

Monday  
28  
December

الإثنين  
١٩ كيهك ١٤٢٧ ق



\* Hematology 1:-

Dr. Rafat. H. Lubbad.

### Hematological disorders.

#### non malignant

- anemia.

- SCD.

- Coagulation disorders

→ Hemophilia, Thrombophilia.  
→ VWD, TTP.

- leukopenia.

#### Malignant.

- lymphoma.

- Myelo Fibrosis

- Polycythemia vera.

- CML.

### \* HELLP syndrome :-

→ Pregnancy complication.

(H) ① hemolysis

(EL) ② elevated liver enzyme.

(LP) ③ low platelet.

discover accidentally

Complaint from mother or non specific complaint → hematological disorder

hematology or

\* CBC : Complete Blood Count.

\* CBP : Complete Blood Pictuer.

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |
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ديسمبر  
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27  
December

الأحد  
١٨ كيهك ١٤٤٢ ق

لو جفأ ليا CBC

- 7 ① WBC
- 8 ② Hemoglobin
- 8 ③ platelets

لو ليا any defect في اطلع انا

- 9 \* MCV Main Corpuscular volume → measure average size of RBC.
- 9 \* MCH Main Corpuscular hemoglobin → // quantity of Hb.
- 10 \* MCHC Main // Hb Concentration → // concentration of Hb.
- 11 \* lymphocytes of WBC

12 \* Key for diagnosis any disease is History  
\* Key for Good History is presenting Complaint. (C.C.)

- 2 \* Symptoms
  - 3 hemoglobin disorder
  - 4 =
  - 5 Petechia → low platelets.
- Dizziness
  - extreme Fatigue.
  - easy Fatigability.
  - dyspnea.
  - weight loss
  - Pallor
- most most common



Saturday

26

December

السبت

١٧ كيهك ١٧٢٧ ق



١١ جماد أول ١٤٤٢ هـ

### \*\*\* What hematological manifestation in chronic liver disease?

- ① Bleeding tendency.
- ② Prolong EPR.
- ③ Prolong Prothrombin time (due to defect in synthesis of Coagulation factors)
- ④ Low platelets (Thrombocytopenia) (due to defect in synthesis of Coagulation factors)  
↳ with splenomegaly + Portal hypertension
- ⑤ low WBC
- ⑥ Microcytic or Normocytic or Macrocytic anemia
- ⑦ Thrombosis (Liver cirrhosis) (risk)

### \*\*\* What hematological manifestation in chronic kidney disease?

- ① Thrombophilia (nephrotic syndrome) (risk)  
↳ why? due to loss protein (proteinuria) C.S in urin.  
↑ Risk to Thrombosis.
- ② Microangiopathic hemolytic anemia.
- ③ Both anemia + polycythemia.

### \* etim hematological manifestation in Rheumatoid arthritis :-

- ① Normocytic anemia
- ② Felty syndrome  
↳ neutropenia  
↳ spleno megaly  
↳ Rheumatoid factor +



Azathioprine  
Methotrexate

① Neutropenic

② Thrombocytopenia

③ Normocytic / Macrocytic anemia

Folate deficiency

### Recurrent abortion in Young female :-

due to: ① Thrombophilia

② anti phospholipid syndrome

(3) Systemic lupus.

④ haematological manifestation 2nd to connective tissue disease.

دائماً مرض Primary blood disorder قلبي معضم عايشه به العياره الكثرية

ہم ریاضیاتی ہیماتولوجی کلینک

hematologic clinic

## \* عرض Anemia

2nd blood loss

← due to

GI blood loss

Renal Failure.

(4)  $\bar{A} \cup B$

Malignant



24

December

الخميس

١٥ كيهك ١٤٢٧ ق

⑤



٩ جماد أول ١٤٤٢ هـ

\* Hematological manifestation to Pulmonary disease?  
(COPD) → or Chronic Respiratory disease?

① Polycythemia (secondary).

\* Takayasu's Arteritis (disease) :-

→ Rare.

→ autoimmune disease.

→ affected to aorta and main branches.

→ inflammation in aorta & main branches → obstruction.

→ Symptoms : \* ischemic limbs.

\* Back pain.

\* 1-2 / M / Y. (very very rare).  
↓  
Million Year

\* Treatment // \* steroid & immunomodulator drug  
\* Blood Transfusion.

→ Anemia not diagnosis is clinical manifestation.

Blood loss → anemia

Malignancy

Chronic disease





٨ جماد أول ١٤٤٢ هـ

الأربعاء

١٤ كيهك ١٤٣٧ ق

23 December

7

B-symptoms:

8

→ Fever

→ weight loss

9

→ sweating (in lymphomas)

→ bone pain

10

→ Pruritic (itching)

11

Family history important in

Thalassemia

Thrombophili

12

sickle cell anemia

G6PD

1

2 Congenital as G6PD. : 60%

Genetic SCA.

3

Spherocytosis

4 Rheumatological disease : 20%

or Connective tissue disease

5

as : systemic lupus.

6 Under line Malignancy : 60%

→ lymphoproliferative disease.

7



Tuesday  
22  
December

الثلاثاء

١٣ كيهك ١٣٣٧ ق



٧ جماد أول ١٤٤٢ هـ

\* Lead poisoning :-

↓  
Microcytic anemia

\* Smoking :-

→ Polycythemia

Under line Malignancy :-  
↓  
Smoker 12 or 11.5 خلاصة

Chronic smoker 18-16 خلاصة

Relatively anemia 12 خلاصة

\* Drug history :-

\* heparin - نقيع على المرض إلى جاحذا

\* warfarin

\* immunosuppressant

\* steroid

\* chemotherapy

\* Drug allergy or hypersensitivity

skin manifestation → Pallor : anemia

→ Jaundice :



Gilbert , hepatitis A (nosymptomatic) ←

Bile duct sten - obstruction ←

hepatitis , hemolysis ←

Pancreatitis ←

ICU ←

Jaundice ←

↑ liver enzyme ←

→ ALT / AST

↑ liver function ←

↑ albumin

↓ albumin ← hepatic failure

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
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الإثنين

١٢ كيهك ١٤٢٧ ق

Monday

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December

\* Hyper ventilation / Hypoventilation in hemolytic disorders.

↓  
Haemochromatosis

Primary

Secondary

recurrent  
Blood  
Transfusion.

↓  
Pernicious anemia.  
(B<sub>12</sub> deficiency)

Cause of nail clubbing :-

- Liver cirrhosis.
- Lung cancer. (COPD not cause clubbing).
- Bronchogenic abscess in lung.
- Cyanotic heart disease.
- IBD

Glossitis in Tongue :-

- Iron deficiency.
- B<sub>12</sub> deficiency.

Gums Hyperplasia → Acute Myeloid leukemia.