

<p style="text-align: center;">Medications</p> <p>Diphenhydramine Injection 12.5 mg IVPB PRN (1 dose)</p> <p>Pharmacological Classification: Antihistamine Therapeutic Classification: Antiallergic, Antihistamine</p> <p>Safe dose range: 20.6 - 25.75 mg IV every 6–8 hours. The ordered dose (12.5 mg) is below the typical range, which is safe but on the lower side.</p> <p>Rationale: Used as needed for allergic reactions, this antihistamine helps to reduce symptoms such as itching, hives, and swelling.</p> <p>Administration Considerations: Monitor for side effects such as drowsiness, dizziness, and hypotension (Nurse’s Drug Handbook, 2023).</p> <p>Key Nursing Assessments:</p> <p>Assess for allergies to diphenhydramine or other antihistamines.</p> <p>Monitor the patient for drowsiness, dizziness, or difficulty breathing.</p> <p>Check vital signs, especially respiratory rate, as respiratory depression can occur.</p> <p>Meropenem (Merrem) 412 mg in 0.9% NaCl 5 mL IVPB</p>	<p style="text-align: center;">Demographic Data</p> <p>Admitting diagnosis: UTI w/ cultures (Citrobacter freundii)</p> <p>Age of client: 4</p> <p>Sex: F</p> <p>Weight in kgs: 20.6 kg</p> <p>Allergies: Amoxicillin</p> <p>Date of admission: 9/26/2024</p>	<p style="text-align: center;">Pathophysiology</p> <p>Disease process: A gram-negative, facultatively anaerobic bacteria, <i>Citrobacter freundii</i> is frequently found in soil, water, and the digestive system. Although it is often a component of the human gut flora, it can turn pathogenic in certain situations—especially in patients with indwelling catheters, immunocompromised people, or hospital settings. When it enters the urinary system, usually through the urethra, it causes a urinary tract infection (UTI), which can progress to cystitis (bladder inflammation) and, in more extreme situations, pyelonephritis (kidney inflammation). Biofilms that the bacteria can create make it challenging to remove and resistant to medications (Brunner & Suddarth's Textbook of Medical-Surgical Nursing, 15th ed., p. 1412).</p> <p>S/S of disease: Dysuria (painful urination), Frequent urge to urinate, Cloudy or foul-smelling urine, Hematuria (blood in urine), Lower abdominal or pelvic pain, Fever, chills (in cases of pyelonephritis), Flank pain (in severe cases affecting kidneys) These signs and symptoms are common in both uncomplicated and complicated UTIs and indicate inflammation in the bladder or kidneys (Brunner & Suddarth's Textbook of Medical-Surgical Nursing, 15th ed., p. 1414).</p>
	<p style="text-align: center;">Admission History</p>	

On September 26, 2024, the caregiver was informed by Shriners Hospital that a urinalysis revealed a urinary tract infection (UTI) with bacteria, following lab work completed seven days earlier. The patient was advised to seek IV antibiotics at the nearest emergency room. After receiving oral antibiotics, the patient returned to Carle Emergency Department due to ongoing difficulties taking her medications. Although there were no signs of vomiting, her resistance to oral medications appeared to be behavioral.

Infectious disease specialists at a St. Louis hospital reviewed her case, noting multidrug-resistant bacteria with five to ten white blood cells in her urine. They recommended a more potent antibiotic since the patient is sensitive to Bactrim and has difficulty tolerating flavored medications due to issues with texture and flavor. Concerns were also raised about the caregiver potentially exhibiting signs of Munchausen syndrome, as the patient has been seen at multiple facilities, including Peoria, Chicago, St. Louis, and Champaign-Urbana, leading to inconsistent medical records.

Relevant Lab Values/Diagnostics

Basic Urine

Leukocyte Esterase Small! Leukocyte esterase:
negative (Pagana et al., 2023)

WBC 53 White Blood Cells 0-4 per low-power field
(Pagana et al. 2023)

Basic Chem

Chloride 109 Child: 90-110 mEq/L

Co2 21 Child: 20-28 mEq/L

Basic Hem

HGB 13 Children % 1-6 years: 9.5-
14 g/dL

Medical History

Previous Medical History: JIA (Juvenile idiopathic arthritis) ANA positive, Psoriatic subtype

Prior Hospitalizations: Previous ED visits 11/24/22 Ear pain acute afebrile illness in a child. 4/17/2023 Leg pain (LWBS) 9/8/24 Fall closed nondisplaced transverse fracture 9/25/24 UTI 9/26/24 UTI Due to the client being seen at multiple organizations, obtaining a consistent medical history has been challenging. The client receives care at Shriner’s Hospital in Chicago, OSF Saint Francis Medical Center in Peoria, and Washington University in Saint Louis.

Past Surgical History: There is no past surgical history

Social needs: The patient's mother has been employed at UPS for five months, but the family does not qualify for assistance through staff

Active Orders

BP Q8 while awake only VS Q4 Blood Pressure (BP) Monitoring:

Blood pressure will be monitored every 8 hours while the patient is awake, as opposed to every 4 hours for vital signs (VS). This schedule is relevant for diagnosis as it allows for the assessment of blood pressure trends without overwhelming the patient, particularly in a pediatric or neonatal population.

IV access- Insert PIV and remove before discharge. You may use/access/maintain the line once placement confirmation is received during the daily reevaluation.

Insert a peripheral intravenous (PIV) line and remove it before discharge. Once placement confirmation is received during daily reevaluation, the IV line may be accessed and maintained. This ensures that IV access is

Assessment	
General	Playing/sleeping appropriately, No acute distress, well nourished
Integument	Appropriate for ethnicity, warm, dry, intact, and has elastic skin turgor. Without bruises, wounds, and rashes
HEENT	The trachea has a midline void of deviation, the head and neck are symmetrical, the pupils are reactive to light, and both carotid pulses are palpable and 2+. PERRLA and the bilateral EOMs are both in good condition. There is no visible eye discharge, a clean cornea, a white sclera, and a pink conjunctiva in both eyes. There are no sores or discharge, and both lids are pink and moist. The turbinate is pink and wet on both sides, the septum is midline, and there are no visible polyps or hemorrhage. There is no discomfort felt when the bilateral frontal sinuses are palpated.
Cardiovascular	Void of any murmurs, gallops, and rubs from S1 and S2. PMI is detectable at the fifth intercostal gap at MCL. Regular rhythm and pace. Two seconds for a cap refill
Respiratory	The patient is on room air; Reparations have an average rate and pattern. Reparations are symmetrical and non-labored; lung sounds are clear. Void of wheezes, Crackles/Creptitus, and rhonchi.
Genitourinary	Void frequency/ urgency
Gastrointestinal	A regular diet, soft, non-tender, non-distended bowel sounds, no NG or feeding tube, no ostomy, and no lumps or organomegaly were felt in any of the four quadrants.
Musculoskeletal	Cast on LLE w/ neurovascular intact distal to the fracture site. Hand grips and pedal pushers and pulls demonstrate normal and equal strength.
Neurological	A&O x4 Pt is alert and awake
Most recent VS (highlight if abnormal)	<p>Time: 09:30</p> <p>Temperature: 97.6 (36.4)</p> <p>Route: Oral</p> <p>RR: 24</p> <p>HR: 97</p> <p>BP and MAP: refused Q8 per doctor's orders</p> <p>Oxygen saturation: None</p> <p>Oxygen needs: Room Air</p>
Pain and Pain	No verbal/ nonverbal indication of pain rFLACC

Scale Used		
<p>Nursing Diagnosis 1 Impaired Urinary Elimination related to urinary tract infection (UTI) as evidenced by frequent urination, dysuria, and urgency.</p>	<p>Nursing Diagnosis 2 Risk for Infection related to the presence of a cast and potential compromise of skin integrity due to left lower extremity fracture.</p>	<p>Nursing Diagnosis 3 Risk for Parental Role Conflict related to suspected factitious disorder imposed on another (Munchausen syndrome by proxy) as evidenced by inconsistent medical history and multiple healthcare visits.</p>
<p>Rationale A urinary tract infection leads to inflammation in the urinary system, causing symptoms such as painful urination and increased urgency (Phelps, 2023).</p>	<p>Rationale A cast can increase the risk of infection, particularly if the skin underneath is compromised or the cast becomes wet or soiled (Phelps, 2023).</p>	<p>Rationale Munchausen syndrome by proxy, where a caregiver fabricates or induces illness in a child, can lead to unnecessary medical interventions and potentially harm the child (Phelps, 2023).</p>
<p>Interventions Intervention 1: Monitor urine output and characteristics, including color, odor, and clarity, to assess the progress of infection resolution (Phelps, 2023). Intervention 2: Administer prescribed antibiotics, ensuring the entire course is completed to eliminate infection and prevent recurrence (Phelps, 2023).</p>	<p>Interventions Intervention 1: Assess the neurovascular status of the affected limb, checking for adequate circulation, sensation, and movement distal to the fracture site (Phelps, 2023). Intervention 2: Teach caregivers to keep the cast dry and clean and to regularly inspect the skin around the edges for any signs of irritation or infection (Phelps, 2023).</p>	<p>Interventions Intervention 1: Collaborate with a multidisciplinary team, including social services, psychology, and child protective services, to assess family dynamics and safeguard the child's health (Phelps, 2023). Intervention 2: Document all interactions, reported symptoms, and treatment plans carefully to maintain an accurate and clear medical history (Phelps, 2023).</p>
<p>Evaluation of Interventions The child shows improvement in urinary symptoms, and reports reduced discomfort. Laboratory tests confirm the resolution of the infection.</p>	<p>Evaluation of Interventions No signs of infection are noted, and the skin around the cast remains intact and healthy.</p>	<p>Evaluation of Interventions The child's health is safeguarded, and appropriate referrals to social services and mental health professionals are made to assess the family situation.</p>

		What do you expect?	What did you observe?
Erickson’s Psychosocial Developmental Stage	Initiative vs. Guilt (3–6 years)	Asking "why" questions	The client was curious about what we were doing in her room and what we were doing with the assessment and her IV.
Piaget’s Cognitive Developmental Stage	Preoperational Stage (2–7 years)	Fearful interactions	Engaging in pretend play, playing with dolls and her sticker book. Being argumentative about toys with the caregiver.
Age-Appropriate Growth & Development Milestones	<ol style="list-style-type: none"> Engages in pretend play Can tell simple stories and follow instructions with 2-3 steps. Can express feelings and may experience fears 		
Age-Appropriate Diversional Activities	<ol style="list-style-type: none"> The child can use stickers to decorate the doll’s clothes or "bandage" the doll with medical-themed stickers. They can create a story about how the doll is in the hospital and receiving care, mimicking their experiences. Give the child a doll and provide toy medical instruments like a stethoscope, bandages, or a thermometer. Let the child "treat" the doll, mimicking the care they might receive. The student nurse can demonstrate simple procedures on the doll, like taking the doll's temperature or giving it a bandage. The child can assist and even "teach" the doll how to be brave. 		

References (3):

Brunner, L. S., & Suddarth, D. S. (2023). *Textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (Eds.). (2023). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Jones & Bartlett Learning.

Phelps, L. L. (2023). *Nursing diagnosis reference manual*. Wolters Kluwer.

Nurse's Drug Handbook. (2023). Jones & Bartlett Learning.