Reflective Question Assignments

Scenario 4: Sickle Cell

1) What is the relationship between fluid and oxygen therapy in the treatment of sickle cell anemia?
   - Two triggers that cause RBC's to sickle are dehydration and hypoxia. A decrease in body fluids promotes and sustains the sickling process, therefore it is important to maintain adequate fluid levels. Fluids are given to slow the process of sickling, which will lead to less pain. Oxygen therapy is due to the reduced production of hemoglobin and hematocrit, leading to hypoxia.
2) What complications might Brittany Long face if her symptoms are not recognized and treated in a timely manner?
   - If symptoms are not treated in a timely manner, it could eventually lead to autosplenectomy, liver failure, renal failure, osteoporosis, retinal detachment, blindness, and acute chest syndrome.
3) Document the patient teaching that you would provide for Brittany Long and her family before discharge, including disease process, nutrition, signs and symptoms of crises, prevention of infection and dehydration, and pain management.
   - Sickle cell anemia is a formation of abnormal blood cells that can "sickle" under circumstances such as dehydration, infection and temperature changes. This causes blood vessels to obstruct, causing pain in the affected area. It is important to stay hydrated and encourage fluids, do not withhold at night. Signs of crisis include pain, fever, swollen hands and feet, arthralgia, leg ulcers and stroke. To prevent infections, practice consistent handwashing and avoid anyone you know has an infection, including family members. For mild to moderate pain give Tylenol or ibuprofen, for severe pain call the doctor.
4) Reflecting on Brittany Long's case, were there any actions you would do differently? If so, what were these actions, and why would you do them differently?
   - I would have taken more opportunities to teach Brittany and her mom. It is important to keep the family and patient involved in the care and to teach in order to prevent future complications.
5) Describe how you would apply the knowledge and skills that you obtained in Brittany Long's case to an actual patient care situation.
   - Brittany was experiencing fluid volume deficit, but was not showing typical signs of dehydration, like dry mucous membranes, or decreased skin elasticity. It is important to look at the lab values and further evaluate the patient. Now knowing that hypoxia and dehydration is a major issue with sickle cell anemia.