H&P #3

Rotation 2 - Emergency Medicine

Chief Compliant : Referral due to hemoglobin of 5.2

33 year old male with no significant past medical history referred to the ED for abnormal labs showing hemoglobin of 5.2. The patient reports one month of progressive gum swelling causing difficulty eating. He was evaluated by his primary care physician yesterday, where laboratory work revealed severe anemia and thrombocytopenia, prompting ED referral. He also reports three episodes of epistaxis over the past month but denies active bleeding currently. He denies hematochezia, melena, hematuria, abdominal pain, nausea, vomiting, fever, chills, weight loss, dizziness, chest pain, palpitations, or shortness of breath. He denies use of anticoagulants or antiplatelet medications.

Past Medical History

None

Past Surgical History

None

Medications

None

Allergies

Denies medication, environmental or food allergies.

Family History

Unknown

Social History

Travel: Denies any recent travel outside of the state or country

Marital history: Single

Occupational history: unknown

Home Situation: Lives with family

Drugs/Alcohol: Admits to drinking alcohol socially 2-3x per month, no drug use.

Smoking history: Denies smoking

Diet: Consumes approximately two meals per day, consisting of chicken, fish, rice, and vegetables. Reports reduced oral intake recently due to gum discomfort.

Exercise: He reported going for 30 minute walk everyday

ROS

General: **Admit, fatigue;** Denies fever, chill, weight loss/gain, loss of appetite, generalized weakness, fever, or night sweats

Hair, skin, nails: **Admits to dry skin;** Denies rash, itching, excessive sweating, new moles, change in existing moles, hair loss, change in hair texture or nail changes

HEENT: **Admits bleeding gums and nose bleeds.** Denies lightheadedness, dizziness, headache, trauma, visual changes, double vision or blurriness, change in hearing, tinnitus, discharge from ears, congestion, sore throat, mouth ulcers

Neck: Denies localized swelling, lumps, stiffness or decreased ROM

Pulmonary: Denies orthopnea, SOB, dyspnea on exertion, cough, sputum, hemoptysis, or wheezing

Cardiovascular: Denies chest pain, palpitations, syncope, irregular heart beat, heart murmur, or swelling of legs or feet

Gastrointestinal: Denies heart burn, nausea, vomiting, changes in appetite, abdominal pain change in bowel habits, diarrhea, constipation, blood in stool, or pain with swallowing

Genitourinary: Denies urinary frequency or urgency, dysuria, nocturia, hematuria, incontinence, flank pain or penile discharge

Neurological: Denies loss of cognition/memory, headaches, sensory disturbances, seizures, or weakness

Musculoskeletal: Denies redness, deformity, arthritis.

Peripheral Vascular: Denies claudication, coldness trophic changes, varicose vein, peripheral edema, or color change

Hematologic: **Admits Anemia.** Denies easy bruising blood transfusions or hx of DVT/PE

Endocrine: Denies thyroid enlargement, heat/cold intolerance, changes in facial or body hair, change in weight or excessive hair growth

Psychiatric: Denies depression, anxiety, mood changes, sleep disturbances, difficulty concentrating or suicidal ideations

Physical Exam:

General: 33 year old male is well-groomed and appears to be stated age. Patient appears A&O x3, without any acute distress. Good posture.

Vital Signs:

BP: 110/65

HR: 120 bpm, regular

RR: 20 rpm unlabored

T: 98.00, ear

O2 Sat : 99% on Room air

Weight: 73.5kg Height: 67.7 in BMI: 24.8

Cardiovascular: Tachycardic, regular rhythm. No murmurs. No gallops

Respiratory: Lungs clear to auscultation bilaterally. No wheezes, rales, or rhonchi.

HEENT: Normocephalic, atraumatic. **Conjunctival pallor,** no scleral icterus, PERRLA, EOMI. **Gingival hypertrophy and swelling noted without active bleeding.**

Neck: Supple, no cervical lymphadenopathy or thyromegaly

GI: Soft, non-tender, non distended, no rebound or guarding.

MSK: Full ROM of all extremities. No joint swelling or deformities. No edema or tenderness

Neuro: CN II-XII intact. Strength 5/5 bilaterally in upper and lower extremities. Normal gait. GCS =15

Skin: warm, dry. No cyanosis or rash.

Assessment: 33-year-old male with no significant past medical history referred to the ED for severe anemia (Hgb 5.2) noted on outside labs. He reports one month of gingival swelling causing difficulty eating and three episodes of epistaxis over the past month, but denies active bleeding, melena, hematochezia, or hematuria. On exam he is tachycardic but hemodynamically stable with conjunctival pallor and gingival hypertrophy without active bleeding. Given severe anemia with reported thrombocytopenia and mucosal bleeding, concern for an underlying hematologic disorders such as bone marrow suppression, aplastic anemia, or leukemia, as well as nutritional deficiencies or less likely chronic blood loss or Platelet or Coagulation Disorder. Will repeat CBC with differential, CMP, coagulation studies, and type and screen. Will be prepared for packed RBC transfusion pending repeat labs, and hematology consultation will be obtained as indicated.

Differentials

1. Hematologic Malignancy (Acute Leukemia)

Considered given the patient's gingival swelling and recurrent epistaxis, which suggest mucosal bleeding. In addition with reported anemia and thrombocytopenia on outside labs, it raises concern for an underlying bone marrow disorder such as leukemia. Leukemia can also cause gingival enlargement due to leukemic infiltration, which may explain the patient's gum swelling and difficulty.

2. Bone Marrow Failure (Aplastic Anemia or Other Marrow Suppression)

Bone marrow failure can lead to decreased production of red blood cells and platelets, resulting in anemia and bleeding symptoms such as epistaxis or gum bleeding. This could explain the

abnormal outside labs and the patient's fatigue. However, gingival swelling is less typical in these conditions.

3. Nutritional Deficiency (Iron, B12, or Folate Deficiency)

Severe nutritional deficiencies can cause significant anemia, which may present with fatigue and pallor. The patient reports difficulty eating due to gum swelling, which could lead to reduced oral intake and potential deficiencies over time. However, nutritional deficiencies would be less likely to cause thrombocytopenia or mucosal bleeding, making this less likely but still possible.

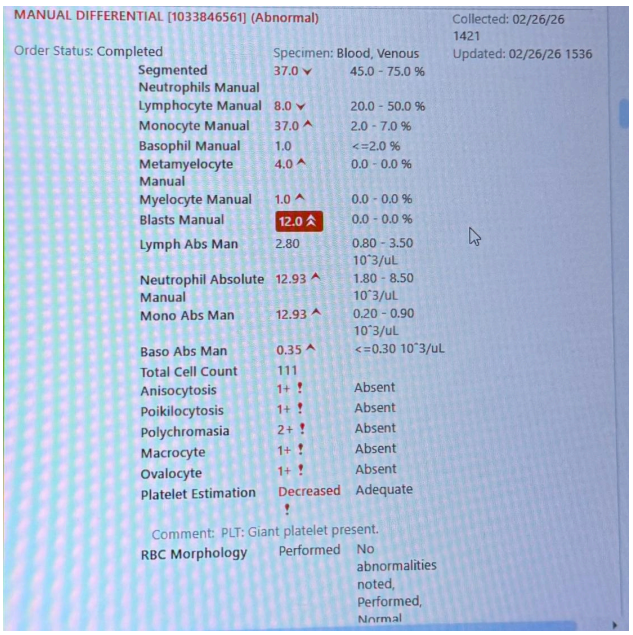
4. Chronic Blood Loss

Chronic blood loss, especially from the gastrointestinal tract, can cause severe anemia. However, the patient denies melena, hematochezia, abdominal pain, or other GI symptoms, which makes this less likely. Chronic blood loss also would not explain gingival swelling, but it remains a consideration in patients presenting with significant anemia.

5. Platelet or Coagulation Disorder

A primary platelet disorder or coagulopathy could explain the patient's recurrent epistaxis and gum bleeding. However, these conditions would not fully explain the reported severe anemia, making this less likely as the sole cause but still part of the differential until labs are confirmed.

CBC



- Hgb: 5.0 *(Normal: 13.5–17.5 g/dL)*
- Hct: 15.9 *(Normal: 41–53 %)*
- WBC: 49.94 *(Normal: 4.0–11.0 ×10³/μL)*
- Plt: 100 *(Normal: 150–450 ×10³/μL)*

Coagulation

- PT: 15.3 *(Normal: 11–13.5 sec)*
- aPTT: 24.9 *(Normal: 25–35 sec)*
- INR: 1.3 *(Normal: 0.8–1.2)*

Plan

- Continuous cardiac and vital sign monitoring
- PRBC transfusion & repeat labs
- Given concern for possible leukemia requiring specialized hematologic care, hematology & oncology consulted and the patient arranged for transfer to NewYork-Presbyterian/Weill Cornell Medical Center for further evaluation and management.