HLS - clinical - final ✌️✔️

- **thalassemia** : inherited (autosomal **recessive**/ family history / younger age) , premature destruction of RBCs , microcytic hypochromic , facial deformities (bone expansion) .
- **von Willibrand disease** : inherited (family history) , bleeding , large multi bruises , (quantitative type 1 autosomal dominant) ,LESS factor 8 , type 2 qualitative , (quantitative type **3 autosomal recessive**) , excessive menstrual bleeding , **bleeding time is test** .
- **multiple myeloma** : elderly + back pain + anemia / renal failure - high erythrocyte sedimentation rate - monoclonal proliferations = electrophoresis peak = tests (BM , immunoglobulins , heavy & light chain) .
- **G6PD Deficiency** : pallor- jaundice - bite cells - blister cells - **H bodies** - x-linked disease - Africa + Asia , due medications or fava bean , cant handle oxidative stress .
- **sickle cell anemia** : autosomal recessive , skeletal abnormalities , leg ulcer , hypoxia , sickling cells , acute crisis , glu to val in B chain , neurological & pulmonary .
- **iron deficiency anemia** : excessive menstrual bleeding , normal WBCs and platelets , nail spooning "Koilonychia" , pallor , microcytic hypochromic cells , stomatitis , or GI malignancy "colon", test : endoscopy .
- **B12 deficiency** : gastrectomy , neurological manifestation , symmetrical numbness , megaloblastic cells (macro) , shuffling gait , vegan diet .
- **acute leukemia** : triad (anemia , bleeding , infections) , monoclonal immature blast cells in blood , bruises , petechiae , **BM dysfunction** .

questions😁 :

- [ ] A 32-year-old woman comes to her primary care physician with worsening depression and frequent falls. She has had difficulty sleeping at night and has frequently been stumbling over herself while walking. The patient states "my legs feel numb all the time." Her partner, who is also present during the visit, states that the patient has not been herself lately and has been eating less since her mother passed away. She drinks alcohol socially, occasionally smokes marijuana, and adheres to a vegan diet. Laboratory testing reveals the following results:

Laboratory Value	**Result**
Hemoglobin	10.5 g/dL
Leukocyte count	1,000/mm3
Platelet count	90,000/mm3

she has ???

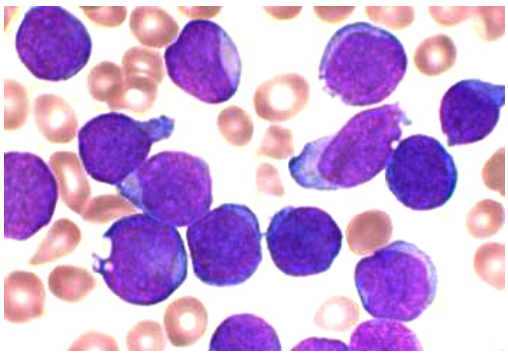
- [ ] A 31-year-old woman comes to the clinic because of increasing fatigue and dizziness over the past several months. She started a vegan diet six months ago. Menarche occurred at age 14, and menses occur regularly every 28 days, with heavy and prolonged menstrual bleeding. Family history is non-contributory. Physical examination shows conjunctival pallor. Laboratory investigations reveal a hemoglobin level of 10.3 g/dL.Which of the following sets of laboratory values is most likely to be present in this patient?
  a=

Serum iron	Total iron-binding capacity (TIBC)	Ferritin	Mean corpuscular volume	Hypersegmented neutrophils	Serum folate
High	Low	High	87	None	Normal

b=

Serum iron	Total iron-binding capacity (TIBC)	Ferritin	Mean corpuscular volume	Hypersegmented neutrophils	Serum folate
Low	High	Low	75	None	Normal

A 4-year-old boy is brought to the emergency department by his parent because of a sore throat for the past 2 days. The patient's parent reports that the patient feels tired all the time and has not been interested in playing his favorite video games over the last several weeks. Temperature is 38.3°C (101°F), pulse is 110/min, respirations are 24/min, and blood pressure is 105/65 mmHg. Physical examination shows pharyngeal erythema without exudates, mucosal pallor and petechiae on lower extremities. Abdominal examination reveals hepatosplenomegaly. Peripheral blood smear is shown below:



GOOD LUCK 😎