

**IM5 (Pediatrics) Critical Thinking Worksheet**

Patient Age: 17 y/o

Patient Weight: 45.6 kg

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| <b>Student Name:</b> Olivia Ledgerwood  | <b>Unit:</b> Pedi Med-Surg <b>Pt. Initials:</b>  | <b>Date:</b> 09/15/22  |
| <b>1. Disease Process &amp; Brief Pathophysiology (Identify Key Concepts to Your Patient and Include Reference):</b><br><br>Sickle Cell Crisis: sickled red blood cells block small blood vessels that carry blood to your bones due to the body destroying red blood cells faster than producing them. | <b>2. Factors for the Development of the Disease/Acute Illness:</b><br><br>Both parents carry sickle cell anemia gene<br>Crisis: <ul style="list-style-type: none"><li>● Dehydration</li><li>● Nausea &amp; vomiting</li><li>● Cold environments</li></ul> | <b>3. Signs and Symptoms:</b><br><br>sudden pain (dull, stabbing, throbbing, or sharp) in your arms and legs, belly, chest, hands and feet, or lower back<br><br>breathing problems<br>extreme fatigue<br>headache/dizziness<br>jaundice |
| <b>4. Diagnostic Tests Pertinent or Confirming of Diagnosis:</b><br><br>CBC<br>Reticulocyte count<br>Liver function tests<br>Complete metabolic panel   | <b>5. Lab Values That May Be Affected:</b><br><br>RBC<br>Hemoglobin<br>Hematocrit  | <b>6. Current Treatment (Include Procedures):</b><br><br>Blood transfusions<br>Hydroxyurea<br>Pain relief medications<br>Stem Cell Transplants   |

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| <p><b>7. Pain &amp; Discomfort Management: List 2 Developmentally Appropriate Non-Pharmacologic Interventions Related to Pain &amp; Discomfort for This Patient.</b></p> <ol style="list-style-type: none"> <li>Cognitive Behavioral Therapy</li> <li>Relaxation Techniques</li> </ol> <p><b>*List All Pain/Discomfort Medication on the Medication Worksheet</b></p> | <p><b>8. Calculate the Maintenance Fluid Requirement (Show Your Work):</b></p> <p> <math>10\text{kg} \times 100 = 1000</math>      <math>1000+500+512=2012/24 \text{ hr}</math><br/> <math>10\text{kg} \times 50 = 500</math><br/> <math>25.6 \text{ kg} \times 20 = 512</math>      <math>2012/24=83.8 \text{ mL/hr}</math> </p> <p><b>Actual Pt MIVF Rate:</b> 80mL/hr</p> <p><b>Is There a Significant Discrepancy?</b> No</p> <p><b>Why?</b></p>  | <p><b>9. Calculate the Minimum Acceptable Urine Output Requirement (Show Your Work):</b></p> <p><math>0.5\text{mL} \times 45.6\text{kg} = 22.8\text{mL/hr}</math></p> <p><b>Actual Pt Urine Output:</b></p> <p>unmeasurable; voided 3x</p> |
| <p>Ibuprofen<br/>Gabapentin<br/>Morphine<br/>Lidocaine-prilocaine (EMLA) cream<br/>Lidocaine 1% injection<br/>Lorazepam</p>   | <p><b>10. Growth &amp; Development: List the Developmental Stage of Your Patient For Each Theorist Below and Document 2 OBSERVED Developmental Behaviors for Each Theorist. If Developmentally Delayed, Identify the Stage You Would Classify the Patient:</b></p> <p><b>Erickson Stage:</b> Identity v Role confusion</p> <ol style="list-style-type: none"> <li>Patient likes to play videogames with friends instead of family.</li> <li>Patient is more independent from the mother and able to make decisions about taking medications with her advice rather than the mother making his choices for him.</li> </ol> <p><b>Piaget Stage:</b> Formal Operational stage</p> <ol style="list-style-type: none"> <li>The patient knew and was aware of what the MRI was and knew they wanted medication to calm them during the procedure.</li> <li>Patient understood that if the nurse unplugs his game, his game would stop playing and offered to plug in pump machine elsewhere.</li> </ol> |  |

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| <b>11. Focused Nursing Diagnosis:</b><br>Ineffective Tissue Perfusion                             | <b>15. Nursing Interventions related to the Nursing Diagnosis in #11:</b><br><b>1.</b> Watch patient drink plenty of fluids and record urine output.<br><br><b>Evidenced Based Practice:</b> Dehydration causes increase in sickling and occlusion of capillaries.<br><br><b>2.</b> Make the room warm and have plenty of blankets in the room.<br><br><b>Evidenced Based Practice:</b> Warmth provides vasodilation, opening up vessels for blood to run smoother.<br><br><b>3.</b> Assess lower extremities for skin texture, ulcerations, and/or edema<br><br><b>Evidenced Based Practice:</b> Sickling of blood can cause reduced peripheral circulation and often leads to dermal changes and delayed healing | <b>16. Patient/Caregiver Teaching:</b><br><b>1.</b> Educate pt not to overwork one's self and take things slow when recovering from a crisis. In addition, educate some methods on how to manage their pain non pharmacological.<br><br><b>2.</b> Educate pt to drink plenty of fluids and to avoid too much exposure of the sun to prevent the sickling of RBCs.<br><br><b>3.</b> Educate pt to avoid getting over-head and getting very cold to prevent too much vasodilation and vasoconstriction. |
| <b>12. Related to (r/t):</b><br>Vaso-occlusive nature of sickling, inflammatory response          |  | <b>17. Discharge Planning/Community Resources:</b><br><b>1.</b> Sickle Cell Anemia Support Groups<br><a href="https://www.sicklecelldisease.org/">https://www.sicklecelldisease.org/</a><br><br><b>2.</b> Educate pt about signs and symptoms of sickle cell crisis and to call their doctor if experiencing symptoms.<br><br><b>3.</b> Set up follow up appointments with doctor to ensure smooth transition back to school and get lab work done often to look at RBCs for any changes.             |
| <b>13. As evidenced by (aeb):</b><br>Diminished peripheral pulses<br>Bone Pain<br>Delayed healing |  | <b>14. Desired patient outcome:</b><br>Patient will demonstrate strong and palpable peripheral pulses by discharge.   |

