

<p style="text-align: center;">Medications</p> <p>1. Poly-Vi-Sol 10 mcg/ mL 1 drop daily; to promote good health and growth</p> <p>Pharmacological: Vitamin (per Therapeutic: Supplement Key Nursing Assessment prior to admin: Review previous iron levels and obtain adjusted age to ensure infant is receiving the recommended daily allowance (Phelps, 2020).</p> <p>2. Vitamin D3 0.1 mL 1 drop daily; to maintain calcium and bone health</p> <p>Pharmacological: Vitamin Therapeutic: Supplement Key Nursing Assessment prior to admin: Review previous vitamin D levels and obtain adjusted age to ensure infant is receiving the recommended daily allowance (Alberta Health Services, 2019).</p>	<p style="text-align: center;">Demographic Data</p> <p>Admitting diagnosis: Dehydration and malnutrition</p> <p>Age of client: 16 weeks old (Adjusted age: 2 months old)</p> <p>Sex: Male</p> <p>Weight in kgs: 4.02 kg</p> <p>Allergies: No known allergies</p> <p>Date of admission: 2/20/24</p> <p>Psychosocial Developmental Stage: Stage 1; Trust vs. Mistrust (Beatey, 2023).</p> <p>Cognitive Development Stage: Sensorimotor (Cherry, 2023).</p>	<p style="text-align: center;">Pathophysiology</p> <p>Disease process: Malnutrition can have a profound effect on the cells and body systems. It can cause an impaired protein intake, which will lead to reduced cell growth and repair mechanisms (Leader, 2023). It can also impair cellular metabolism, which leads to fatigue and weakness (Leader, 2023). Depending on the severity or time left untreated, it can turn into development delay, impaired growth, and organ dysfunction (Leader, 2023).</p> <p>S/S of disease: Sunken soft spot on the head, wrinkled skin, urinates one to two times per day, hard to feed, diarrhea, vomiting, weak cry, not gaining enough weight (Leader, 2023).</p> <p>Method of Diagnosis: Although weight and height are the most significant clinical finding for FTT, medical history, physical examination, labs, and diagnostic testing are also helpful resources for a diagnosis (Leader, 2023).</p> <p>Treatment of disease: To provide adequate nutrients, supplements and or any other forms of support in relation to the patient to promote growth (Leader, 2023).</p>
<p style="text-align: center;">Admission History</p> <p>Patient is a 16 wk old male with malnutrition, dehydration, and welfare concerns. He has no external signs of trauma, but is extremely thin for his age. Patient was neglected of basic needs prior to admission, and malnutrition related symptoms were being unproperly managed with cow's milk.</p>		

Relevant Lab Values/Diagnostics

1. Chloride **109 mmol/L** (98-107)
2. BUN **<3 mg/dL** (5-17)
3. Creatinine **0.48 mg/dL** (0.70-1.30)
4. Albumin **3.1 g/dL** (3.8-5.4)
5. Bilirubin **0.1 mg/dL** (0.2-1.2)
6. AST **35UL** (5-34)
7. Platelet **622 10³ uL** (244-529)

1. **XR Skeletal Survey for Non-accidental Trauma**; No acute findings
2. **US Head (Neuro)**; Normal
3. **XR Babygram with Chest**; Normal WDL

*lab ranges & diagnostics per Carle charting

*Continued on page 4

Medical History

Previous Medical History: Prematurity, abnormal newborn screen, abnormal CBC, slow feeding of newborn

Prior Hospitalizations: 11/4/23 following delivery; stayed in the NICU for 47 days

Past Surgical History: Circumcision

Social needs: DCFS; awaiting placement

Active Orders

1. **Pediatric feeding; Similac 360 total care every 2-3 hrs:** To ensure patient is receiving proper nutrients on schedule to promote growth.
2. **Daily weight before morning feed:** A measurable goal to monitor the patient's growth.
3. **Length Q Monday:** Correlates with weight and indicates the patient's growth and progress.
4. **Intake & output per protocol:** To monitor for any fluid imbalances as well indicate if patient is responding to feeds well.

Assessment	
General	Awake and alert, small for age, extremely thin; due to prematurity, dehydration, and malnutrition (Leader 2023) , no acute distress.
Integument	Skin color pale. Skin warm and dry upon palpation. No rashes, lesions, or bruising noted.
HEENT	Head and neck are symmetrical, sunken fontanel; due to severe hydration upon admission (Resnick, 2022), normocephalic, atraumatic. Bilateral sclera white, no visible drainage. EOMS intact bilaterally. Pupils are equal, round, and respond to light. Nose is normal and clear. Septum is midline. Bilateral auricles with no visible deformities. Gingiva is good, oral mucosa overall is moist and pink. Neck is not tender and has range of motion WDL.
Cardiovascular	Clear S1 and S2 sounds without murmurs. Normal rate and rhythm, pulses intact.
Respiratory	Normal rate and pattern of respirations. Breath sounds are equal, no accessory muscle use. No stridor, wheezes, or crackles noted.
Genitourinary	No lesions or rashes noted.
Gastrointestinal	Abdomen is soft, nontender, no masses noted. Bowel sounds are normoactive.
Musculoskeletal	All extremities have full ROM WDL. Palmar grasp reflex present.
Neurological	Awake and alert.
Most recent VS (highlight if abnormal)	<p>Time: 1630</p> <p>Temperature: 98.4 F</p> <p>Route: Axillary</p> <p>RR: 34 breaths/ min</p> <p>HR: 169 bpm</p> <p>BP and MAP: 78/45 mm Hg & 56 Map</p> <p>Oxygen saturation: 99%</p> <p>Oxygen needs: Room air</p>
Pain and Pain	According to FLACC pain scale, the infant ranked a 1 out of 10; mild discomfort (Nedea, 2020).

Scale Used		
<p>Nursing Diagnosis 1 At risk for nutritional deficiency related to low body weight as evidence by abnormal labs and daily weights (Phelps, 2020).</p>	<p>Nursing Diagnosis 2 At risk for fluid deficiency related to severe dehydration as evidence by sunken fontanelles and abnormal labs (Phelps, 2020).</p>	<p>Nursing Diagnosis 3 At risk for impaired parenting related to neglect as evidence by infant taken out of mother's custody and awaiting placement with a new family (Phelps, 2020).</p>
<p>Rationale The infant was severely malnourished upon arrival. He was extremely thin and was not being fed the proper nutrients for his age (Phelps, 2020).</p>	<p>Rationale An infant's soft spot should be relatively firm. A sunken fontanelle is a clinical sign that the infant is not receiving enough fluid (Resnick, 2022).</p>	<p>Rationale Their mother was not able to provide a healthy environment that promoted proper development and safety (Phelps, 2020).</p>
<p>Interventions Intervention 1: Offer high protein and high calorie formula that the infant can tolerate well (Phelps, 2020). Rationale: To promote growth and help the infant gain weight consistently. Intervention 2: Weigh the infant daily, around the same time in the morning before his first feed (Phelps, 2020). Rationale: To monitor that feeds are working and the infant is progressing.</p>	<p>Interventions Intervention 1: Monitor vital signs per protocol. Tachycardia, dyspnea, or hypotension can be an indication of fluid volume deficit or electrolyte imbalance (Phelps, 2020). Rationale: To ensure infant's vitals are stable and WDL (Phelps, 2020). Intervention 2: Measure I/O per protocol and report any unusual findings (Phelps, 2020). Rationale: To ensure infant's volume is adequate and urine output is established. Low urine output is an indication of hypovolemia (Phelps, 2020).</p>	<p>Interventions Intervention 1: Assess if the home environment is developmentally stimulating (Phelps, 2020). Rationale: The infant should be removed from the household if neglect or abuse is detected. Intervention 2: Provide full proper care for infant to promote trust and ensure growth (Phelps, 2020). Rationale: The infant was a failure to thrive upon admission.</p>
<p>Evaluation of Interventions The infant tolerated feeds well and had 5oz of formula instead of his usual 4oz. The infant did not spit up and was content. A daily weight was unobtainable because it is done in the morning. The infant has gained several pounds since admission and is making significant progress.</p>	<p>Evaluation of Interventions The infant still presented sunken fontanelles despite receiving fluids and nutrient-rich feeds. His abnormal lab results show improvement, but fluids and vitals must be monitored. Urine output is standard.</p>	<p>Evaluation of Interventions The infant's growth has been progressing well and consistently since admission. He is in a safe environment and is provided with scheduled feeds and care around the clock.</p>

Relevant Lab Values/Diagnostics

1. **Chloride 109 mmol/L** (98-107) due to dehydration (Martin, 2023)
2. **BUN <3 mg/dL** (5-17) due to very low muscle mass or body weight (Martin, 2023)
3. **Creatinine 0.48 mg/dL** (0.70-1.30) due to very low muscle mass or body weight (Martin, 2023)
4. **Albumin 3.1 g/dL** (3.8-5.4) due to malnutrition (Martin, 2023)
5. **Bilirubin 0.1 mg/dL** (0.2-1.2) due to diet very low in protein caused by malnutrition (Martin, 2023)
6. **AST 35UL** (5-34) due to malnutrition (Martin, 2023)
7. **Platelet 622 10³ uL** (244-529) due to iron deficiency (Martin, 2023)

1. **XR Skeletal Survey for Non-accidental Trauma**; the infant was neglected and malnourished. This diagnostic was done to rule out any internal injury to organs and tissues as a precaution.
2. **US Head (Neuro)**; The infant had sunken in fontanels due to severe dehydration. The exam was performed to confirm there was no neurological damage.
3. **XR Babygram with Chest**; the infant was neglected and malnourished. This diagnostic was done to rule out any respiratory failure.

*lab ranges and diagnostic results per Carle charting

References (3):

Alberta Health Services. (2019, September). *Vitamin D for babies and children*. Alberta Health Services.

<https://myhealth.alberta.ca/Alberta/AlbertaDocuments/vitamin-d-for-babies-and-children.pdf>

Beatey, C. (2023, October 11). *Trust vs mistrust*. Practical Psychology. <https://practicalpie.com/trust-vs-mistrust/>

Cherry, K. (2023, October 24). *Piaget's 4 stages of cognitive development explained*. Very Well Mind. <https://www.verywellmind.com/piagets-stages-of-cognitive-development-2795457#:~:text=Sensorimotor%20stage%3A%20Birth%20to%202,stage%3A%20Ages%2012%20and%20up>

Leader, D. (2023, August 15). *An overview of malnutrition*. Very Well Health. <https://www.verywellhealth.com/what-is-malnutrition-914791>

Martin, P. (2023, September 3). *Complete normal lab values reference guide & cheat sheet*. Nurse Labs. <https://nurseslabs.com/normal-lab-values-nclex-nursing/>

Nedea, D. (2020, April 20). *FLACC pain scale*. MD App. <https://www.mdapp.co/flacc-pain-scale-calculator-382/>

Phelps, L. (2020). *Nursing diagnosis reference manual* (11th ed.). Lippincott Williams & Wilkins

Resnick, M. (2022, April 29). *What does it mean if my baby has a sunken fontanelle?* What to Expect.

<https://www.whattoexpect.com/first-year/newborns/sunken-fontanel-soft-spot/>