N433 Care Plan 1

Lakeview College of Nursing

Kelsey Bierman

Demographics (3 points)

Date of Admission 10/18/2020	**Client Initials** ALM	**Age (in years & months)** 5 years and 9 months	**Gender** Female
Code Status Full	**Weight (in kg)** 22.3 kg	**BMI** 17.9	**Allergies/Sensitivities (include reactions)** NKA

Medical History (5 Points)

Past Medical History: My patient has no past medical history

Illnesses: N/A

Hospitalizations: N/A

Past Surgical History: My has no past surgical history

Immunizations: N/A

Birth History: The patient had a vaginal birth that was uncomplicated and was delivered at 39 weeks.

Complications (if any): N/A

Assistive Devices: N/A

Living Situation: The patient lives at home with both her parents and her younger brother.

Admission Assessment

Chief Complaint (2 points): Abdominal Pain

Other Co-Existing Conditions (if any):

Pertinent Events during this admission/hospitalization (1 points): The patient came in this a perforated appendix and required an open appendectomy.

History of present Illness (OLD CARTS) (10 points): The patient is a 5-year-old Hispanic female that told her mother that her pain started on 10/17/2022 in the morning. Her mother brought her to the ED on 10/18/2022. The patient presented with a fever, nausea, vomiting, and abdominal pain. The patient needed an open appendectomy due to her diagnosis of a perforated appendix. I took care of her postoperatively. The patient described her abdominal pain as a sudden sharp and gnawing pain that was constant. The patient also told her mother that walking aggravated her pain and that Ibuprofen helped to alleviate her pain. While at the hospital, my patient is receiving acetaminophen and ketorolac for her pain. When I asked her to rate her pain during my shift using the FACES pain scale, she rated her pain a 4 out of 10. However, when she was first admitted to the hospital, her pain was a 10 out of 10.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Appendicitis

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points):

The pathophysiology of appendicitis is most likely a result of an obstruction of the appendiceal orifice (Jones et al., 2019). The cause of the obstruction may differ with age (Jones et al., 2019). Obstruction can occur from lymphoid hyperplasia, infections, fecaliths, or benign or malignant tumors (Jones et al., 2019). When an obstruction is the cause of appendicitis, it leads to increased intraluminal and intramural pressure, which results in small vessel occlusion and lymphatic stasis (Jones et al., 2019). When appendiceal orifice obstruction occurs, the appendix fills with mucous and is distended (Jones et al., 2019). As lymphatic and vascular compromise

continues, the wall of the appendix becomes ischemic and necrotic (Jones et al., 2019). Bacterial overgrowth occurs in the obstructed appendix with aerobic organisms early on, following mixed aerobes and anaerobes later in the course (Jones et al., 2019). Typical organisms include Escherichia coli, Peptostreptococcus, and Pseudomonas (Jones et al., 2019).

Once significant inflammation and necrosis occur, the appendix is at risk for rupture, which leads to a localized abscess and frank peritonitis (Jones et al., 2019). Some common symptoms in patients with appendicitis include sudden onset of pain, pain that worsens when you walk, nausea, vomiting, loss of appetite, low-grade fever, constipation, diarrhea, abdominal bloating, and flatulence (Mayo Clinic, 2021). My patient presented with a sudden onset of pain in her abdomen that worsened when she walked, nausea, vomiting, loss of appetite, low-grade fever, and abdominal bloating. Expected physical exam findings include right lower quadrant guarding and rebound tenderness at McBurney's point, Rovisng's sign, and Dunphy's sign (Jones et al., 2019). Expected changes in vital signs include tachycardia and fever (Jones et al., 2021). My patient was admitted with both a fever and tachycardia. Diagnostic testing used includes a complete blood count (CBC) to evaluate the white blood cell count and urinalysis (UA) to rule out a urinary tract infection or kidney stones (Mayo Clinic Staff, 2021). The provider may also order an abdominal X-ray, an abdominal ultrasound, a computerized tomography (CT) scan, or magnetic resonance imaging (MRI) to help confirm the diagnosis (Mayo Clinic Staff, 2021).

My patient had a CBC, BMP, CRP, Beta strep test, Procalcitonin levels, UA, abdominal CT, and an abdominal ultrasound done. Treatment for appendicitis includes an appendectomy and draining an abscess if present before surgery (Mayo Clinic Staff, 2021). My patient received an open appendectomy. Potential appendicitis complications include a surgical site infection and

prolonged ileus (Jones et al., 2019). Signs and symptoms of a surgical site infection include a hot incision, swelling of the incision, redness, purulent drainage, and pain (Whitlock, 2022). Preventive nursing actions to prevent surgical site infection include performing hand hygiene before and after contact with the patient, encouraging a diet high in protein and high calories to help promote wound healing, and assisting the patient in performing appropriate skin and oral hygiene (Vera, 2022). Signs and symptoms of prolonged ileus include abdominal distention, bloating, diffuse, persistent pain, nausea, vomiting, inability to pass flatus, and intolerance to an oral diet (Buchanan & Tuma, 2022). One nursing intervention that can help prevent prolonged ileus is encouraging patients to chew gum because it leads to vagal stimulation and increases gut motility (Khawaja et al., 2022). Another intervention would be encouraging early ambulation (Khawaja et al., 2022).

Pathophysiology References (2) (APA):

Buchanan, L., & Tuma, F. (2022). *Postoperative ileus*. PubMed; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK560780/#:~:text=Delayed%20bowel%20movement%20or%20passage

Jones, M. W., Lopez, R. A., & Deppen, J. G. (2019). *Appendicitis*. Nih.gov; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK493193/

Jones, M. W., Lopez, R. A., Deppen, J. G., & Kendall, B. A. (2021). *Appendicitis (nursing)*. PubMed; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK568712/

Khawaja, Z. H., Gendia, A., Adnan, N., & Ahmed, J. (2022). Prevention and management of postoperative ileus: A review of current practice. *Cureus*, *14*(2), e22652. https://doi.org/10.7759/cureus.22652

Mayo Clinic. (2021, August 7). *Appendicitis - Symptoms and causes*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/appendicitis/symptoms-causes/syc-20369543

Mayo Clinic Staff. (2021). *Appendicitis - Diagnosis and treatment*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/appendicitis/diagnosis-treatment/drc-20369549#:~:text=Your%20doctor%20may%20also%20recommend

Vera, M. (2022, March 19). *Risk for infection – Nursing diagnosis & care plan*. Nurseslabs. https://nurseslabs.com/risk-for-infection/

Whitlock, J. (2022). *Signs of an infection after surgery*. Verywell Health. https://www.verywellhealth.com/signs-and-symptoms-of-an-infection-3156917

Active Orders (2 points)

Order(s)	Comments/Results/Completion
Activity:	Independent Ambulation
Diet/Nutrition:	Regular Diet
Frequent Assessments:	Vital signs Q4H, Input and Output Q4H, and Trauma Pain Protocol Q2H.
Labs/Diagnostic Tests:	CBC, BMP, CRP, Beta Strep test, Procalcitonin levels, UA, abdominal CT, and abdominal ultrasound.
Treatments:	Open appendectomy, IV Piperacillin-tazobactam, Ketorolac injection, and Acetaminophen.

Other:	One-time STAT lactic acid
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
Discontinue BMP	Another BMP will not need to be drawn again because the patient is no longer at an increased risk of an electrolyte imbalance.
CMP on 10/23/2022	A repeat CMC will be drawn on 10/23/2022 to determine the effectiveness of the antibiotic treatment. The white blood cell count will be decreased and WNL if the treatment has been effective.
N/A	**N/A**

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range (specific to the age of the child)	Admission or Prior Value	Today's Value	Reason for Abnormal Value
RBC	**3.8-4.8**	**4.57**	**N/A**	**N/A**

Hgb	**11.2-14.1**	**12.1**	**N/A**	**N/A**
Hct	**31-41**	**36**	**N/A**	**N/A**
Platelets	**150-440**	**202**	**N/A**	**N/A**
WBC	**5-14.5**	**14.79**	**N/A**	White blood cells are increased to inflammation of the appendix (Capriotti, 2020).
Neutrophils	**1.5-8.5**	**8.4**	**N/A**	**N/A**
Lymphocytes	**2-8**	**4.3**	**N/A**	**N/A**
Monocytes	**0.4-2**	**1.9**	**N/A**	**N/A**
Eosinophils	**0-1.2**	**0.0**	**N/A**	**N/A**
Basophils	**0-0.1**	**0.1**	**N/A**	**N/A**
Bands	**0-0.5**	**0.3**	**N/A**	**N/A**

***All CBC normal lab values from (MercyOne, 2022)**

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission or Prior Value	Today's Value	Reason For Abnormal
Na-	**136-144**	**139**	**N/A**	**N/A**
K+	**3.7-5.2**	**3.7**	**N/A**	**N/A**
Cl-	**96-106**	**105**	**N/A**	**N/A**
Glucose	**64-100**	**121**	**N/A**	**A high glucose reading could result from the patient's disease process or dehydration (NHS, 2019).**
BUN	**6-20**	**13**	**N/A**	**N/A**
Creatinine	**0.8-1.2**	**0.9**	**N/A**	**N/A**
Albumin	**3.5-5.2**	**4.2**	**N/A**	**N/A**

Total Protein	**6-8.3**	**7.4**	**N/A**	**N/A**
Calcium	**8.5-10.2**	**9.9**	**N/A**	**N/A**
Bilirubin	**0.3-1**	**0.6**	**N/A**	**N/A**
Alk Phos	**44-147**	**106**	**N/A**	**N/A**
AST	**13-39**	**22**	**N/A**	**N/A**
ALT	**7-52**	**9**	**N/A**	**N/A**
Amylase	**40-140**	**N/A**	**N/A**	**N/A**
Lipase	**0-160**	**N/A**	**N/A**	**N/A**

***All BMP normal values from (UCSF Benioff Children's Hospital, 2022)**

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Admission or Prior Value	Today's Value	Reason for Abnormal
ESR	**0-10**	**N/A**	**N/A**	**N/A**
CRP	**2-10.9**	**7.92**	**N/A**	**N/A**
Hgb A1c	**4.5-5.7**	**N/A**	**N/A**	**N/A**
TSH	**0.8-1.8**	**N/A**	**N/A**	**N/A**
Procalcitonin	**0-0.5**	**1.62**	**N/A**	**Elevated procalcitonin levels can result from bacterial infections. Procalcitonin is also a biomarker for acute appendicitis (Motie et al., 2018).**
Beta Strep Test	**Negative**	**Negative**	**N/A**	**N/A**

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal	Admission	Today's	Reason for Abnormal

	Range	or Prior Value	Value	
Color & Clarity	**Yellow and clear**	**Dark yellow, slightly cloudy**	**N/A**	**My patients urine may be dark and cloudy due to dehydrated or her infection (Cleveland Clinic, 2021).**
pH	**5-8**	**7**	**N/A**	**N/A**
Specific Gravity	**1.005-1.034**	**1.030**	**N/A**	**N/A**
Glucose	**Negative**	**Negative**	**N/A**	**N/A**
Protein	**Less than 100**	**30**	**N/A**	**N/A**
Ketones	**Negative**	**Negative**	**N/A**	**N/A**
WBC	**Less than 5**	**14**	**N/A**	**An elevated WBC count indicates inflammation kidneys or urinary tract (John's Hopkins Lupus Center, 2021). My patient's CT did show a thickening of the urinary bladder.**
RBC	**0-3**	**22**	**N/A**	**Elevated RBCs may be caused by a UTI, kidney or bladder infection, or can be caused by antibiotics (White, 2019).**
Leukoesterase	**Negative**	**Negative**	**N/A**	**N/A**

***All UA normal values from (Capriotti, 2020)**

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Admission or Prior Value	Today's Value	Explanation of Findings
Urine Culture	**Negative**	**N/A**	**N/A**	**N/A**
Blood Culture	**Negative**	**N/A**	**N/A**	**N/A**
Sputum Culture	**Negative**	**N/A**	**N/A**	**N/A**
Stool Culture	**Negative**	**N/A**	**N/A**	**N/A**
Respiratory ID Panel	**Negative**	**N/A**	**N/A**	**N/A**
COVID-19 Screen	**Negative**	**Negative**	**N/A**	**N/A**

Lab Correlations Reference (1) (APA):

Capriotti, T. M. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F A Davis.

Cleveland Clinic. (2021). *Cloudy urine: Causes, treatment, & what does it mean*. Cleveland Clinic. https://my.clevelandclinic.org/health/symptoms/21894-cloudy-urine

John's Hopkins Lupus Center. (2021). *Urinalysis*. Johns Hopkins Lupus Center. https://www.hopkinslupus.org/lupus-tests/screening-laboratory-tests/urinalysis/#:~:text=White%20Blood%20Cells%3A%20A%20high

MercyOne. (2022). *CBC normal ranges*. MercyOne. https://www.mercyone.org/northiowa/find-a-service-or-specialty/laboratory-services/lab-test-index/special-helps-section/cbc-normal-ranges

Motie, M.-R., Soleimani, A., Soltani, A., & Hashemy, S. I. (2018). Serum procalcitonin and lactoferrin in detection of acute appendicitis; A diagnostic accuracy study. *Emergency*, *6*(1), e51. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6289145/#:~:text=However%2C%20in%20one%20study%20procalcitonin

NHS. (2019). *Hyperglycaemia (high blood sugar)*. Nhsinform. https://www.nhsinform.scot/illnesses-and-conditions/blood-and-lymph/hyperglycaemia-high-blood-sugar

UCSF Benioff Children's Hospital. (2022). *Basic metabolic panel*. Www.ucsfbenioffchildrens.org. https://www.ucsfbenioffchildrens.org/medical-tests/basic-metabolic-panel#:~:text=Normal%20Results&text=CO2%20(carbon%20dioxide)%20%3A%2023

White, C. (2019, November 6). *RBC in urine: What it means, ranges, and test results*. MedicalNewsToday. https://www.medicalnewstoday.com/articles/326907#causes

Diagnostic Imaging

All Other Diagnostic Tests (5 points): My patient had two diagnostic tests done to help confirm her diagnosis of appendicitis. The tests included an abdominal and pelvic CT with contrast and abdominal ultrasound. An abdominal ultrasound is an imaging test that uses sound waves to see inside the abdomen (Mayo Clinic, 2018). Abdominal ultrasound can be used to visualize blood vessels and organs within the abdominal cavity (Mayo Clinic, 2018). Computed tomography (CT) on the abdomen and pelvis help provides to detect diseases of the small bowel, colon, and appendix by producing multiple pictures of the internal organs (Radiological Society of North America [RSNA], 2022). Abdominal and pelvic CT is commonly used to help diagnose appendicitis (RSNA, 2022).

Diagnostic Test Correlation (5 points): My patient's abdominal ultrasound was inconclusive. Neither a normal nor an abnormal appendix was visible using the abdominal ultrasound. Peristaltic bowel loops were observed. A RUQ lymph node was measured at 8 mm. An abdominal and pelvic CT was done on my patient, and it showed a thickening an enlarged appendix that measured 8 mm with mild thickening and enhancement of the appendiceal walls and mild free fluid in the pelvis. These findings were consistent with appendicitis.

Diagnostic Test Reference (1) (APA):

Mayo Clinic. (2018). *Abdominal ultrasound*. Mayo Clinic. https://www.mayoclinic.org/tests-procedures/abdominal-ultrasound/about/pac-20392738

Radiological Society of North America. (2022). *Abdominal and pelvic CT*. RadiologyInfo.org. https://www.radiologyinfo.org/en/info/abdominct

Current Medications (8 points)
****Complete ***ALL*** of your Client's medications****

Brand/ Generic	Piperacillin-tazobatam/Zozyn	Ketorolac/ Acular	Acetaminophen/ paracetamol	N/A	N/A
Dose	2.25 g	11.2 mg	336 mg	N/A	N/A
Frequency	TID	Four times a day	Every 4 hours	N/A	N/A
Route	I.V.	I.V.	P.O.	N/A	N/A
Classification	Pharmacological class: Penicillin, Extended-Spectrum Therapeutic class: Antibiotic	Pharmacological class: NSAID Therapeutic class: Anagesic	Pharmacological class: Nonsalicylate, paraaminophenol derivative Therapeutic class: Antipyretic, nonopiod analgesic	N/A	N/A
Mechanism of Action	By binding to specific penicillin-binding proteins (PBPs) located inside the bacterial cell wall, Piperacillin inhibits the third and last stage of bacterial cell wall synthesis. Cell lysis is then mediated by bacterial cell wall autolytic enzymes such as autolysins; Piperacillin may interfere with an autolysin inhibitor.	Blocks cyclooxygenase, an enzyme needed to synthesize prostaglandins. Prostaglandins mediate inflammatory response and cause local vasodilation, pain, and swelling. They also promote pain transmission from periphery to spinal cord. By blocking cyclooxygenase	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system. Acetaminophen also acts directly on temperature-regulating center in the hypothalamus by inhibiting synthesis of prostaglandin E2.	N/A	N/A

		and inhibiting prostaglandins, this NSAID reduces inflammation and relieves pain.			
Reason Client Taking	Patient had a perforated appendix and an open appendectomy	To treat moderate to severe pain that requires analgesia at the opioid level	To relieve mild to moderate pain	N/A	N/A
Concentration Available	2.25 g/ 50 mL	0.5 mg/kg	160mg/5mL	N/A	N/A
Safe Dose Range Calculation	50 mL	11.2 mg	10.5 mL	N/A	N/A
Maximum 24-hour Dose	150 mL	44.8 mg	63 mL	N/A	N/A
Contraindications (2)	1. Previous allergic reaction to penicillin 2. Previous allergic reaction to cephalosporin	1. Active peptic ulcer disease or recent GI bleeding or perforation 2. Advanced renal impairment or risk of renal impairment due to volume depletion.	1. Hypersensitivity to acetaminophen or its components 2. Severe hepatic impairment	N/A	N/A
Side Effects/Adverse Reactions	1. Diarrhea 2. Constipation	1. Acute pancreatitis	1. Oliguria 2. Pulmonary edema	N/A	N/A

(2)		2. GI bleeding			
Nursing Considerations (2)	1. Monitor for seizures 2. Monitor for signs of pseudomembranous colitis, including diarrhea, abdominal pain, fever, pus or mucous in stools.	1. Be aware that NSAIDs should be avoided in patients with a recent MI because risk of reinfarction increases with NSAID therapy. 2. The risk of heart failure increases with NSAID use.	1. Calculate the total daily intake of acetaminophen, including other products that may contain acetaminophen so maximum daily dosage is not exceeded. 2. Use cautiously in patients with hepatic impairment or active hepatic disease.	N/A	N/A
Client Teaching needs (2)	1. Take the entire prescribed amount of Zosyn do not stop taking if symptoms subside. 2.	1. Advise the patient not to take NSAIDs while taking ketorolac without consulting the provider 2. Instruct patient to	1. Teach patient to recognize signs of hepatotoxicity, such as bleeding, easy bruising, and malaise, which commonly occurs with chronic overdose. 2. Caution patients not to exceed recommended dosage or take	N/A	N/A

		immediately report blood in urine, easy bruising, itching, rash, swelling, or yellow eyes or skin.	other drugs containing acetaminophen at the same time because of risk of liver damage.		

All medication information from (Jones & Bartlett Learning, 2021)
Medication Reference (1) (APA):

Jones & Bartlett Learning. (2021). *2022 Nurse's drug handbook.* Jones & Bartlett Learning.

Assessment

Physical Exam (18 points) Highlight Abnormal Pertinent Assessment Findings

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient was awake, alert, and oriented to person, place, time, and situation (x4), with no acute distress, well developed, hydrated, and nourished. The patient appears stated age.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N X** **Type:** **IV Assessment (If applicable to child):** **Size of IV:** **Location of IV:** **Date on IV:**	The patient's skin color was pink. The skin was warm and dry bilaterally throughout upon palpation. There were no rashes, bruising, or lesions present. No wounds, but the patient has an incision scar on the lower quadrant of her abdomen. Good quantity, texture, and distribution of hair throughout the body. Skin turgor had good mobility; no tenting was present. Nails were without cyanosis and clubbing. Capillary refill was less than 3 seconds in fingers and toes bilaterally. The patient's Braden score was 17. The patient has a 22 gauge IV in the right antecubital the date in the IV is 10/19/2022. The IV was patent, and there were no signs of erythema, drainage, or infiltration. The IV dressing is clean, dry, and intact. The patient has

Patency of IV: **Signs of erythema, drainage, etc.:** **IV dressing assessment:** **IV Fluid Rate or Saline Lock:**	100 mL of lactated ringers running per hour and 60 mL of Zosyn per hour.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	The patient's Head and neck are symmetrical. The patient's carotid pulses were examined asynchronously. Carotid pulse 2+ bilaterally. The patient's sclera is white bilaterally, cornea clear bilaterally, and conjunctiva pink and moist with no drainage bilaterally. Eyelids are moist and dry with no lesions or discharge. PERRLA is intact bilaterally. EOMs are intact bilaterally. The patient's auricles have no lesions, deformities, or lumps bilaterally. The ear canals are clear and bilaterally. The patient's septum is midline with no deviation. The nares have no signs of bleeding. Bilaterally sinuses are nontender upon palpation (frontal and maxillary sinuses assessed). The patient's posterior pharynx and tonsils are pink and moist, with no exudate noted. Tonsil grades 2+ bilaterally. The uvula was midline, and the soft palate rose and fell symmetrically. The hard palate was intact. Dentition is good. Overall oral mucosa was pink and moist with no lesions.
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N X** **Edema Y ☐ N X** **Location of Edema:**	The patient had a normal rate and rhythm for heart sounds. The patient's PMI at the 5th intercostal space at the MCL was palpable. The patient had clear S1, and S2 heart sounds with no murmurs, gallops, or rubs. No chest pain, palpitations, no reports of syncope. Peripheral pulses all locations 2+ bilaterally.
RESPIRATORY: **Accessory muscle use: Y☐ N X** **Breath Sounds: Location, character**	The patient has a normal rate and pattern for respirations. The patient had symmetrical and nonlabored breathing. The patient had clear lung sounds anteriorly/posteriorly throughout bilaterally, with no wheezes, crackles, or rhonchi noted.
GASTROINTESTINAL: **Diet at home:** **Current diet:** **Height (in cm):** **Auscultation Bowel sounds:**	The patient is on a regular diet at home and at the hospital; however, she has not eaten anything since her surgery. The abdomen is soft but extremely tender. During light palpation, the patient grimaced and verbalized that she was in

Last BM: **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	pain. I could not assess for organomegaly or masses in the abdomen due to my client being in pain. Bowel sounds are normoactive in all four quadrants. No CVA tenderness was noted. Abdominal distention was noted, along with a surgical incision in the lower left quadrant. The incision was not hot or red, and there was no purulent drainage present. No other wounds or scars were noted. The patient also had no drains. No ostomy, nasogastric, nor PEG tubes.
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N X** **Dialysis: Y ☐ N X** **Inspection of genitals:** **Catheter: Y ☐ N X** **Type:** **Size:**	The patient nor her mother report any signs of hematuria or an increase in the frequency of urinating. The color of the patient's urine was dark yellow and cloudy. The patient urinated two times for a total of 200 mL. No abnormalities were noted when inspecting genitals. The genitals were clean and intact with no lesions present.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: YX N ☐** **Fall Risk: Y X N☐** **Fall Score: 6** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk ☐**	All extremities have full range of motion. Hand grips and fetal pulses are normal and equal in strength. Unable to assess any motor deficits because the patient was in pain and did not want to get up to walk. According to the mother, her memory is intact, and her thought process is normal for her developmental age. PERRLA is intact bilaterally. Deep tendon reflexes all locations 2+ bilaterally. The patient can ambulate; however, her mother carried her to the bathroom and the couch. The patient's cummings fall score was a six which indicates she is at risk for falls.
NEUROLOGICAL: **MAEW: Y X N☐** **PERLA: Y X N☐** **Strength Equal: Y X N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:**	All extremities move well. PERRLA is intact bilaterally. The patient has equal strength in all extremities. The patient was awake, alert, and oriented to person, place, time, and situation (x4). The patient has clear speech. The patient felt sensations equally on both sides. The patient was completely conscious.

LOC:	
PSYCHOSOCIAL/CULTURAL: **Coping method(s) of caregiver(s):** **Social needs (transportation, food, medication assistance, home equipment/care):** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The patient was very shy and mainly only spoke to her mom. The child would nod at me and other HCPs. The coping method that the mother expressed was the support of her husband, who was caring for her other child and her extended family. Thepatient's mother will manage any and all of the ppatien's medications when the patient is discharged home.

Vital Signs, 2 sets – (2.5 points) Highlight All Abnormal Vital Signs

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0821	93 bpm	99/53 mm Hg	20 breaths per minute	36.1°C (Axillary)	100% on room air
1120	97 bpm	99/52 mm Hg	17 breaths per minute	36.3°C (Axillary)	100% on room air.

Vital Sign Trends: Overall, all vital signs are stable. The patient's respirations dropped at 1120, but this could be because the patient was sleeping.

Normal Vital Sign Ranges (2.5 points)
****Need to be specific to the age of the child****

Pulse Rate	70-120 BMP (HealthLink BC, 2022)
Blood Pressure	Systolic pressure 90-110 mm Hg Diastolic pressure 55-75 mm Hg (HealthLink BC, 2022)
Respiratory Rate	20-30 breaths per minute (HealthLink BC, 2022)
Temperature	36.6-38℃ (HealthLink BC, 2022)
Oxygen Saturation	95-100% on room air (Cunha, 2021)

Normal Vital Sign Range Reference (1) (APA):

Cunha, J. P. (2021, October 26). *What Is a good oxygen rate ay age?* EMedicineHealth. https://www.emedicinehealth.com/what_is_a_good_oxygen_rate_by_age/article_em.htm

HealthLink BC. (2022). *Vital signs in children*. HealthLinkBC. https://www.healthlinkbc.ca/health-topics/vital-signs-children

Pain Assessment, 2 sets (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**
1100	FACES	Abdomen	4 out of 10	The patient's mother said that she had a stomachache.	Ketorolac injection
Evaluation of pain status *after* intervention	FACES	Abdomen	2 out of 10	The patient still has been when the abdomen is palpated.	A Ketorolac injection was given 45 minutes ago. The patient can take a dose of Acetaminophen at 1400.
Precipitating factors: Walking **Physiological/behavioral signs:** Facial grimacing and verbalization of pain.					

Intake and Output (1 points)

Intake (in mL)	**Output (in mL)**
90 mL of orange juice 400 mL of lactated ringers 240 mL of Zosyn Total: 730 mL	200 cc of urine Patient urinated twice during my clinical shift.

Developmental Assessment (6 points)
Be sure to highlight the achievements of any milestone if noted in your child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading

Age Appropriate Growth & Development Milestones

1. Normal development of a 5-year-old child would be that they can follow rules and take turns while playing games (Centers for Disease Control and Prevention [CDC], 2018).
2. Five-year-old children should be able to tell stories they have heard or makeup stories with at least two events (CDC, 2018).
3. Five-year-old children should be able to count to ten (CDC, 2018).

Age Appropriate Diversional Activities

1. A five-year-old child may copy simple shapes with a pencil (Raising Children Network, 2017).
2. A five-year-old child may read simple picture books (Raising Children Network, 2017).
3. A five-year-old child may copy letters and write their own name (Raising Children Network, 2017).

Psychosocial Development:

Which of Erikson's stages does this child fit?

A five-year-old child is in the Initiative versus Guilt stage of Erikson's developmental stages.

What behaviors would you expect?

At this developmental stage, play and imagination become very important (Cherry, 2022). During this stage, it is important for caregivers to encourage exploration and to help children make decisions (Cherry, 2022). Children in this stage begin to make decisions about who their friends are, what games they play, and how they are going to approach a task (Cherry, 2022).

What did you observe?

From what I observed, the patient was making her own decisions. She picked out a movie to watch, and she decided that she wanted to color. It is difficult to say that she is in the initiative stage, though, because I observed her for such a short period, and there was a language barrier between us.

Cognitive Development:

Which stage does this child fit, using Piaget as a reference?

According to Jean Piaget's cognitive developmental stages, a five-year-old is in the preoperational stage**.**

What behaviors would you expect?

Some behaviors that can be expected from children in this stage include imitative play, imagining themselves as a superhero, or inventing an imaginary friend (Kandola, 2019).

What did you observe?

I did not observe any behaviors expected with the preoperational stage, but this could be because I observed my patient for a short time and because she was recovering from surgery.

Vocalization/Vocabulary:

Development expected for child's age and any concerns?

A five-year-old should gain four to five pounds each year, should grow two to three inches per year, should have better coordination, and should be able to stay balanced while standing on one foot with their eyes closed (CDC, 2018). It was difficult for me to assess her development because she was recovering from abdominal surgery and was in pain.

Any concerns regarding growth and development?

I do not have any concerns with my patient's growth or development other than that she is underweight, but this is most likely due to her disease process.

Developmental Assessment Reference (1) (APA):

CDC. (2018, September 24). *CDC's developmental milestones*. Centers for Disease Control and Prevention. https://www.cdc.gov/ncbddd/actearly/milestones/index.html

Cherry, K. (2022, May 28). *Understanding initiative vs. guilt*. Verywell Mind. https://www.verywellmind.com/initiative-versus-guilt-2795737

Kandola, A. (2019, April 25). *Piaget's 4 stages of development: What do they mean?* MedicalNewsToday. https://www.medicalnewstoday.com/articles/325030#piagets-stages

Raising Children Network. (2017, November 16). *5-6 Years: Child development*. Raising Children Network. https://raisingchildren.net.au/school-age/development/development-tracker/5-6-years

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client.	**Rational** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcomes**	**Evaluation** • How did the Client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Acute Pain related to abdominal surgery as evidenced by verbalization of pain.	I chose this nursing diagnosis because my patient verbalized being in pain and	1. Assess the patient's signs and symptoms of pain behavioral cues and administer	1. Goal: The patient will express that pain has been well managed and is at a	Goal met: The goal is met if the pain medication is effective in treating the patient's pain and the patient

	grimaced when I went to palpate her abdomen lightly.	pain medications as prescribed (Linda Lee Phelps, 2020). 2. Return to the patient in 30 minutes to check intervention effectiveness and use the FACES pain scale when assessing pain (Linda Lee Phelps, 2020).	3 out of 10 or lower by the end of my clinical shift.	verbalizes that her pain is a 3 out of 10 or lower by the end of my clinical shift.
2. Risk for infection related to bacterial overgrowth in the abdomen as evidenced by increased WBCs and Procalcitonin levels.	I chose this nursing diagnosis because my patient had an open appendectomy on 10/19/2022. Therefore, she is at risk for a postoperative infection at the incision site.	1. Minimize the patient's risk for infection by performing hand hygiene before and after providing care to the patient (Linda Lee Phelps, 2020). 3. Monitor the patient's temperature every four hours and report any	1. Goal: Patient will remain infection free during postoperative care and will not spike a fever of 100.4°F or greater.	Goal Met: The patient will not show any signs or symptoms of infection, her vital signs will all be within normal limits, and the WBC count will decrease throughout her hospital stay.

		elevated temperature to the provider immediately (Linda Lee Phelps, 2020).		
4. Deficient fluid volume related to hypermetabolic state as evidenced by the healing process.	I chose this nursing diagnosis because my patient has increased metabolic needs as she heals from surgery.	1. Monitor and record vital signs and input and output every four hours and report any significant changes to the provider (Linda Lee Phelps, 2020). 2. Administer fluids as ordered to replace fluids lost and facilitate fluid movement into the intravascular space (Linda Lee Phelps, 2020).	1. Goal: The patient's vital signs will be within normal limits, and the patient will have light and less concentrated urine. This goal should be accomplished in one week.	Goal Met: The patient's vital signs and fluid volume will be within normal limits and the patient has clear yellow urine and elastic skin turgor in 48 hours.
5. Deficient knowledge related to inadequate knowledge of disease process as evidenced by decreased exposure and language barrier.	I chose this nursing diagnosis because the patient's mother did not bring her daughter to the emergency department until her appendix ruptured. This could be due to	1. Find a quiet and private environment for teaching the patient and her mother (Linda Lee Phelps, 2020). 2. Establish an environment of mutual trust and respect to enhance learning (Linda Lee Phelps, 2020).	1. Goal: The patient and the patient's daughter express motivation to learn about the patient's diagnosis. The patient's mother will be able to	Goal met: Both the patient and the patient's mother will demonstrate a positive attitude towards learning and can successively teach the nurse what they learning during the teaching session.

	deficient knowledge and decreased exposure to appendicitis.		teach back the material she was taught before discharge.	

Other References (APA):

Linda Lee Phelps. (2020). *Sparks & Taylor's nursing diagnosis reference manual.* Wolters Kluwer Medical.

Concept Map (20 Points):

Subjective Data

Patient mother expressed that her child's pain felt like a stomachache
Child verbally expressed pain during physical exam she rated it a 4 on the FACES scale

Nursing Diagnosis/Outcomes

Ac[illegible]e Pain related to abdominal surgery as evidenced by verbalization of pain.
Goal: The patient will express that pain has been well managed and is at a 3 out of 10 or lower by the end of my clinical shift.
Risk for infection related to bacterial overgrowth in the abdomen as evidenced by increased WBCs and Procalcitonin levels.
Goal: Patient will remain infection free during postoperative care and will not spike a fever of 100.4°F or greater.
Deficient fluid volume related to hypermetabolic state as evidenced by the healing process.
Goal: The patient's vital signs will be within normal limits, and the patient will have light and less concentrated urine. This goal should be accomplished in one week.
Deficient knowledge related to inadequate knowledge of disease process as evidenced by decreased exposure and language barrier.
Goal: The patient and the patient's daughter express motivation to learn about the patient's diagnosis. The patient's mother will be able to teach back the material she was taught before discharge.

Objective Data

VS: 0821: HR: 93 bpm, BP: 99/53 mmHg, RR: 20 breaths/min, T: 36.1°C (Axillary), O2 Sat: 100% on room air. 1120: HR: 97 bpm, BP: 99/52 mmHg, RR: 17 breaths/min, T: 36.3°C (Axillary), O2 sat: 100% on room air.
Braden Scale: 17
Cummings Fall Score: 6
Diagnostic Tests: CBC, BMP, UA, Beta Strep culture, Procalcitonin levels, Abdominal and pelvic CT, and abdominal ultrasound.

Client Information

The patient was a 5-year-old Hispanic Female who has no past medical or past surgical history. The patient came in with severe abdominal pain, nausea, vomiting, and a fever.

Nursing Interventions

Nursing Diagnosis 1:
- Assess the patient's signs and symptoms of pain behavioral cues and administer pain medications as prescribed (Linda Lee Phelps, 2020).
- Return to the patient in 30 minutes to check intervention effectiveness and use the FACES pain scale when assessing pain (Linda Lee Phelps, 2020).

Nursing Diagnosis 2:
- Minimize the patient's risk for infection by performing hand hygiene before and after providing care to the patient (Linda Lee Phelps, 2020).
- Monitor the patient's temperature every four hours and report any elevated temperature to the provider immediately (Linda Lee Phelps, 2020).

Nursing Diagnosis 3:
- Monitor and record vital signs and input and output every four hours and report any significant changes to the provider (Linda Lee Phelps, 2020).
- Administer fluids as ordered to replace fluids lost and facilitate fluid movement into the intravascular space (Linda Lee Phelps, 2020).

Nursing Diagnosis 4:
- Find a quiet and private environment for teaching the patient and her mother (Linda Lee Phelps, 2020).
- Establish an environment of mutual trust and respect to enhance learning (Linda Lee Phelps, 2020).