Symptoms and Signs in Hematology (2)/ 2013

Abdallah Abbadi.MD.FRCP
Professor of Medicine,Hematology & Oncology
University of Jordan & JUH
Email: abdalla.awidi@gmail.com
Case one: A

24 yr old female complains of Dizziness, Fatigue, Shortness of breath especially on exertion and Headaches for the last 2 months. She has been losing scalp hair.

She does not eat red meat and has reported heavy menstrual bleeding.

Her physical exam showed Lab and Xray test showed Likely Diagnosis
Case One **Investigations & Diagnosis**

1- Hb 8 g/dl, MCV 65 fl, RDW 20%, MCH 19 pg, Retcs 0.8%.
2- Bld Film: microcytic, hypochromic, anisocytosis, poikilocytosis.
3- serum Ferritin 2 ng/ml, TIBC 450 μg/dL, serum Fe 10 μg/dL, B12, Folate : normal.

**Diagnosis: Iron Deficiency Anemia Secondary to poor diet and menorrhagia**
Case 1 B

65 yr old male had gradual onset of “odd” behavior with psychotic symptoms. He was noticed to have imbalanced gait. Examination showed loss of vibration and proprioception in lower limbs. Hb 5, MCV 112, WBC 3.3, Plt 112, Retics (corrected)0.009. Serum B12 30pg/ml. LDH 1900.

Gastric Bx atrophic gastritis.

Achlorhydria+

IF Ab +

PCA+

Diagnosis

Oxintic G. mucosa atrophy
Case TWO

18 yr old male complains of acute pain in his back, Dizziness, Fatigue, Shortness of breath and Headaches for the last 6 hours. He has had similar attacks.

Physical exam showed

Lab and Xray test showed

Likely Diagnosis
Case Two: Investigations & Diagnosis

1- Hb 9g/dl, MCV 80 fl, RDW 16%, sickle cell test %, Hb electrophoresis: A 0%, A2 3%, S 90%, F 7%.
2- Diagnosis:
   Sickle cell anemia with acute vaso-occlusive crisis.

Pathophysiology of sickle cell disease

- Deoxy Hb S polymer forms with low O2, depends on Hgb S concentration, low pH, high temperature, high 2,3-DPG
- Under a variety of circumstances, different organs are susceptible: spleen, renal medulla (papillary necrosis), & many other complications
Case Three

13 yr old male complains of skin pigmentation, abdominal swelling and pallor. He has been receiving blood transfusions since the age of 9 months.

Physical exam showed

Lab and Xray test showed

Likely Diagnosis
Case Three: Investigations & Diagnosis

1- Hb 5.6g/dl, MCV 55 fl, RDW 18%, Retcs 12%
Bld film, Serum Ferritin 6000ng/ml, Hb electrophoresis:
A 25%, A2 6%, F 69%.
2- Diagnosis: B-Thalassemia major with Fe overload,
Case Four

16 yr old male complains of back pain, dizziness, red urine and pallor after eating fava beans. He had similar attacks before.

Physical exam showed: pallor and tachycardia.

Lab test showed

Likely Diagnosis
Case Four: Investigations & Diagnosis

1- Hb 8.5, Low haptoglobin, serum LDH 1400, Bilirubin 4 mg/dl mostly indirect
2- Diagnosis: G6PD deficiency/ severe type (Favism)
3- G6PD level tested 2 months later was very low

Heinz Bodies
Case Five: a rare case

55 yr old man complains of his chocolate/ blue color with shortness breath on moderate exercise.

Likely findings and diagnosis?
Methemoglobinemia: Congenital
Due to NADH methemoglobin reductase
metHb, i.e., ferric[Fe3+] rather than ferrous [Fe2+] haemoglobin) in the blood. Methemoglobin is an oxidized form of hemoglobin that has a decreased affinity for oxygen
Case SIX

50 yr old man complains for several weeks of hotness in his face, itching and severe acute pain in his big toe.

Physical findings

Likely diagnosis
Case Six Investigations and Diagnosis

1- Hb 19, WBC 17000, Platelets 500K, Serum Uric acid 12mg/dl, Po2 Saturation 95%, serum erythropoeitin 10 mU/ml. JakII Mutation +.

2- Diagnosis: polycythemia rubra vera with acute gouty arthritis.
Case SEVEN

19 yr old boy complains of repeated attacks of large joint painful swelling especially in his knees for several years. His maternal uncle has similar condition.

Physical findings

Likely diagnosis
Case Seven Investigations and Diagnosis

1- PT 12/12 s, PTT 100/30s, TT 11/11s, BT 7 mnts, Factor VIII: <1%, Factor IX 100%.

2- Diagnosis: Hemophilia A/ Severe.
Case Eight

49 yr old lady complains of painful swelling and hotness of her L leg following coming back from visiting her relatives in USA. She had repeated attacks of cough with hemoptysis and shortness of breath.

Physical findings

Likely diagnosis
Case Eight investigation & Diagnosis

1- Duplex Us: DVT common femoral vein with PE
2- Found to have Protein C deficiency
Case Nine

29 yr old lady complains of fever and painful gums for 1 week. She developed easy bruising and hemorrhagic spots on her trunk.

Physical findings

 Likely diagnosis: AML
Case Nine

1- Hb 8.5 g/dl, Wbc 37000, 70% blasts, 12% monocytes. Platelets 24000, PT 18/12, PTT 40/32.

2- LDH 1500 U/ml, Serum uric acid 10 mg/dl

3- Bone marrow: heavily infiltrated by blasts.
Case TEN

69 yr old man complains of fever and cervical and axillary swelling for several months with occasional fever and productive purulent cough.

Physical findings

Likely diagnosis
Case Ten investigations and Diagnosis

1- Hb 10, WBC 123k, Plt 95k,
2- Diagnosis: Chronic lymphocytic leukemia with lower airways infections
Case ELEVEN

57 yr old man complains of back pain for several months and fracture of his L leg 2 days ago.

Lab and Xrays
Physical findings
Likely diagnosis
Case Eleven Investigation and Diagnosis

1- Hb 9 g/dl, normocytic normochromic, WBC 8K, Plt 180K, ESR 112mm/1st hr. Bld film. B2-microglobulin 6mg/l, serum albumin 3 g/dl, P/E 1gG 15 g/dl and IF

2- Multiple myeloma igG/k stage III.