Medications

Zosyn (piperacillin-tazobactam) 2,630 mg, IVPB, @100 mL/hr

-> Beta-lactamase inhibitor/extended-spectrum penicillin antibiotic. The client takes this medication to treat the infection in the abdomen caused by E. coli. Key nursing assessments prior to administration: kidney function (this medication is cleared renally), and IV site assessment (this medication is given IV) (Jones & Bartlett Learning, 2023).

Toradol (ketorolac) 12.3 mg, IV push, every 6 hours

-> Non-steroidal anti-inflammatory drug (NSAID)/Non-opioid analgesic. The client is taking this medication for moderate pain and inflammation. Key nursing assessments prior to administration: renal function (Toradol is nephrotoxic), assess pain level (Jones & Bartlett Learning, 2023).

Tylenol (acetaminophen) 315.6 mg, oral, every 6 hours

-> Analgesic, Antipyretic/Central analgesic. The client takes this medication for moderate pain and fever. Key nursing assessments prior to administration: Assess pain or fever level, asses total daily dosage (Jones & Bartlett Learning, 2023).

Pepcid (famotidine) 12.3 mg, IV push, twice a day

-> H2 receptor antagonist/Gastric-acid suppressant. The client is taking

Demographic Data

Admitting diagnosis: Appendicitis with perforation

Age of client: 8 years old (DOB 12-22-2016)

Sex: Male

Weight in kgs: 26.6 kg

Allergies: No known allergies

Date of admission: 10-25-2025

Admission History

The patient presented to the emergency department complaining of abdominal pain and seeking care. The patient's pain was described as periumbilical abdominal pain that migrated to the right lower quadrant, which started on Wednesday 10/22/25. The patient states the pain is "sharp", worsens with ambulation, but better with keeping the legs bent. The patient's symptoms were managed with Tylenol at home, with some relief. The persistent pain and migration of pain resulted in the parents bringing him to the hospital. The team performed diagnostic testing and admitted the patient for

Pathophysiology

Disease process: Appendicitis occurs when the opening of the appendix becomes obstructed , which can lead to increased pressure in the appendix. The obstruction can be caused by many factors, such as swelling or fecaliths (Michelson et al., 2021). A perforation of the appendix occurs when the pressure increases, ischemia occurs, and the necrotic appendiceal wall ruptures (Michelson et al., 2021). When perforation of the appendix occurs, the infected contents leak into the abdominal cavity and can cause peritonitis or abscess formation (Michelson et al., 2021).

S/S of disease: Typical signs and symptoms of appendicitis include periumbilical pain in the right lower quadrant, fever, guarding with rebound tenderness, and nausea/vomiting (Michelson et al., 2021). When an appendix perforates there may be a sudden relief of pain, severe tenderness at the right lower quadrant, tachycardia, and high fever (Plattner et al., 2021).

Method of Diagnosis: Physical assessment, laboratory studies, and diagnostic tools are commonly used methods to diagnose appendicitis with perforation. A complete blood count will show an increased white blood cell count, indicative of infection (Plattner et al., 2021). CRP levels might be elevated due to inflammation (Plattner et al. 2021). Computed tomography (CT) scans can assess the severity of inflammation, perforation, and abscess

Assessment	
General	The patient is alert and awake, opens his eyes spontaneously, awakens to voice and touch, and exhibits responses and verbalization that are appropriate for his age.
	The patient's skin is dry and warm to the touch. There is a 9.5 centimeter incision on the abdomen with steri strips, along with a L and R
Genitourinary	The patient voids spontaneou… …odor.
Gastrointestinal	The patient's bowel sounds are normoactive in all four abdominal quadrants. No organomegaly palpated, with no palpable masses. There is tenderness upon deep palpation, mostly due to the surgical drainage of abdominal abscesses.
Musculoskeletal	The patient exhibits full range of motion in bilateral upper and lower extremities, and has appropriate muscle tone and equal strength in upper and lower extremities. The patient's gate is balanced and within normal limits.
Neurological	The patient is alert and awake, opens and closes eyes appropriately. The patient's behavior is appropriate for age and developmental level. The patient is oriented to parents, healthcare staff, and situation. The patient is able to follow commands, and play complex games with his parent. The patient smiles appropriate to situation.
Most recent VS	**Time:** 0744

Relevant Lab Values/Diagnostics

WBC : 32,100 cells/mm^3 (normal range 5,00-10,00 cells/mm^3)

—>**WBC**: post antibiotic therapy: 13,190 cells/mm^3

Neutrophils: 28, 230 cells/mm^3 (normal range 2500-8000 cells/mm^3)

Hemoglobin: 8.6 g/dL (normal range 10-15.5 g/dL

Aerobic Culture (Gram Stain Reflex): used aspirate from abdominal cavity. The growth showed Escherichia coli, a gram-negative bacteria (normal range is negative for any growth).

Chest X-Ray: Heart is normal in size, the central line tip in right atrium (normal values show normal heart and lung findings)..

CT Abdomen/Pelvis with contrast: Ground glass opacity in the left lower

Medical History

Previous Medical History: N/A

Prior Hospitalizations: N/A

Past Surgical History: Trigger finger release (2020)

Social needs: Peer relationships, sense of belonging, independence with support, structured social activities

Active Orders

Diet: Regular (relevant due to the nutritional needs of the pediatric patient, as his diet was upgraded post-surgery).

Vital Signs every 4 hours (relevant due to the severity of the patient's infection, and to closely monitor any changes)

Intake and Output every 4 hours (relevant to assess the patient's fluid status)

Weekly Labs (CMP, MAG, PHOS, PT/INR) (routine labs are performed weekly to assess the patient's electrolyte levels and blood clotting factors)

Central Line Placement & Management (this is ordered so the patient would receive continuous infusions while intubated and

(highlight if abnormal)	**Temperature:** 37.1°C (98.8°F) **Route:** Oral **RR:** 20 respirations/minute **HR:** 102 **BP and MAP:** 88/63 (MAP 69) **Oxygen saturation:** 100% **Oxygen needs:** Room air
Pain and Pain Scale Used	Pain Level: 1 Pain Scale: Word Scale (1-10)

Nursing Diagnosis 1	**Nursing Diagnosis 2**	**Nursing Diagnosis 3**
Acute pain related to surgical incision as evidenced by guarded posture during ambulation.	Risk for secondary infection related to possible contamination of the abdominal cavity.	Impaired physical mobility related to post-operative pain as evidenced by limited movement.
Rationale	**Rationale**	**Rationale**
The surgical procedure can cause localized pain and swelling to the incisional sites.	The incisional site and drain sites create a potential entry point for bacteria, especially with the presence of E. coli that was cultured from abdominal aspirate.	Complex surgery can cause the patient to guard their physicality as it may cause pain, and doing this long term can have negative effects on health well-being.

Interventions	Interventions	Interventions
Intervention 1: Assess pain levels using the Word Scale every 4 hours or if the patient exhibits signs of pain. **Intervention 2:** Encourage diversional activities and comfort measures such as guided imagery at signs of pain.	**Intervention 1:** Monitor incisional and drain sites every shift for signs of redness, warmth, or purulent drainage. **Intervention 2:** Assess the patient's temperature every 4 hours.	**Intervention 1:** Assist the patient with early ambulation 2-3 times per shift. **Intervention 2:** Educate the child and the caregivers on the importance of moving slowly and safely.
Evaluation of Interventions	**Evaluation of Interventions**	**Evaluation of Interventions**
The patient will verbalize a pain score of less than 3 out of 10 using the Word Scale, and will demonstrate pain relief through smiling, playing, or verbal affirmations. (Phelps, 2023)	The incisional and drain sites will have no signs of redness, inflammation, or purulent drainage and the patient will remain afebrile. (Phelps, 2023)	The child will ambulate during the shift with caregivers, will report reduced pain during movement, and will exhibit increased strength and mobility. (Phelps, 2023)

		What do you expect?	What did you observe?
Erickson's Psychosocial Developmental Stage	Industry vs. Inferiority	The child wants to master skills, feel competent, be praised for accomplishments, and benefits from simple responsibilities (McLeod, 2024).	This patient was observed to feel competent in his knowledge of the current medical situation, enjoyed being praised when correct, and enjoyed playing and winning games with his parent.
Piaget's Cognitive Developmental Stage	Concrete Operational Stage	The child can follow multi-step instructions, understand cause and effect and consequences, and can think logically about real-life situations (McLeod, 2024).	The child was observed to be able to follow multi-step instructions, understood cause and effect, and was able to verbalize an understanding of real-life situations (including his health status and

			health history).
Age-Appropriate Growth & Development Milestones	**1.** The child will understand rules and fairness. **2.** The child participates in sports and active play. **3.** The child will exhibit improved problem-solving. (McLeod, 2024)		
Age-Appropriate Diversional Activities	**1.** Card games, video games, or card games to divert attention away from hospitalization. **2.** Building lego sets, doing puzzles, and coloring pictures. **3.** Watching age appropriate videos, reading books, and playing on a handheld tablet. (McLeod, 2024)		

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