

Cheat Sheets

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Hemophilia

1. Pathophysiology

Hemophilia is an inherited X-linked recessive disorder (female carriers pass the defect to affected males).

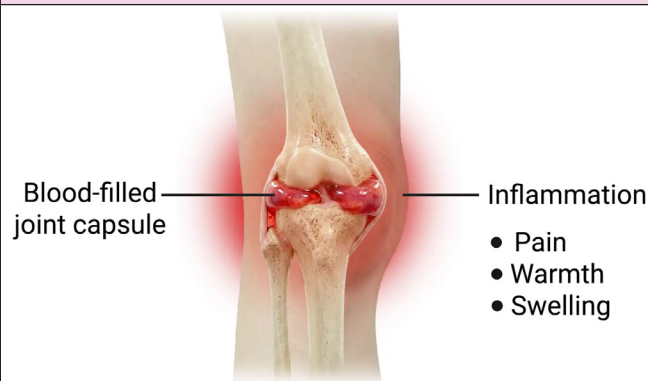
Genetic defect → **Deficiency in coagulation factors** → **Prolonged bleeding**

- Hemophilia **A**: **Factor VIII** deficiency
- Hemophilia **B**: **Factor IX** deficiency
- Often diagnosed after client has **abnormal, prolonged bleeding** following minor trauma (circumcision, first fall)

2. Assessment Findings

- ★ **Prolonged** bleeding
- ★ **Hemorrhage** after minor injury
- ★ **Hemarthrosis** (joint bleeding): Joint pain, warmth, swelling, stiffness (**FIGURE 1**)
 - Episodes of **epistaxis** (nosebleed) or **hematuria**
 - Bruises easily

FIGURE 1. HEMARTHROSIS OF THE KNEE



3. Interventions & Teaching

Nursing care focuses on:

1. **Preventing** and **recognizing bleeding**
 2. **Controlling bleeding**
 3. Encouraging **low-risk physical activity**
1. **Prevent and recognize bleeding:**
 - **#1 priority = bleeding prevention.**
 - ★ Initiate **bleeding precautions** (**TABLE 1**).
 - Apply **prolonged pressure** to superficial wounds (10-15 min).
 - ★ Administer **prophylactic factor replacement** before surgery and dental procedures.
 - Assess for signs of bleeding like **joint swelling** from hemarthrosis (see **FIGURE 1**).
 - ★ Immediately **notify HCP** of **serious trauma** (falls, motor vehicle collision) or signs of **life-threatening internal bleeding**.
 - **Cerebral bleeding**
 - Headache; slurred speech
 - ↓ **level of consciousness**
 - **GI bleeding**
 - **Black, tarry stools**
 - Encourage client to wear a **medical alert bracelet**.

TABLE 1. BLEEDING PRECAUTIONS

Have client:

- ★ **Avoid aspirin** and aspirin-containing medications (antiplatelets).
- ★ **Avoid invasive procedures** (IM injections, enemas, rectal temperatures).
- Pad table corners.
- Use a **soft bristle toothbrush** and **electric razor**.

NCLEX Star Points

- 1 **Signs of bleeding:** Notify the HCP if a client with hemophilia develops a **decreased level of consciousness**, which can indicate **cerebral bleeding**, or **black, tarry stools**, which can indicate **GI bleeding**.

3. Interventions & Teaching, Continued

2. Control bleeding:

- ★ Administer **replacement** for the deficient clotting factor (VIII or IX) to control bleeding and prevent life-threatening hemorrhage.
- Administer desmopressin acetate (**DDAVP**) to ↑ factor VIII levels in **hemophilia A**.
- ★ Implement **RICE** (**R**est, **I**ce, **C**ompression, **E**levation) for injured extremities and joints (hemarthrosis).
- For **epistaxis**, the nurse should (see **FIGURE 2**):
 - Keep client **quiet and calm** (agitation can ↑ bleeding).
 - ★ Sit client **upright and leaning forward** (prevents aspiration and ingestion of blood).
 - **Do not** tilt client's **head back**.
 - ★ Apply **pressure** to the **nostrils** with thumb and forefinger for **≥10 min**.
 - ★ Apply **ice** or a **cold compress** to the nose and face (vasoconstricts).
 - **Discourage nose blowing** to prevent dislodging blood clots.
 - If bleeding **persists**, **notify the HCP**; additional interventions may be needed (nasal packing).
- Teach clients and caregivers to **recognize** and **control bleeding** at home (administer IV factor replacement, implement RICE).

FIGURE 2. EPISTAXIS



Lean forward and apply pressure to **nostrils**.

3. Encourage **low-risk physical activity**:

- Support **ROM** activities, **regular exercise**, and physical therapy to strengthen joints and to **prevent** repeated hemarthrosis, which can cause debilitating contractures.
- ★ Encourage **sports** and physical **activities** with a **low risk** for injury (swimming, golf, walking); **avoid contact sports** (boxing, soccer, wrestling).
 - ★ Teach the importance of wearing **protective equipment** during activity (helmets, knee pads).
- Closely monitor infants learning to walk to prevent injury.

★ NCLEX Star Points

- ② **Prevent bleeding:** To **prevent bleeding**, clients with hemophilia should wear **protective equipment** during physical activity and **avoid aspirin** and **contact sports**.
- ③ **Factor replacement:** To control active bleeding, administer **factor replacement** to replace the deficient clotting factor (VIII or IX).
- ④ **Hemarthrosis:** If the client has **joint swelling**, **pain**, and **stiffness**, the nurse should suspect **hemarthrosis** and implement **RICE: Rest, Ice, Compression, and Elevation** of the extremity.
- ⑤ **Epistaxis management:** To stop bleeding from **epistaxis**, the client should **sit upright, lean forward**, apply **pressure** to the **nostrils**, and apply **ice** or a **cold compress** to the nose and face.



NCLEX Top 5 Targets

- ① If a client with hemophilia has **black, tarry stools**, it can indicate ____ (**what complication?**), and a **decreased level of consciousness** can indicate ____ (**what complication?**).
- ② Clients with hemophilia should **avoid** ____ (**what medication?**) and ____ (**what activities?**).
- ③ Control **active bleeding** by administering ____ (**what medication?**).
- ④ **Joint swelling, pain, and stiffness** in a client with hemophilia are signs of ____; the nurse should implement **RICE**: **R**____, **I**____, **C**____, and **E**____.
- ⑤ To stop bleeding from **epistaxis**, the client should **sit upright** and **lean** ____ (**backward or forward?**), **apply** pressure to the ____ (**bridge of nose or nostrils?**), and **apply** a ____ (**hot or cold?**) **compress** to the nose and face.

Answers: 1. GI bleeding, cerebral bleeding 2. aspirin, contact sports 3. factor replacement 4. hemarthrosis, rest, ice, compression, elevation 5. forward

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Attributions:

- **Hemarthrosis:** Created with BioRender.com