

Reflective Questions

Scenario 4: Sickle Cell

1. What is the relationship between fluid and oxygen therapy in the treatment of sickle cell anemia?

A: Oxygen therapy is needed in the treatment of sickle cell anemia due to the sickled cells clumping together and slowing the flow of blood which decreases the amount of oxygen being able to make it to organs and tissue. Oxygen administration during treatment will help aid in those target areas receiving adequate oxygenation. Fluid therapy is also important as it contributes to vasodilation which allows blood to flow more easily through the affected vessels.

2. What complications might Brittany Long face if her symptoms are not recognized and treated in a timely manner?

A: Brittany could potentially experience severe hypoxia and tissue ischemia if her symptoms are not recognized in a timely manner which could lead her to sustain damage to vital organs such as chest syndrome. Chest syndrome is when the lungs and cardiovascular are deprived of blood flow and oxygen due to blockage of sickled cells within the vessel. If left untreated, this could be fatal for Brittany.

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.

A: Sickle cell disease is a blood disorder where the body produces abnormally shaped red blood cells which are cleared from the body at a faster rate than normal leading to inadequate oxygen supply to the entire body. A sickle cell crisis happens when those abnormal red blood cells clump together and dislodge in a small blood vessel, depriving vital organs of oxygen and nutrients. Signs and symptoms of a crisis would include sudden pain that may be dull, stabbing, throbbing in places such as the arms or legs, abdomen, chest, hands and feet, shortness of breath, extreme fatigue, headache or dizziness, weakness in body movements and yellowish color of the skin and eyes. It is important to be aware of things that may trigger a crises episode such as dehydration, extreme cold temperatures, infection, stress, and low oxygen intake. Preventions would include drinking plenty of water a day to prevent dehydration, dressing warm during cold months, exercise cautiously to not overexert the body and cause excess stress, good sleep schedule, and good hand washing and immunizations to prevent illness. Pain management will depend on the severity of pain experienced during crises flare up but may include an NSAID such as Ibuprofen or Tylenol, for severe pain an opioid may be given to help elevate breakthrough pain. It is very important to consume a well-balanced diet with plenty of fruits and vegetables, whole grains, and lean proteins such as chicken, fish, beans, and nuts.

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?

A: I do not believe I would have wished to do anything differently regarding Brittany's case. Brittany's symptoms were addressed promptly, and her pain was assessed and treated with appropriate analgesic medications. Brittany was receiving adequate fluids to help come back hypovolemia and was monitored closely for improvement. Her lab results were addressed, and interventions were started.

5. Describe how you would apply the knowledge and skills that you obtained in Brittany Long's case to an actual patient care situation.

A: I would perform a thorough pain assessment on my patient and obtain information about the severity of the pain and duration that has been experiencing. I would be sure to keep a close eye on my patient's oxygen saturation levels and perform thorough respiratory assessments during intervention. I would stay on top of my patient's pain medication administration times to ensure their pain is being controlled appropriately. Once my patient was stable and comfortable I would ensure he/she was well educated on their disease and any potential activity that may send them into a crisis and readily answer any questions they may have for me.