

IM5 (Pediatrics) Critical Thinking Worksheet**Patient Age:** 3**Patient Weight:** 15.1kg

Student Name: Miguel Alegre	Unit: Pedi N3 Pt. Initials: N/A	Date: 12/16/2021
<p>1. Disease Process & Brief Pathophysiology <i>Identify How Consistent Your Patient's</i> Pancytopenia - Peripheral blood cytopenia in children can be due to a variety of acquired or inherited diseases. Genetic disorders affecting a single hematopoietic lineage are frequently characterized by typical bone marrow findings, such as lack of progenitors or maturation arrest in congenital neutropenia or a lack of megakaryocytes in congenital amegakaryocytic thrombocytopenia, whereas antibody-mediated diseases such as autoimmune neutropenia are associated with a rather unremarkable bone marrow morphology. By contrast, pancytopenia is frequently associated with a hypocellular bone marrow, and the differential diagnosis includes acquired aplastic anemia, myelodysplastic syndrome, inherited bone marrow failure syndromes such as Fanconi anemia and dyskeratosis congenita, and a variety of immunological disorders including hemophagocytic lymphohistiocytosis. Thorough bone marrow analysis is of special importance for the diagnostic work-up of most patients. Cellularity, cellular composition, and dysplastic signs are the cornerstones of the differential diagnosis. Pancytopenia in the presence of a normo- or hypercellular marrow with dysplastic changes may indicate myelodysplastic syndrome. More challenging for the hematologist is the evaluation of the hypocellular bone marrow. Although aplastic anemia and hypocellular refractory cytopenia of childhood (RCC) can reliably be differentiated on a morphological level, the overlapping</p>	<p>2. Factors for the Development of the Disease/Acute Illness: Disease such as cancer, lupus or bone marrow disorders (P), infections (P), medicine side effects, environmental toxins, radiation, benzene or arsenic, chemotherapy/radiation treatments, autoimmune disorders, family history of blood disorders</p>	<p>3. Signs and Symptoms: Weakness (P), fatigue, skin problems (P), such as rashes or easy bruising, pale skin, Tachycardia, SOB, bleeding problems, such as bleeding gums, nosebleeds or internal bleeding, infections (P), a fever higher than 101 degrees, seizures, convulsions, heavy bleeding, severe SOB, confusion, passed out</p>

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<p>pathophysiology remains a significant challenge for the choice of the therapeutic strategy. Furthermore, inherited bone marrow failure syndromes are usually associated with the morphological picture of RCC, and the recognition of these entities is essential as they often present a multisystem disease requiring different diagnostic and therapeutic approaches. This paper gives an overview over the different disease entities presenting with (pan)cytopenia, their pathophysiology, characteristic bone marrow findings, and therapeutic approaches.</p>		
<p>4. Diagnostic Tests Pertinent or Confirming of Diagnosis: CBC (P), peripheral blood smear (P), LFTs, test for any diseases, thyroid function, bone marrow biopsy</p>	<p>5. Lab Values That May Be Affected: CBC: HCT: 22.8 (low), WBC: 2.38 (low), Plt 147 (low), Hgb 7.9 (low)</p>	<p>6. Current Treatment (Include Procedures): Antifungals (to treat the fungus that grew on her L arm, which that fungus caused her to have pancytopenia) and Wound care</p>
<p>7. Pain & Discomfort Management: List 2 Developmentally Appropriate Non-Pharmacologic Interventions Related to Pain & Discomfort for This Patient.</p>	<p>8. Calculate the Maintenance Fluid Requirement (Show Your Work): 15.1 kg $10 \times 100 = 1000$</p>	<p>9. Calculate the Minimum Acceptable Urine Output Requirement (Show Your Work): $0.5 \text{ mL}/15.1 \text{ kg/hr} = 7.6 \text{ mL/hr}$</p>

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<ol style="list-style-type: none"> 1. Presence of mom beside the patient 2. Distractions, having toys and cartoons playing on the TV <p>*List All Pain/Discomfort Medication on the Medication Worksheet Morphine and tylenol</p>	$5.1 \times 50 = 255$ $= 1255/24 \rightarrow = 52.3 \text{ mL/hr}$ <p>Actual Pt MIVF Rate: 75 mL/hr</p> <p>Is There a Significant Discrepancy? <input type="checkbox"/></p> <p>Why? The rate that was prescribed was more than what was needed. This could lead into fluid overload to the patient.</p>	<p>Actual Pt Urine Output: 1340</p>
<p>10. Growth & 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:</p> <p>Erickson Stage: Autonomy vs shame and doubt</p> <ol style="list-style-type: none"> 1. Negativism - the child displayed it when I was trying to reach out for her finger to put on a pulse ox, I opened up with a closed-ended question to see her finger, she look at her mom and said no. 2. Transitional Object - the patient had stuffed toys that has names on them that she feels close and comfortable with <p>Piaget Stage: Anal stage</p> <ol style="list-style-type: none"> 1. The patient told her mom that she wants to go potty (but still on her diaper) she communicated the need to go, which is a good marker for the child;s readiness to toilet train 2. During the morning vitals, we had to change her diaper and gown, her diaper was dry throughout the night. Also a good marker that the child is ready to start toilet training. 		

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11. Focused Nursing Diagnosis: Impaired skin integrity	15. Nursing Interventions related to the Nursing Diagnosis in #11: 1. Have the patient play and do ROM activities Evidenced Based Practice: This is to prevent pressure ulcers to develop if patient feels weak or pain. This also helps with the circulation to other areas of the body and decreasing constipation.	16. Patient/Caregiver Teaching: 1. Educate the child and her parent(s) the importance of TCDB 2. Teach the child and her parent(s) to increase patient's activity to improve circulation 3. Educate the child and her parent(s) about proper handling of the patient's wound (cleaning, dressing, etc.)
12. Related to (r/t): Wound caused by fungal infection on the L arm	2. Do TCDB Evidenced Based Practice: If pain is unbearable or mobility is greatly affected, this can help prevent atelectasis and pneumonia to develop. Also keeping the cardiopulmonary status conditioned	17. Discharge Planning/Community Resources: 1. To continue prescribed medication use, refill prescribed medications in pharmacies. 2. Wound care appointment for the patient 3. Dietary consultant to help plan a meal for a toddler with an impaired skin integrity and pancytopenia.
13. As evidenced by (aeb): Pain at the site and wound dressing covering half the arm	3. To monitor and observe the area of impaired tissue integrity and comparing it bilaterally Evidenced Based Practice: To identify imminent problems early and to evaluate if the skin integrity is getting better or worse	
14. Desired patient outcome: Patient will be able to move her L arm with a pain less than 5 without analgesics used. To be achieved until pt is discharged.		