Jermiel Cruise is a 20-year-old student at the community college. He is admitted to the emergency department with a nosebleed that began when he fell during a touch football game. It has continued to bleed for over an hour.

ASSESSMENT
Mr. Cruise states that he has hemophilia and realizes that playing contact sports “is probably a dumb thing to do.” He adds that he has not had any recent bleeding episodes. An icebag and manual pressure are applied in the emergency department. The physician orders factor VIII concentrate to be administered. Physical assessment findings are: T 97.2°F (36.2°C), BP 118/64, R 18. Skin pale but warm. Laboratory tests reveal a prolonged APTT and a normal bleeding time and PT. Following treatment, Mr. Cruise’s bleeding subsides.

DIAGNOSES
The nurses caring for Mr. Cruise make the following nursing diagnoses:
- Risk for aspiration related to uncontrolled nosebleed
- Noncompliance with activity recommendations
- Ineffective protection related to lack of clotting factor VIII

EXPECTED OUTCOMES
The expected outcomes specify that Mr. Cruise will:
- Exhibit no further signs of bleeding.
- Maintain vital signs within his usual range.
- Maintain an open airway.
- Identify sports and recreation activities in which he can safely participate.
- Verbalize self-care measures to control bleeding.

PLANNING AND IMPLEMENTATION
The following nursing interventions are planned and implemented for Mr. Cruise while he is in the emergency department.
- Monitor vital signs and for further signs of bleeding.
- Assess airway and auscultate breath sounds.
- Review emergency measures to help stop bleeding.
- Reiterate the importance of seeking prompt medical attention if bleeding should occur.
- Advise regarding the importance of wearing a MedicAlert bracelet identifying him as a hemophiliac.
- Discuss alternative noncontact sports and recreational activities.

EVALUATION
On discharge, Mr. Cruise has no further signs of bleeding, shock, or aspiration. He is able to verbalize methods to help stop local bleeding and the importance of seeking medical attention promptly when bleeding continues. Mr. Cruise agrees to stop at a local drug store on the way home to order a MedicAlert bracelet. In addition, Mr. Cruise verbalizes an understanding of the importance of avoiding contact sports and has identified swimming and golf as alternative leisure activities that he might enjoy.

Critical Thinking in the Nursing Process
1. What is the pathophysiologic basis for the bleeding that occurs in hemophilia A and B?
2. What was Mr. Cruise’s priority nursing diagnosis? Why?
3. Why is family planning a special consideration with a client who has hemophilia?
4. Outline a plan to teach the family of a client diagnosed with hemophilia how to administer an intravenous infusion.
5. Develop a care plan for Mr. Cruise for the nursing diagnosis, Impaired social interaction. Consider Mr. Cruise’s age and developmental level in creating the plan.

See Critical Thinking in the Nursing Process in Appendix C.

Disorders of the white blood cells and lymphoid tissue include infectious mononucleosis, the leukemias, multiple myeloma, and malignant lymphomas (Hodgkin’s disease and non-Hodgkin’s lymphoma). A review of the physiology of white blood cells and lymphoid tissues precedes discussion of the diseases.

WHITE BLOOD CELL AND LYMPHOID TISSUE DISORDERS

PHYSIOLOGY REVIEW

White Blood Cells

White blood cells (WBCs), also called leukocytes, are a part of the body’s defense against microorganisms. On average, there are 5,000 to 10,000 WBCs per cubic millimeter of blood,