

advisable. At all times, encourage family members to practice good hand washing to avoid introducing pathogens into the home (see [Critical Thinking Case Study](#) box).

Critical Thinking Case Study

Fever and Neutropenia

Billy, 9 years old, is undergoing chemotherapy for high-risk acute lymphoblastic leukemia (ALL) but has recently been hospitalized with a fever of 103° F (39.5° C). He last received chemotherapy 10 days ago with vincristine, doxorubicin, and PEG-L-asparaginase and is currently taking oral dexamethasone for 21 days. His current white blood cell count is 0.1/mm³, with an absolute neutrophil count (ANC) of 0. His platelet count is 31,000/mm³, and his hemoglobin is 8.1 g/dl. He has noticeable petechiae on his arms and legs with multiple bruises in various stages of healing.

After your morning report, you visit Billy, start your assessment, and note the following: Billy is an alert and oriented 9-year-old Caucasian boy. His tongue and oral mucosa are covered with a white plaque. Vital signs are as follows: Temperature, 102.6° F (39.2° C), axial; respiratory rate, 24 breaths/min; heart rate, 140 beats/min; and blood pressure, 100/56 mm Hg. Further observation of the patient and his surroundings reveals (1) a sign over his bed that reads “no needle punctures”; (2) he is currently getting 6 liters of oxygen via nasal cannula; (3) the Port-A-Cath is accessed with intravenous (IV) fluids infusing, and the dressing is clean and dry; and (4) a tympanic thermometer is in the room.

1. What evidence should you consider regarding this condition?
2. What additional information is required at this time?
3. List the nursing intervention(s) that have the highest priority.
4. Identify important patient-centered outcomes with reference to your nursing interventions.

Hemorrhage