or peaked) T wave
   - prolonged QT interval
   - PR-depression
   - ST-depression

2. Hyperkalemia

3.
   - Decreased renal potassium excretion
   - Increased tissue breakdown
   - High potassium diet
   - Drug-induced (e.g. NSAIDs or Beta Blockers)

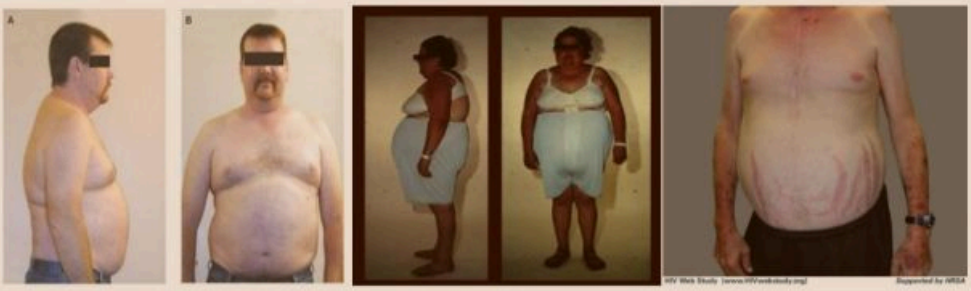
4.
   - Wide QRS
   - AV block
   - BBB
   - Sinus bradycardia
   - AFib
   - Sine wave
   - VF
   - Asystole

5.

a. Calcium gluconate (cardioprotective)

b. Insulin with dextrose

Station 1



1- Describe ?

2- how would differ between syndrome and disease?

3- diagnosis?

4- Investigation?

5- Treatment ?

Station 1

1 – abdominal obesity with purpulish straie , buffalo hump , moon like face , and hirshutism

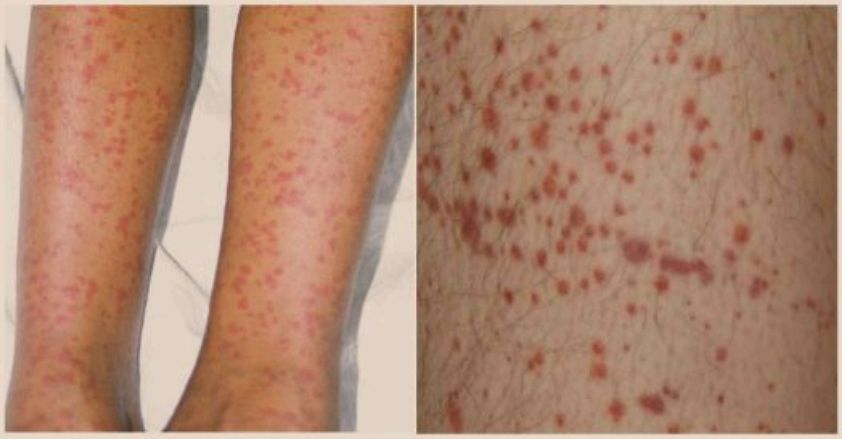
2- cushing disease is due to pituitry adenoma secreting ACTH , cushing syndrome anything else either exogenous source of cortisol or endogenous as adrenal or lung

3-cushing syndrome as it includes the disease

4- An overnight (low-dose) dexamethasone suppression , The 24-hour urinary free cortisol level, ACTH leve, High-dose dexamethasone suppression test, CRH stimulation test, CT scan or MRI of the appropriate area

5- Iatrogenic Cushing syndrome: tapering of glucocorticoid , Pituitary Cushing syndrome: surgery), Adrenal adenoma or carcinoma: surgery (adrenalectomy)

Station 3



1- Decribe and how this disease differ from other?

Splenomegaly is absent, Megakartocyte in PBS

2- Diagnosis and type of this diease?

3- Investigation?

4- Plan of Treatment .

Station 3

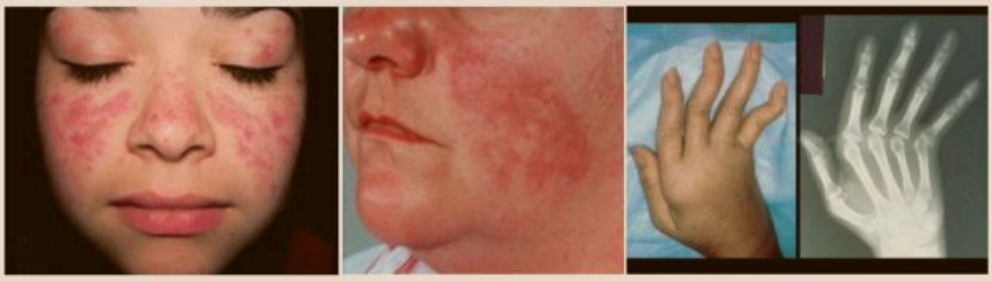
1-purpuric skin lesions almostly blanchable , No splenomegaly and megakaryocytes due to platelet autoimmune mediated destruction

2- ITP , acute if child , chronic if middle age woman

3- platelet count low , bone marrow biopsy shows megakaryocytes

4-steroids, immunoglobulin , splenectomy if refractory

Station 4



1- Describe and what is the sign?

2- Diagnosis?

3- Pt's was dyspneic (wrote in the case of question)
.. What is the causes? Serositis and pleural effusion

4- How you will confirm your diagnosis?

5- Complication ?

Station 4

1-facial butterfly rash and jaccouds deformity

2-SLE

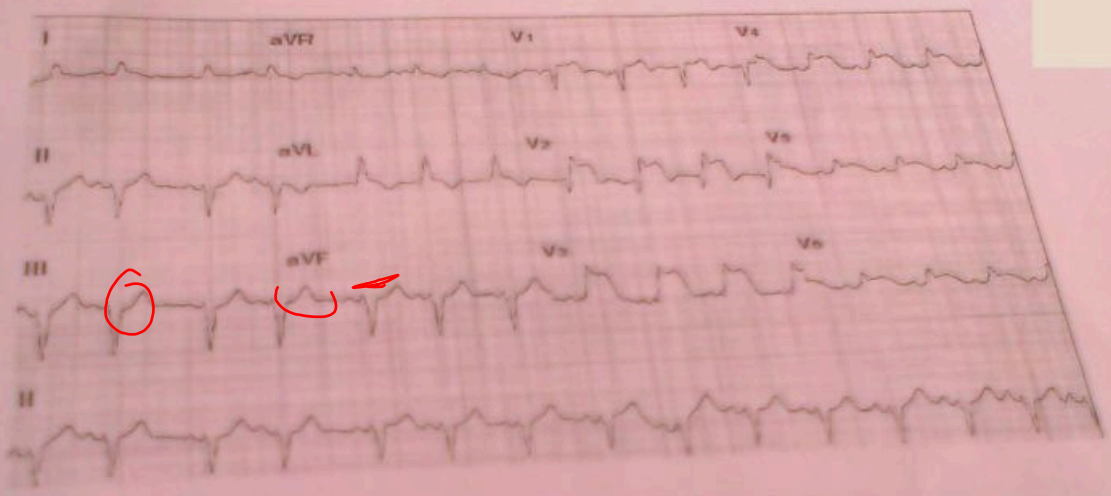
3- serositis , pleural effusion and pulmonary fibrosis

4-ANA , anti Double stranded DNA , anti smith , , ESR , low complement , False-positive test result for syphilis,CBC, renal function tests ,urinalysis, serum electrolytes, Anticardiolipin and lupus anticoagulan

5- renal failure , opportionistic infection , cardiovascular impairment

Station-4

A 55 – year – old male with stong family history of Coronary Artery Disease present to Emergency Department with severe chest pain . The following ECG was recorded and admitted to CCU without any complications . 4 days after admission he developed severe pulmonary oedema and on auscultation there was a pan systolic murmur over his precordium .



Q.1- What is the abnormal findings in this ECG ?

Q.2- What is the diagnosis of this ECG ?

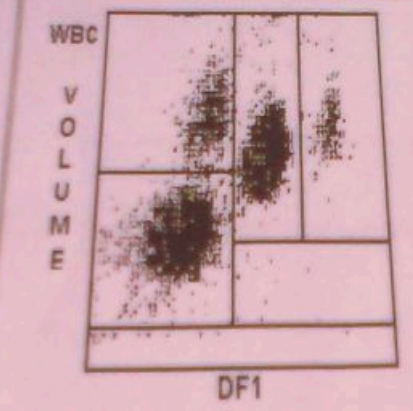
Q.3 – What is the artery responsible for this ECG findings ?

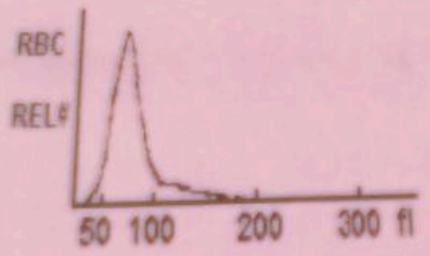
Q.4 – What are the mechanical complication leading to the new pulmonary oedema ?

Q.5 – What are the risk factors for CAD

Station-3

This is a CBC record of a 20 – year – old female with heavy menstruation .





WBC	5.5			
	%		#	
NE	54.7		3.0	
LY	34.1		1.9	
MO	7.5		0.4	
EO	3.0		0.2	
BA	0.7		0.0	
RBC	4.28	L		
HGB	9.7	L		
HCT	29.9	L		
MCV	69.7	L		
MCH	22.6	L		
MCHC	32.4	L		
RDW	18.4	H		
PLT	331			
MPV	8.8			

Q.1- What is your interpretation of this CBC ?

Q.2- What is the most likely diagnosis of this female and the cause ?

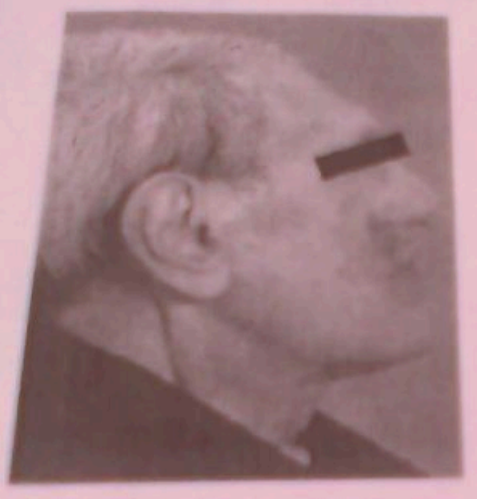
Q.3 – What is the differential diagnosis ?

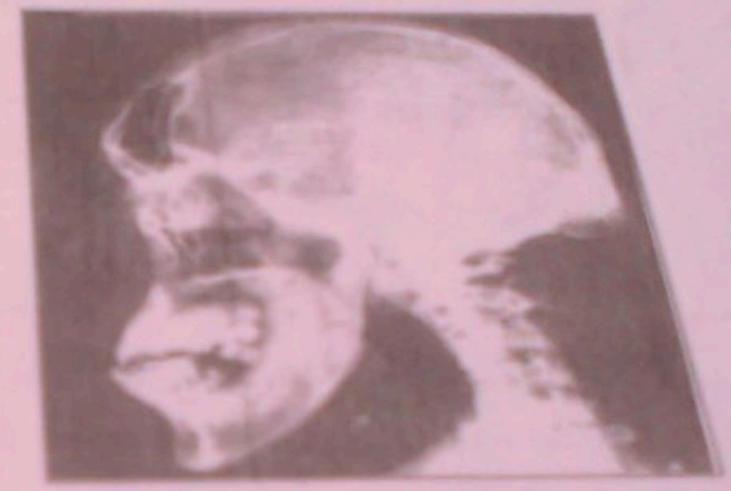
Q.4 – How you will investigate this female ?

Q.5 – How you will treat this female & the duration of treatment ?

Station – 2

A 55 – year – old male present with anormal facial appearance for more than 1 year.
The patient have profuse sweating .
Patient noticed his ring become tight and he have to change his shoes frequently.
Bellow a picture of his face and Skull X Ray .

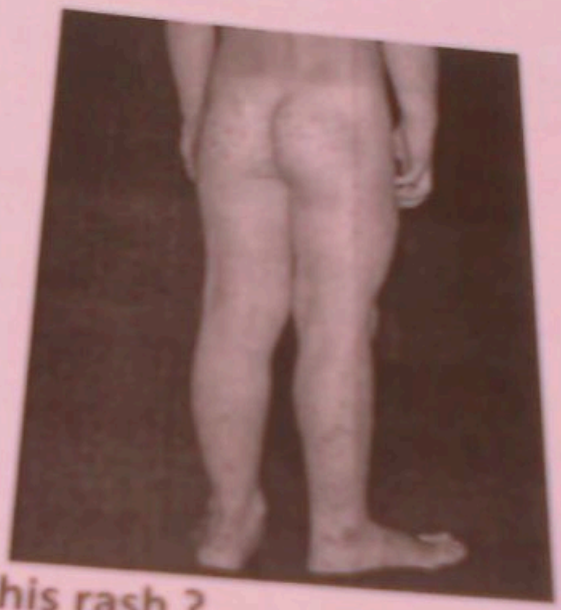




Q.1 –What are the signs in the face and skull ?
Q.2 – What is the diagnosis of this patient ?
Q.3 - Mention 4 clinical features of this disease
Q.4 – How you will investigate this patient ?
Q.5 –How you will treat this patient ?

Station No. 1

A 15 – year – old boy complaining of skin rash over his lower limbs of 2 days duration , associated with joint pain and abdominal pain . Two weeks back he had upper respiratory tract infection. CBC : Normal Coagulation profile & Platelet



Q.1 – What is this rash ?

Q.2- What is the most likely diagnosis of this boy ?

Q.3- What are the other manifestation of this disease ?

Q. 4- What other investigations you will request ?

Q.5 – How you will manage this patient & What is the outcome of this patient ?

Station 4

1-ST elevation in lead aVF,2,3 and Reciprocal changes ST depression in anterior leads (I,Avl , V1 up to V6)

2- acute inferior wall MI

3-RCA

4-rupture of papillary muscles , interventricular septum , rupture of free wall.

5- modifiable risk factors as HTN,DM,Hyperlipidemia and stress ,,, non modifiable as age ,gender , and race

Station 3

1-microcytic hypochromic anemia

2-IDA due heavy menstrual cycle

3-thalasemia trait , anemia of chronic disease , lead poisoning,sideroblastic anemia

4-Iron , ferritin , transferrin saturation , TIBC ,bone marrow stain

5-ferrous sulphate or ferrous gluconate Continue for 6 - 12 months to replete iron stores
Hgb should increase 1 g/dL every 2 - 3 weeks or 2 g/dL within 4 weeks

Station 2

1- Coarsening of facial features, Enlarged jaw (macrognathia) , boosing of frontal bone
2- Acromegaly
3-

a. Soft tissue and skeleton overgrowth
b. Coarsening of facial features
c. Abnormally large hand and foot size (ask about increasing glove/ring size)
d. Organomegaly
e. Arthralgia due to joint tissue overgrowth
f. Hypertrophic cardiomyopathy
g. Enlarged jaw (macrognathia)

4- IGF-1,oral glucose suppression test , MRI for brain
5-

Transsphenoidal resection of pituitary adenoma—treatment of choice
Radiation therapy if IGF-1 levels stay elevated after surgery
Octreotide or other somatostatin analog to suppress GH secretion

Station 1

1- Purpuric skin lesions
2- Henoch scholein purpura

e. Arthralgia due to joint tissue overgrowth
f. Hypertrophic cardiomyopathy
g. Enlarged jaw (macrognathia)

4- **IGF-1,oral glucose suppression test , MRI for brain**
5-

Transsphenoidal resection of pituitary adenoma—treatment of choice
Radiation therapy if IGF-1 levels stay elevated after surgery
Octreotide or other somatostatin analog to suppress GH secretion

Station 1

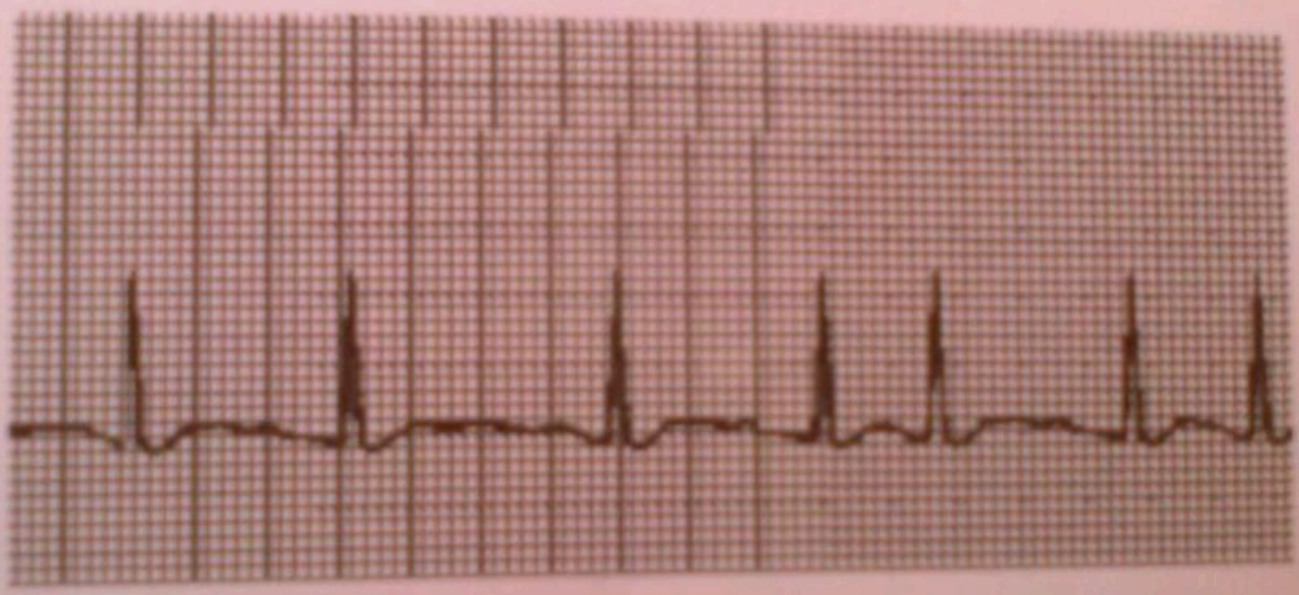
1- **Purpuric skin lesions**
2- **Henoch scholein purpura**

3- **GIT vasculitis with abdominal pain ang hemorrhage,IgA nephropathy with hematuria , arthropathy**
4- **Kidney fxn , urine analysis, IgA ,**
5- **NSAIDs for arthalgia , steroids for renal and respiratory**
6- **The outcome is good prognosis in this child**

ODAY & Ahmed Jamal

Palestinian Medical School
AL – AZHAR UNIVERSITY
4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE
Station No. .....

This is a patient of 50 –year – old presents to the cardiology clinic with history of shortness of breath and difficulty in sleeping flat and the patient awaked frequently from sleep . which improved when the patient stand . On examination patient is lookind dyspneic and orthopnic. Pulse is irregular. Heart examination revealed accentuated first heart sound and mid diastolic murmur on left 5th intercostals space.



Q.1 – What is the diagnosis of this ECG ?
Q.2- What is the causes of this ECG finding ?
Q.3- What is the complication for this ECG diagnosis ?
Q.4- What is the most likely diagnosis of this patient cardiac lesion ?
Q.5 – How can you prevent the most serious complication ?

Palestinian Medical School AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q1. Atrial Fibrillation (2M)

Q.2- Mitral Valve Disease (2M)

. Ischaemic Heart Disease & ACS .

. Cardiomyopathy

. Hypertension

. Thyrotoxicosis

. Alcoholism

Q.3- Embolic Stoke . (2M)

. – Intestinal ischemia.

- Limb ischemia

Q.4- Mitral Stenosis + Atrial Fibrillation . (2M)

Q.5 – Anti coagulation with warfarine. (2M)

Palestinian Medical School — AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

This is 30 –year – old lady present to the clinic with darkening of her exposed parts of the skin after exposure to the sun .

Hisory from this patient reveals that she had a long history of hands joint pain and recurrent aphthous ulcers in her mouth .

She was informed that she is anaemic

On examination there is abnormal face and hands .

Q.1 – What is the cause of her skin darkening ?

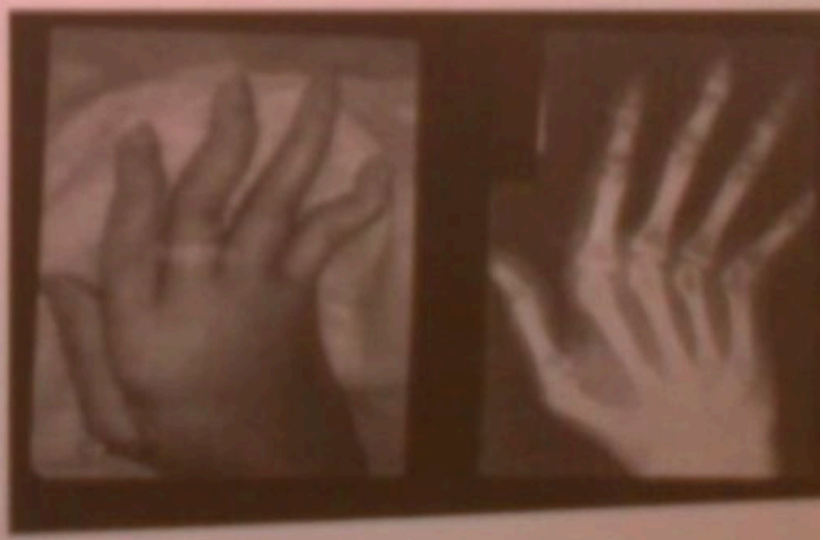
Q.2- What is the sign in her face & the differential diagnosis & hoe you differentiate ?

Q.3 – What is the name of her joint deformity and how You can prove it ?

Q.4- What is the most likely cause of her anaemia ?

Q.5- What is your initial diagnostic test ?

Q.6- What is the final diagnosis ?



Palestinian Medical School AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q1. Photosensitivity (1M)

Q.2- Facial butter fly rash (1)

Mitral rash (Not cross the nasal bridge) (1M)

Q.3- Jaccouds deformity which corrected by the patient or physician (2M)

Q.4- Haemolytic Anaemia . (1 1/2M)

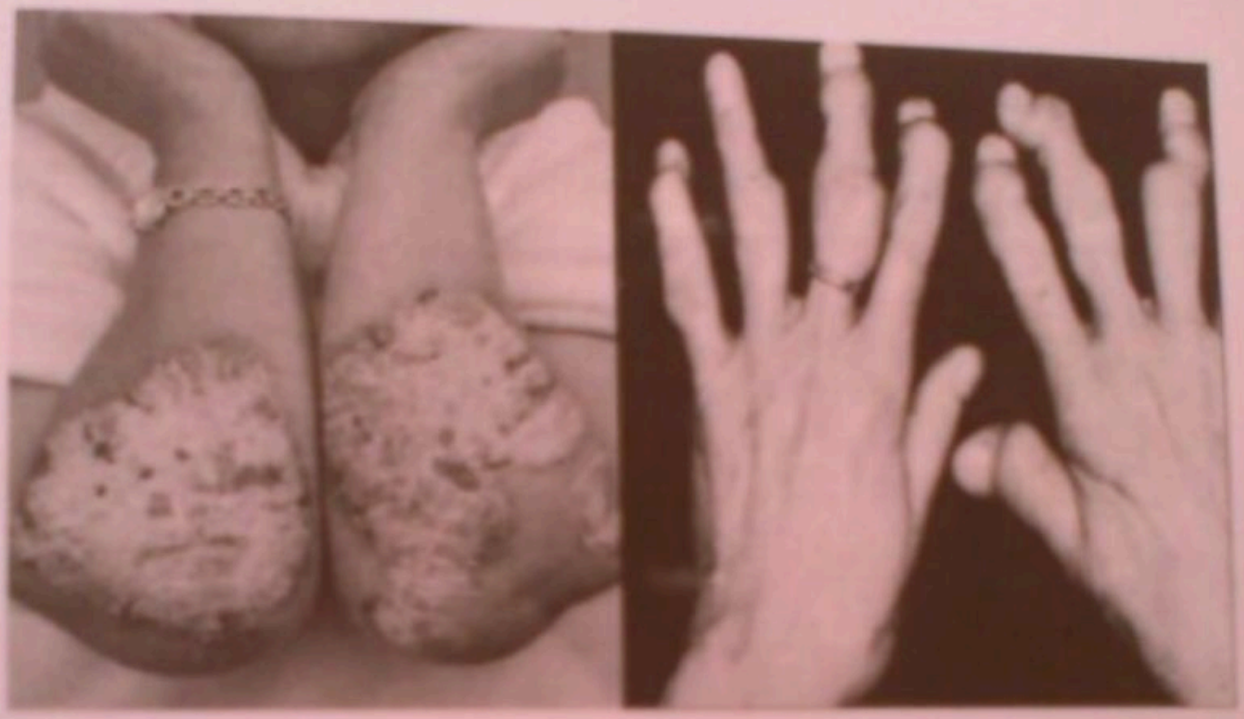
Q.5- ANF (1 1/2M)

Q.6 – SLE (2 M)

Palestinian Medical School — AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....



This is a 50 – year – old male presents with skin rash over back of elbows and knees followed by hands joint pain for long time . This is followed by hands deformity .

Q.1- What is the skin rash over elbows ?

Q.2- What pattern of joint deformity for this patient ?

Q.3 – What are the possible abnormal findings you can see in the nails ?

Q.4- What is the most likely diagnosis of this patient ?

Q. 5- What are other patterns of presentation of this disease ?

Q.6 – What is the best treatment of this patient ?

Medical School AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q.1-Psoriatic plaques (1M)

Q.2- Arthritis mutilans (2M)

Q.3- Nail pitting (2M) Total (½ for each)
- Onycholysis
- Transverse ridges
- Hyperkeratosis
- Yellow nails

Q.4- Psoriatic Arthritis (2M)

Q.5- Symmetric polyarthritis (2 M) Total (½ for each)
- Asymmetric polyarthritis or Oligoarthritis
- Spondylitis
- Distal interpaingeal joint disease

Q.6- Methotrxate (1 M) Total (½ for each)
-TNF @ blocker (Infliximab)
-PUVA
-Intra articular steroid injection
- NSAIDs

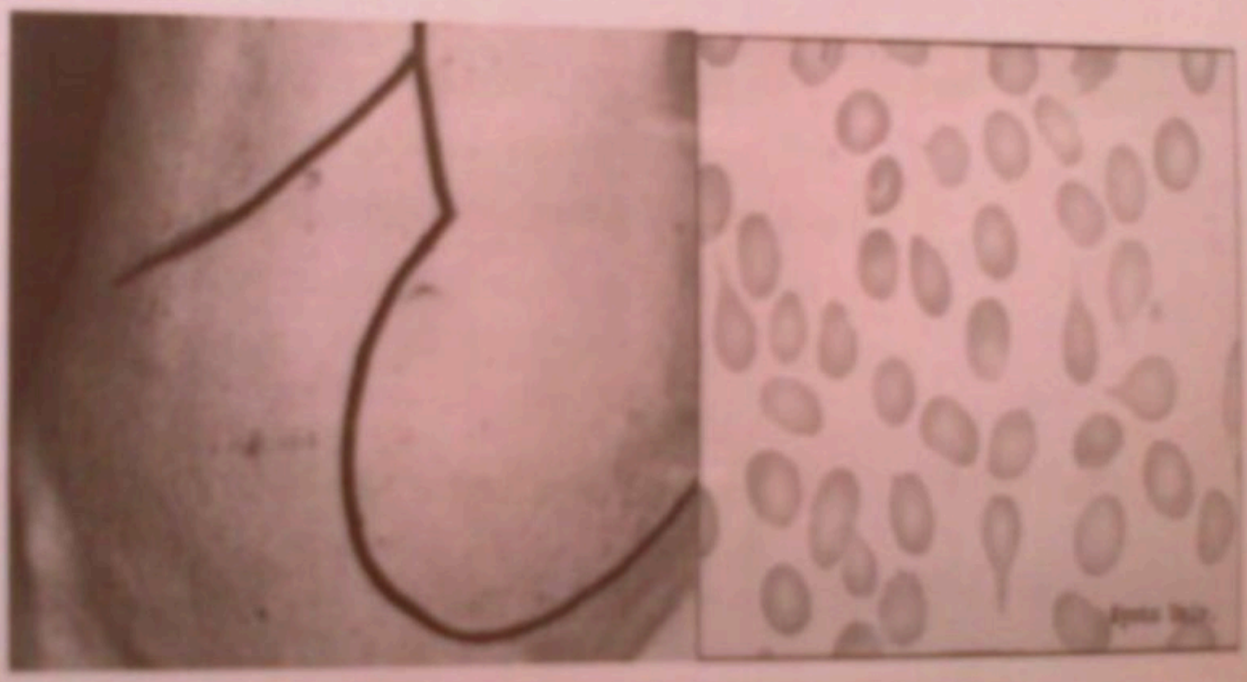
Palestinian Medical School
AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. _____

This is a 60 – year – old male present to the clinic with prolonged history of fatigue and dragging abdominal pain mainly in the left hyochondrium area associated with anorexia , night sweets , joint pain and low grade fever. CBC : Hb : 8 gm / dl & Pancytopenia

Clinical examination & Peripheral blood smear show finding in these two pictures .



Q.1- What is the findings in his abdomen ?

Q.2- What is the abnormal finding in his peripheral blood smear ?

Q.3- What is the most likely diagnosis ?

Q.4 – What is the bases for diagnosis ?

Q.5 – What is the treatment for this patient ?

Palestinian Medical School
4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE
AL – AZHAR UNIVERSITY

Station No. .....

Examiner Answer Sheet

Q.1 – Huge splenomegaly & Hepatomegaly . (2M)

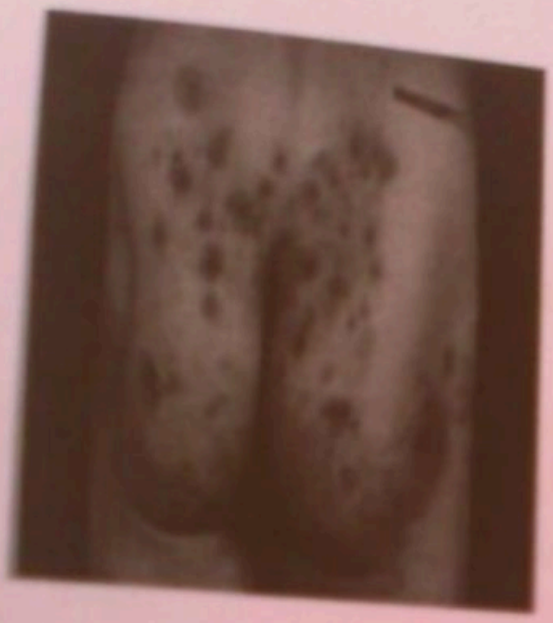
Q.2 – Tear drop cells . (2M)

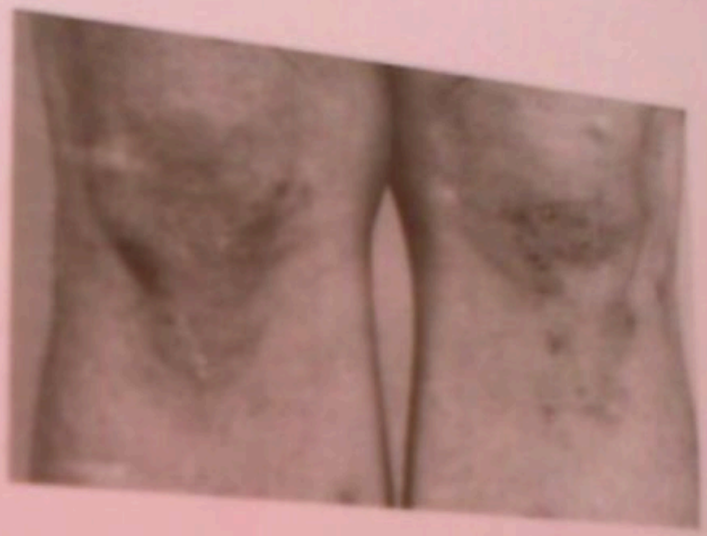
Q.3 – Myelofibrosis . (2 M)

Q.4 – 1. Huge splenomegaly (2M) -1/2 for each)
2. Anaemia & Pancytopenia
3. Bone marrow aspiration (Dry tap)
4. Bone marrow trephine (Fibrosis)
5. Absence of Philadelphia chromosome .

Q.5 –Periodic blood transfusion (2 M) – 1/2 for each)
- Erythropoeitin & Oxymatholone
- Splenectomy .
-Allogenic peripheral stem cell transplantation
- Bone marrow transplantation
- Hydoxyurea

Palestinian Medical School
4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE
AL – AZHAR UNIVERSITY
Station No. .....





This is a young patient present with chronic diarrhoea , abdominal bloating with recurrent mouth ulcers . He had intense & severe itching associated with weight loss . On examination the patient looking pale with skin rash over the knees & buttocks .

Q.1 – What is the cause of his itching and the skin rash ?

Q.2- Why the patient looking pale ?

Q.3- What is the most likely diagnosis ?

Q.4 – How to prove your diagnosis ?

Q.5- What is the character of his diarroea ?

Q.6 – What are the complications of this disease ?

Palestinian Medical School
4th Year Final Clinical Examination (2012) - INTERNAL MEDICINE
AL – AZHAR UNIVERSITY
Station No. .....
Examiner Answer Sheet

Q.1 – Dermatitis herpetiformis . (2 M)

Q.2 – Anemia (Dimorphic anaemia / Iron & Folate deficiency) (2M) -1 for each

Q.3- Coeliac Disease . (1 1/2M)

Q.4- CBC / Serum calcium / Serum Albumin / S.Ferritin & folate)
- Positive serology tests (IgA Antiendomysial / TTG
- Endoscopy with duodenal biopsy) (1 1/2) 1/2 mark for each

Q.5 – Steatorrhea , oily , explosive . (1M)

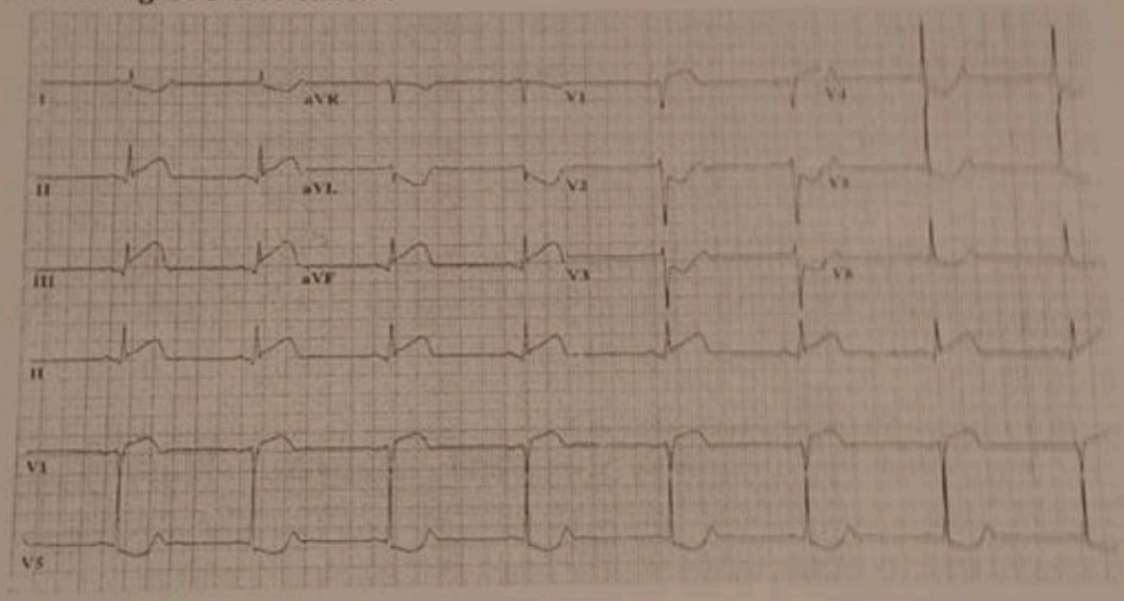
Q.6 Fat soluble vitamin deficiency (ADEK) (2 M) 1/2 for each
- Enteropathy Associated T cell Lymphoma
- Esophageal & Oropharyngeal Squamous carcinoma
- Non Hodgkins Lymphoma
-Association with other Autoimmune Diseases
- Hepatic steatosis and raised ALT & AST)
- Dental enamel hypoplasia & growth retardation
- CNS (Ataxia , P.Neuropathy)
- Oteopenea & Arthralgia
- Infertility
-D.Herpeteformis
- Ulcerative Jejunoileitis
-Hypospienism

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

A 67 – year – old male patient presents to emergency Department with crushing central chest pain of two hours duration. No past history of similar attacks . The patient is heavy smoker , diabetic and hypertensive on anti – hypertensive drugs . His brother died at age of 45 years due to myocardial infarction. On examination the patient is distressed , in severe pain . Blood pressure 80/50 mm/Hg , Pulse rate is regular and with normal rate. JVP ; normal . Chest examination revealed normal lung fields. The following ECG was taken .



Q.1-Describe the abnormal findings in this ECG.

Q.2- What coronary artery feeds this area of the heart .

Q.3 – What are the risk factors in this patient leads to this disease.

Q.4-What is the most likely complete diagnosis for this patient?

Q.5 – What is the definitive treatment for this patient

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q1.ST.Elevations in leads II , III . aVF (2M)

Q.2- Right Coronary Artery (1M)

Q.3- Age , sex , smoking , obesity , DM ,HTN , F/History(2 M)

Q.4- Acute inferior Wall Myocardial Infarction (2 M)
- Most Likely Right Ventricular Infarction (1 M)

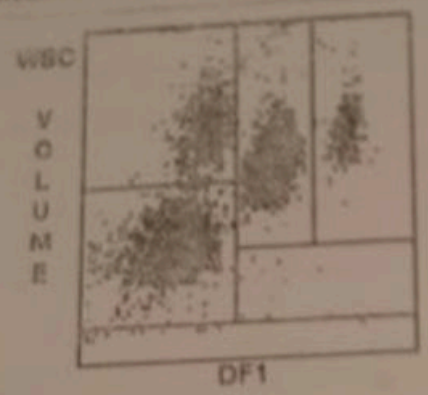
Q.5- IV Fluids , Anagesia , Oxygen . (1 M)
PCI (1 M)

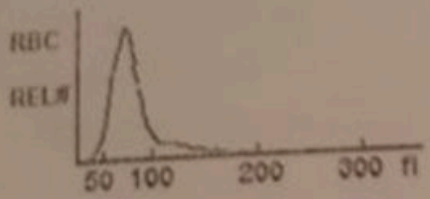
Palestinian Medical School — AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2013) - INTERNAL MEDICINE

Station No. .....

A 20 – year – old lady presents to the out patient department with abdominal bloating and chronic diarrhoea since childhood . Patient has excessive menstrual bleeding associated with clots . On examination she looks pale , no lymphadenopathy . There is intense itchy skin rash over extensor aspects of her knees. The following CBC is attatched .





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	%		#
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BA	0.7		0.0
RBC	4.28	L	
HGB	9.7	L	
HCT	29.9	L	
MCV	69.7	L	
MCH	22.6	L	
MCHC	32.4	L	
RDW	18.4	H	
PLT	331		
MPV	8.8		

Q.1 What is the abnormal finding in this patient CBC ?

Q.2- What is the cause of her skin rash ?

Q.3- What is type of anaemia this patient has & What is the differential diagnosis ?

Q.4- What is the investigations needed in this patient?

Q.5- What is the most likely causes of anaemia in this patient & What is the most likely final diagnosis

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Examiner Answer Sheet

Q.1- Hb , MCV , MCH , MCHC : Low / RDW : High(2M)

Q.2- Dermatitis herpitiforme (1 M)

Q.3- Microcytic Hypochromic Anaemia (1M)

- Iron Deficiency Anaemia . (½ M)
- Anaemia of chronic disease (1/2 M)
- Thalasemia (1/2 M)
- Sideroblastic anaemia / Lead poisoning (½ M)

Q.4- (2M) Serum iron , Ferritin , TIBC , Bone Marrow Stain

- Stool Lipid Assay
- Serum IgA Endomesyal Antibodies
- OGD with Duodenal Biopsy

Q.5 – (2 M) Iron Deficiency Anaemia due to Coeliac Disease :

Iron Malabsorption

Menorrhagia

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

A55-year-old woman with a long-standing history of dry cough and increasingly short of breath on exertion . On examination , she looks dyspnoeic . There is finger clubbing . Chest examination : There are bilateral fine end inspiratory (Velcro) Crackles at the lung bases Her room air arterial blood gas (ABG) are the following:

pH 7.36

PCO2 35

PO2 55

HCO3 : 25

Q.1- What is the explanation of her ABG ?

Q.2- What is the expected Pulmonary Function Test Pattern for this patient ?

Q.3- What is the finding in this pattern of Pulmonary Function Test ?

Q.4- What is the most likely causes of this pattern?

Q.5 – What is the most likely diagnosis of this patient ?

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q1. Respiratory Failure Type I (1 1\2 M)

Q.2- Restrictive Pattern (1 1\2 M)

Q.3- TLC & RV : Decreased (1M)

- FEV1 & FVC : Decreased (1 M)
- FEV1\FVC : Normal or More than 80 % (1M)

Q.4- Interstitial Lung Diseases (1M)

-Pulmonary Vascular Diseases (1 M)

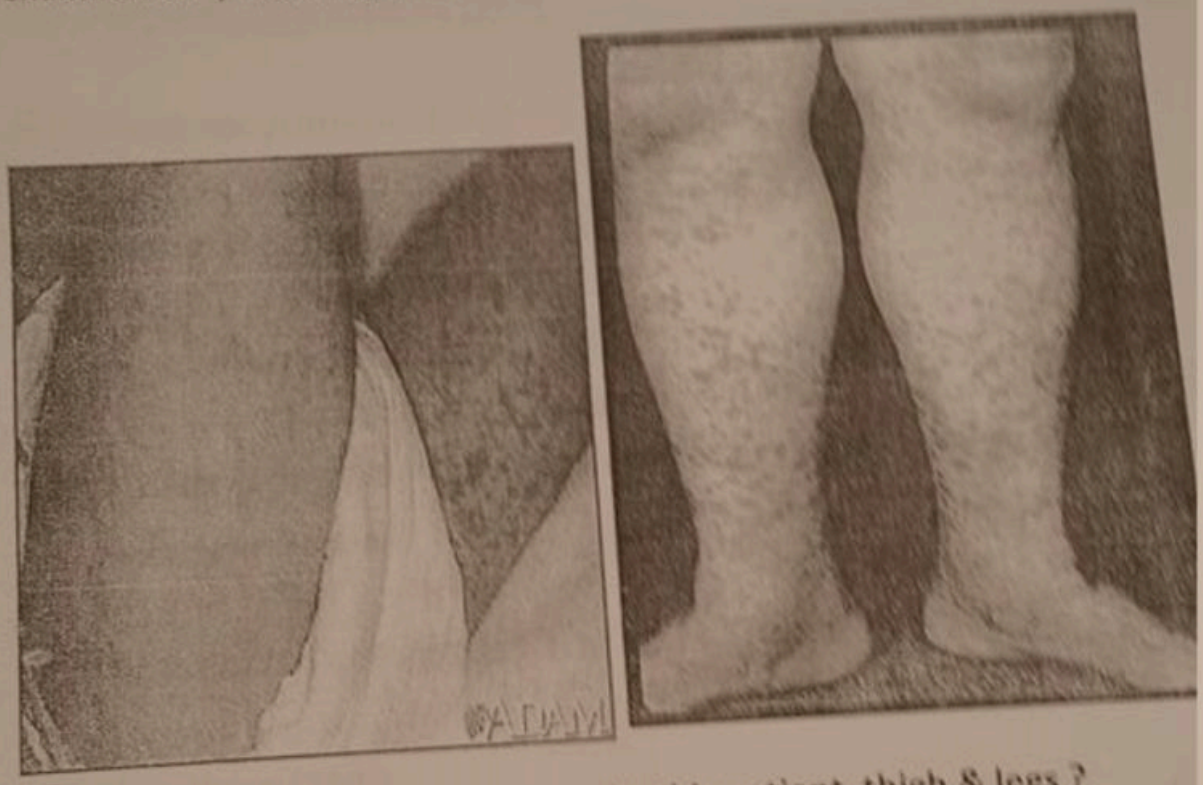
Q.5- Idiopathic Pulmonary Fibrosis (2 M)

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examiaation (2012) - INTERNAL MEDICINE

Station No. .....

A 17-year-old male presents to out patients department with new onset of skin rashes involved the buttocks , extensor surfaces of the knees and elbows& legs This skin rashes not blanched with pressure . Full blood examination , including platelets are normal .



Q.1 – What is the abnormal finding in this patient thigh & legs ?

Q.2- What is the differential diagnosis of this type of rash ?

Q.3- What is the most likely diagnosis of this patient ?

Q.4- What are other presentation can be elicited in this patient?

Q.5- What is the treatment of this patient ?

Palestinian Medical School AL – AZHAR UNIVERSITY

6th Year Final Clinical Examination (2012) - INTERNAL MEDICINE

Station No. .....

Examiner Answer Sheet

Q.1-Purpuric skin lesions (1M)

Q.2- Thromocytopenia (1M)

Q.3 - Henoch-Schonlein Purpura (2 M)

Q.4-IgA mediated vasculitis (1 M)

- GIT Vasculitis with Abdominal pain & GIT haemorrhage (1M)
- IgA Nephropathyh with haematuria (1 M)
- Arthropathy (1M)

Q.5- NSAIDS for arthralgia (1 M)

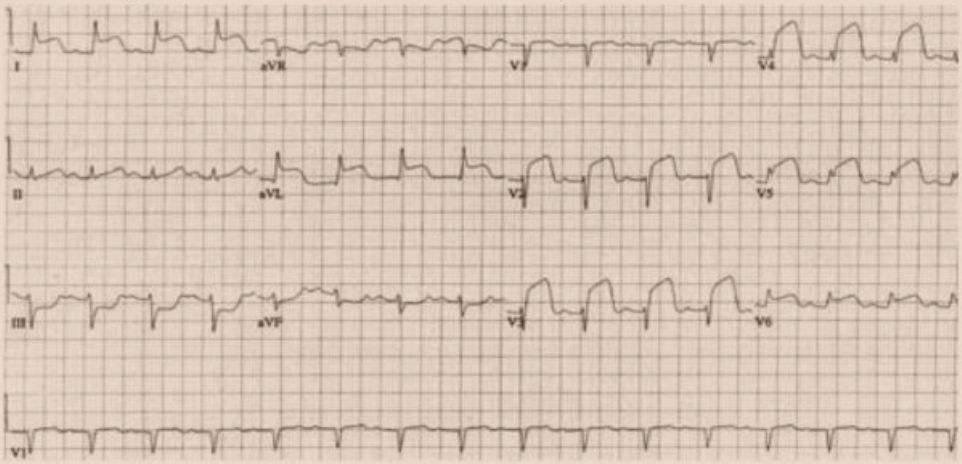
- Steroid for renal , CNS , Intra pulmonary haemorrhage and GIT Bleedings (1M)

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. 1

A 45 – year – old male presented to Emergency Department with chest tightness for four hours duration associated with profuse sweating. The following ECG was taken immediately.



Q.1- What is the abnormal findings in this ECG ?

Q.2-What is the diagnosis ?

Q.3- What is coronary vessel responsible for this ECG finding ?

Q.4- Mention four important risk factors for this patient :

Q.5-What is the immediate treatment for this patient ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet Station No. 1

Q.1- What is the abnormal findings in this ECG ?

1.ST Elevation in anterior leads (I,Avl , V1 up to V6) **(2)**

2- Reciprocal changes ST depression in inferior leads(II , III and Avf) **(2)**

Q.2-What is the diagnosis ? *Acute Anterior Wall Myocardial Infarction***(4)**

Q.3- What is coronary vessel responsible for this ECG finding ? *LAD artery***(2)**

Q.4- Mention four important risk factors for this patient :

Hypertension,Dyslipidaemia ,DM ,Smoking ,Family History ,Age,Lack of physical activity . Obesity. **(4)**

Q.5-What is the immediate treatment for this patient ?

1- MONA + BAH (Morphine ,Oxygen , Nitroglycerine ,Aspirin ,Beta Blocker ,ACE Inhibitor) **(3)**

*2- Reperfusion therapy (PCI ,Thrombolytics (tPA.Streptokinase)***(3)**

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No.

A 32 –year – old lady brought to Emergency Department in unconscious stat after repreated generalised tonic –clonic siezures .ABC Resuscitation was done and immedite Arterial Blood Gases (ABG) was obtained and the results as follow :

Na : 145 mmol /l

K : 5 mmol/ l

Chloride 90 mmol / l

Bicarbonate 10mmol /l

Po2 : 90mmHg

Pco2 : 40 mmHg

Q.1 Calculate the Anion Gap ?

Q.2- What is the type of this Acid Base Disturbance ?

Q.3-Mention 4 causes of this Acid Base Disturbance.

Q.4 - What is the final diagnosis ?

Q.5-What is the treatment of this diagnosis ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet **Station No.**

Q.1 Calculate the Anion Gap ? *45 / 50* **(4)**

Q.2- What is the type of this Acid Base Disturbance ?

High Anion Gap Metabolic Acidosis. **(4)**

Q.3-Mention 4 causes of this type of Acid Base Disturbance.(6)

1-Lactic Acidosis

2- Diabetic Keto- Acidosis

3-Uraemia / Paraldehyde

4-Methanol Ethyline glycole /Salisylate /Starvation.

Q.4 - What is the final diagnosis ? *Lactic acidosis (Type A)***(3)**

*secondary to epilepsy.***(1)**

Q.5-What is the treatment of this diagnosis ?

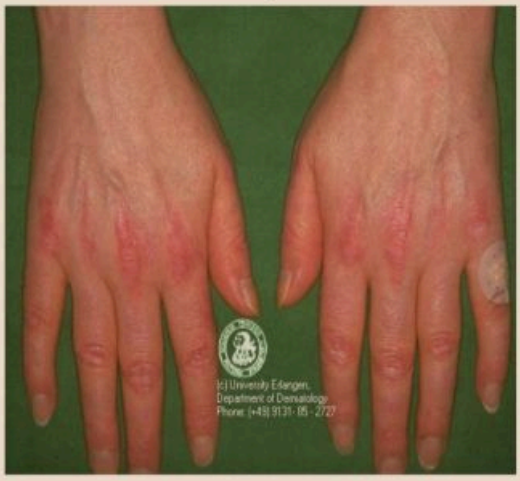
I.V sodium Bicarbonate **(2)**

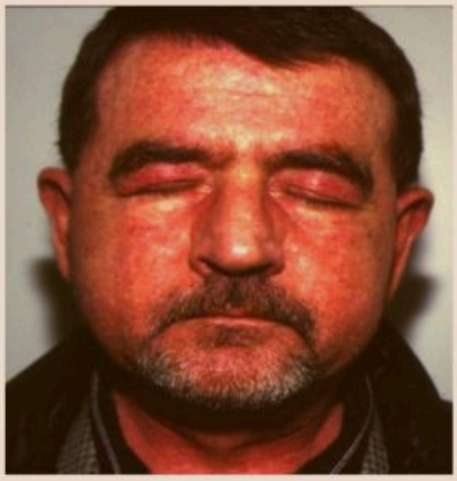
Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. 3

A 50 – year – old male presented to out patient department with difficulty in standing after prologed sitting on chair and difficulty in rising his hands above the shoulder .In system review he noticed increase difficluty in passing stool and constipatin.The following photos was taken for the patient hands & face.





Q.1- What is the signs on the hands& the face called and which of them pathognomonic and characteristic ?

Q.2- What is the most likely diagnosis ?

Q.3- How you will investigate this patient to confirm the diagnosis ?

Q.4-How you will treat this patient ?

Q.5-What serious pathology can be associated with this diseases deep investigation to Rule it out need ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet **Station No. 3**

Q.1- ***Gottrons sign*** **(3)** ***(Pathognomonic)*****(1)**

Heliotrpe rash**(3)** ***(characteristic)*****(1)**

Q.2- ***Dermatomyositis.*****(4)**

Q.3-*1- Blood Tests (CPK ,AST ,Aldolase ,ESR ANA ,Anti –JO- ,Anti RNP)***(1)**

2- EMG.**(1)**

3-Muscle Biopsy **(1)**

Q.4- ***Steroid , Methotrexate ,I.V Immunoglobulin.*****(2)**

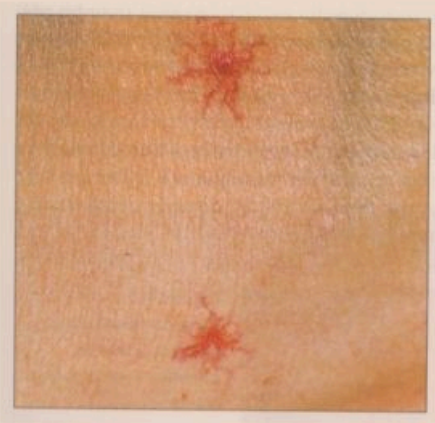
Q.5- ***Internal Malignancy.*****(3)**

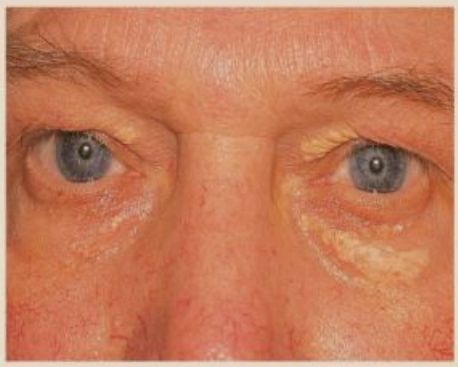
Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. 11

A 50 –year – old lady non alcoholic presnented to out patient departement complaining of intense itching, fatigue ,joint pain ,anorexia and abnormal things appears around her eyes and over her anterior upper chest. CBC , electrolytes & serum aminotransferrases are normal and high serum Alkaline Phosphatase and high serum protein. The following photos was obtained for her face and chest .





Q.1- What are the signs in these photos ?

Q.2- What is the most likely diagnosisis ?

Q.3- How you will confirm your dignosis (Invistegations)

Q.4- What is the complications of this disease ?

Q.5- What is the only drug proved to alter the prognosis ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet **Station No. 11**

Q.1- ***Spider naevi (3) , Xanthelesmat (3).***

\Q.2- ***Prmary Biliary Cirrhosis.(4)***

Q.3- ***Ultrasound Abdomen(2)***

-Anti-Mitochondrial Antibodies (2) / Antigen M2

- Liver Biopsy(2)

- IgM

Q.4- ***Portal hypertension complications and decompensated liver disease.(2)***

Q.5- ***Ursodioxycholic Acid(2)***

Palestinian Medical School **AL – AZHAR UNIVERSITY**

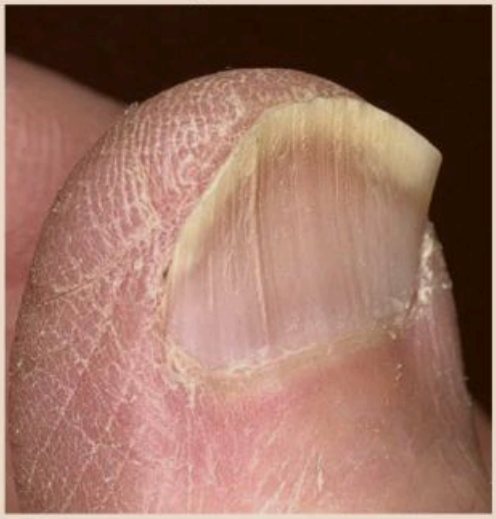
4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. 12

A 29 – year – old lady presented to out patient department complaining of easy fatigability and progressive dyspnoea on effort .Patient had history of mennorhagia. No history of joint pain .No family history of anaemia,not on any medications.

Physical examination of the patient show pallor , no lymphadenopathy and abnormal finding of her nails and face.

The following CBC was obtained and show the following :



Hb : 8 gm / dl , HTC : 24

MCV : 56

MCH : 22 / MCHC : 30

Platlet count :450.000

Q.1- What is this sign called ?

Q.2- What type of anaemia this patient have ?

Q.3- What is the differential diagnosis of this type of anaemia Q.4- What is the most likely diagnosis for this patient ?

Q.5- Mention 4 general aetiological causes for this type of anaemia.

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Strtudent Answer Sheet

Station No. 12

Q.1- *Koilonychia* **(3)**

Q.2- *Microcytic Hypochromic Anaemia* **(4)**

Q.3-

1- Iron Deficiency Anaemia **(1)**

2-Anaemia of Chronic Disease.**(1)**

3- Thalassaemia **(1)**

4- Lead Poisoning **(1)**

5-Sideroblastic Anaemia **(1)**

Q.4- *Iron Deficiency Anaemia*. **(4)**

Q.5-

1-Increase blood loss (Menorrhagia , chronic GIT loss) **(1)**

2-Increased requirement (Pregnancy , Lactation ,child growth **(1)**

3-Poor dietary intake **(1)**

4-Malabsorption **(1)**

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 50 –year – old man who was a heavy smoker presented with shortness of breath and change in the colour of his productive cough ,which was present for most of the months for last 4 years. This arterial blood gas on room air was obtained from him and show the following :

pH : 7.21

PCO2 : 75

Po2 : 57

HCO3 :34.5

Base Excess 6.3

Q.1-What is the type of Acid Base Disturbance ?

Q.2-What is the type of Respiratory function defect ?

Q.3- What are the causes of this respiratory function defect ?

Q.4- What is the diagnosis of this man ?

Q.5- What is the cause of his recent deterioration ?

Palestinian Medical School AL – AZHAR UNIVERSITY

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet **Station No. .....**

Q.1- Respiratory Acidosis (Uncompensated) (3)

Q.2- Respiratory failure Type II. (3)

Q.3-

1- Chest wall diseases (Kyphoscoliosis , Flial chest) (2)

2- Neuromuscular diseases (Myasthenia gravis ,Guillain –Barre Syndrome , Nuromuscular Distrophy) (2)

3- Lung diseases (COPD) (2)

4- Respiratory drive (Narcotic over dose) (2)

Q.4- COPD (Chronic Bronchitis) (3)

Q.5 Acute infective exacerbation (3)

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. 7

A 20 – year – old , Diabetic , thin built , single university student , with recurrent hospital admission with Diabetic Keto – Acidosis (DKA) due to insulin non compliamce. Recentley admitted to the hospital after an episode of sore throat , fever and repeated vomiting .

Examination on admission : Looking ill , rapid breathing , dehydrated with very dry tounge and throat cogestion. Temperature : 39 , Pulse rate :110 , Respiratory rate 35 / minute, B.P 90/60. Blood Sugar : 450 mg / dl. Urine ketones by dipstix : negative. ABG : Severe Metabolic Acidosis

Diagnosis of metabolic acidosis was cobsidered and treatment with I.V fluids and Insulin, On follow up urine turned to be Positive for Ketone Bodies.

Q.1 - What are the most Two causes that lead to DKA ?

Q.2 - Which ketone bodies appear in the blood and urine in DKA ?

Q.3 - Why on admission the urine ketone was negative and subsequently become Positive ?

Q.4 - What is the most important aspect of management to prevent recurrent attacks of DKA in such patient ?

Q.5 - What is the criteria for diagnosing Diabetes Mellitus in general?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet Station No. .....

Q.1

- Symptomatic patient :

FPG > 126 mg/dl or RBS >200mg/dl (Single reading) (2)

- A Symptomatic patient : FPG > 126 mg/dl or RBS >200mg/dl (2 readings)(2)

Q.2- Type 1 DM & Type 2 DM (4)

Q.3- Omitting insuline therapy(2)

- Infection(2)

Q.4- Beta – hydoxy butric acid(1)

- Aceto Acidic Acid(1)

-Acetone(1)1

Q.5- Dipstix detect only acetone which appear late.(2)

Q.6- Patient Education (3)

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 20 – year – old , Diabetic , thin built , non married university student , with recurrent hospital admission with Diabetic Keto – Acidosis due to insulin non compliamce. Recentley admitted to the hospital after an episode of sore throat , fever and repeated vomiting .

Examination on admission : Looking ill , rapid breathing , dehydrated with very dry tounge and throat cogestion. Temperature : 39 , Pulse rate :110 , Respiratory rate 35 / minute, B.P 90/60. Blood Sugar : 450 mg / dl. Urine ketones by dipstix : negative. ABG : Severe Metabolic Acidosis

Diagnosis of metabolic acidosis was cobsidered and treatment with I.V fluids and Insulin, On follow up urine turned to be Positive for Ketone Bodies.

Q.1- What is the criteria for diagnosing Diabetes Mellitus?

Q.2- What are the main Two types of Diabetes Mellitus ?

Q.3- What is the most Two causes that lead to DKA ?

Q.4-What are the Acute &Chronic complications of D.M ?

Q.5 - What is the most imprtant aspect of management to prevent recurrent attacks of DKA in such patient ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

4th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Answer Sheet **Station No. …….**

Q.1

- Symptomatic patient :

FPG > 126 mg/dl or RBS >200mg/dl (Single reading) (2)

- A Symptomatic patient : FPG > 126 mg/dl or RBS >200mg/dl (2 readings)(2)

Q.2- Type 1 DM & Type 2 DM (3)

Q.3- Omitting insuline therapy(2)

- Infection(2)

Q.4- <u>Acute Complications</u> (3)

- DKA

-NKHOS

-Hypoglycaemia, snow flower cataract , Diabetic Amyotrophy.

- <u>Chronic Complications (3)</u>

-Diabetic Retinopathy

-Diabetic Nephropathy

-Diabetic Neuropathy

(Low immunity , Infections , Diabetic foot & PVD , Risk for MI & STROKE)

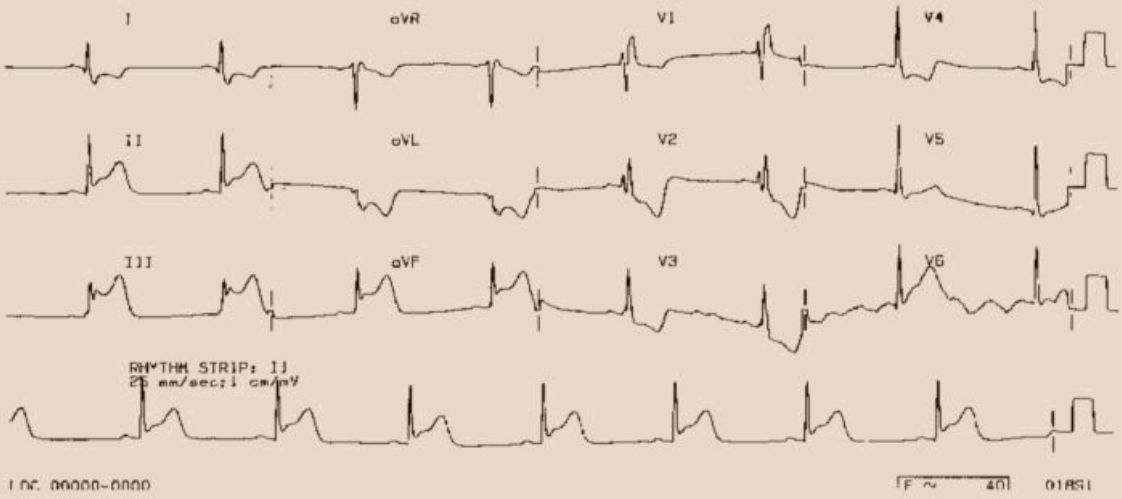
Q.5- Patient Education (3)

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 55 year old man with 4 hours crushing chest pain. The following ECG was taken.



Q.1-Describe the findings in this ECG.

Q.2-What is the vessel involved in this patient. ?

Q.3-What is the final diagnosis ?

Q.4- Mention 3 sinister complications may occur in this patient.

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1- ST Elevation in the inferior leads II , III a VF (2)
Reciprocal ST depression in the Anterior leads (.1)

Q.2- Right coronary artery **(2)**

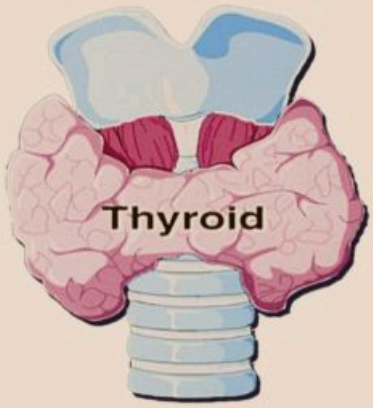
Q.3-Acute inferior wall myocardial infarction **(4)**

Q.4-Transient complete heart block **(2)**
Acute mitral regurgitation **(2)**
Right ventricular infarction **(2)**

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….



Q.1-When examining a patient with thyroid disease (Hyper / Hypothyroidism) list 5 possible signs you might observe from a general inspection ?

Q.2- When examining the same patients hand list 3 things you might observe

Q.3-When examining the same patients eye ,what might you be looking for ?

Q.4-Suggest 3 other signs you may detect when examining a patient with thyroid disease .

Q5.-When palpating the thyroid gland what would ask the patient to do to help confirm your diagnosis ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1-Thinning/ Dry / Brittle hair. **(5)**
-Loss of outer third of eyebrows
-Facial myxoedema
-Agitation
-Lid retraction
-Weight changes

Q.2-Palmer erythema **(3)**
-Sweaty / dry palms
-Tremors
-Thyroid acropachy
-Onycholysis

Q.3-Lid lag **(3)**
-Exophthalmuus
-Proptosis
-Ophthalmoplegia

Q.4 – Proximal myopathy **(3)**
- Slow / brisk reflexes
-Pre-tibial myxoedema
- Tachy / bradycardia

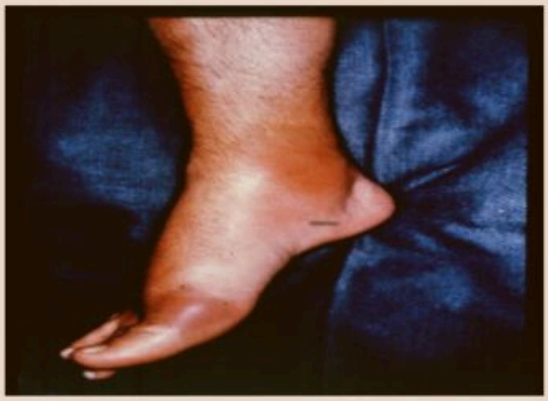
Q.5- Swallow water **(1)**

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 55- year old male known case of hypertension and congestive heart failure .The patient on ACE-Inhibitor ,Furesemide and Hydrochlortiazide .The patient awaked after midnight with severe pain in his right foot and he noticed something abnormal in his foot. The following photo was taken.



Q.1- What is this sign called & What is the most likely diagnosis?

Q.2 How can you confirm your diagnosis ?

Q.3-What is the characteristic X –ray findings ?

Q.4-What is the most likely precipitating factors in this patient ?

Q.5- How you will manage this patient ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1 - Podagra / Acute gouty arthritis **(4)**

Q.2 – Aspirating and inspecting synovial fluid demonstrating MSU crystals. **(2)**
-Polarised microscopy with negative Birefringent crystals **(2)**

Q.3- Soft tissue calcification and punched out juxta-articular erosions around the interphalangeal joints **(2)**

Q.4 –Dieuretics (Frusimide & Thiazide) **(2)**

Q.5- Oral Colchicine for acute stage **(3)**
Change the thiazide
Allopurinole for chronic case

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 78 – year – old lady presented with dyspnoea and lethargy , . She has never smoked cigarettes. Chest X –ray showed a prominent left hilum.

Na 110 mmol / l

K 3.5 mmol /l

Urea 10 mg / dl (4.0 mmol / l)

Creatinine 0.7 mg / dl (80 umol / l)

Glucose 162 mg / dl (9.0mmo/l)

Urine osmolality 625 mosmol / kg

Urine Na 35 mmol / l

CBC , Thyroid function test ,Calcium and cholesterol levels were normal. CT Chest showed a 5 cm irregular mass in the left hilum that had extended into the adjacent lung tissues.

Q.1-Calculate the plasma osmolality. ……..

Q.2-Why there is a low serum sodium ?.....

Q.3- What is the complete diagnosis ?.....

Q.4- What is the other aetologies for this disorder ?.....

Q.5- What is the immediate management for this patient ?.....

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1-240 mosmol / kg **(3)**

Q.2- Syndrome of Inappropriate ADH secretion (SIADH) **(2)**

Q.3- SIAD due to left brochogenic carcinoma **(4)**

Q.4- Pneumonia ,Pulmonary TB ,. **(4)**

-Drugs (Carbamezapine , Thiazide , Cyclophosphamide)

- CNS (Head injury , SAH , Meningitis)

-Lymphoma , Acute intermittent porphyria

Q.5- Water restriction **(2)**

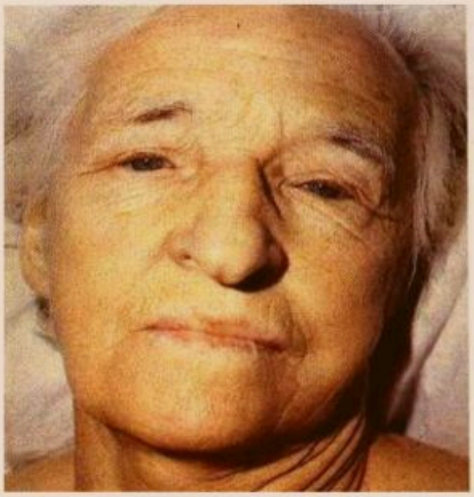
-Demclocycline

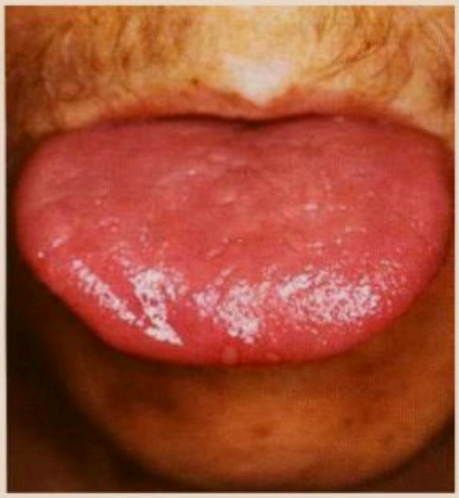
Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 49 – year –old lady known to have vitiligo and early menopause presents to OPD complaining of walking difficulties for several weeks.She also complains of annoying parasthesia of the toes and finger tips which has been worse at night.The following photoes and CBC was obtaoined :





CBC :Hb 8.2Gm /dl , WBC 3800 , Platlet 106.000

MCV :120 ,MCH :36 , MCHC :39

S.Bilirubin (T:3mg /dl –Direct 0.8 mg / dl)

S.Albumin & AST ,ALT : NORMAL.

Q.1-Why the face is lemon like ?

Q.2- What is the most likely diagnosis& the complication in this patient

Q.3- How you will investigate this patient ?

Q.4- What is the differential diagnosis of this type of anaemia ?

Q5.-What is the treatment and what is the duration of treatment ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1-Combination of anaemic pallor and jaundice due to mild haemolysis. (3)

Q.2- Pernicious anaemia / SCDC. (3)

Q.3- Peripheral smear (macrocytes ,ovalocytes , hypersegmented polymorphs) (2)

Serum B.12 LEVEL (1)

Anti-bodies screen (1)

Bone marrow examination(2)

Schilling test. (2)

Q.4-FOLATE DEFECIENCY (2)

Q.5- Intramuscular B.12 Injection I.M every 1-3 months & for life (4)

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Station No. …….

A 25- year- old lady admitted from emergency department in unconscious state . She is tachycadic , tachpnoeic , but haemodynamically stable.The following results are obtained :

Na 144 mmol/l

K 6 mmol/l

Urea 40 mg/dl

Chloride 101 mmol/l

Glucose 77 mg/dl

Arterial Blood Gases (ABG on room air)

pH 6.96

Po2 106 mmHg (14.1 kPa)

Pco2 14 mmHg (1.9 kPa)

Bicarbonate 9 mmol /l

Q.1-Calculate the Anion Gap ?

Q.2- What is the metabolic abnormality ?

Q.3-What is the most likely cause in this patient ?

Q.4 Mention 4 causes of Normal Anion Gap Acidosis ?

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1-Calculate the Anion Gap ?34/ 40 (3)

Q.2- What is the metabolic abnormality ? High Anion Gap Acidosis

Lactic Acidosis **(3)**

Q.3-What is the most likely cause in this patient ? Salicylate poisoning (2)

Q.4 Mention 2 causes of Normal Anion Gap Acidosis ? (2)

Renal Tubular Acidosis /

Diarrhoea

Ureteral Diversion / Pancreatic fistula / Hyperalementation / Saline resucitation /Acetazolamide

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Student Answer Sheet

Station No. …….

Student Name : ……

This 50- year – old man with a history of increasing dyspnoea became acutely breathless and was admitted as an emergency .The chest X –ray on the radiology box was taken .

Q.1- What three important abnormal features are present on this CXR

1- ……..

2-……..

3-…….

Q.2- What underlying condition is indicated by these features ?

…….

Q.3- Give the three likely diagnosis , which could cause this condition

1- ……..

2-……

3-……..

Q.4- Give two treatments that you would give immediately

1-……..

2-…….

Palestinian Medical School **AL – AZHAR UNIVERSITY**

6th Year Final Clinical Examination (2009) - INTERNAL MEDICINE

Examiner Answer Sheet

Station No. …….

Q.1- What three important abnormal features are present on this CXR

1- Enlarged heart size (1)

2-Kerley (B) lines (1)

3-Pulmonary venous congestion (1)

Q.2- What underlying condition is indicated by these features ?

Heart failure or pulmonary oedema (2)

Q.3- Give the three likely diagnosis , which could cause this condition

1-Myocardial infarction / IHD /Cardiomyopathic heart disease (3)

2-Hypertension

3-Valvular heart disease

Q.4- Give two treatments that you would give immediately)2)

1-Oxygen/ Propped up position

2- Opiate /Nitrate / Diuretics