

### Medications

1. D5 1/2 NS 20 mEq KCl @ 50 ml/hr running continuously
  - a. Pharmacological
    - i. Electrolyte cations
  - b. Therapeutic
    - i. Electrolyte replacement
  - c. The patient is taking the medication to replacement of their sodium replacement.
  - d. The nurse should review the past medical history of the client because the medication can interact with many conditions that will reverse and give patient hyperkalemia.
2. Acetaminophen 320 mg PO q6h prn
  - a. Pharmacological
    - i. Nonsalicylate, paraminophenol derivative
  - b. Therapeutic
    - i. Antipyretic, nonopioid analgesic
  - c. The patient is taking this medication due to pain. And history of fever.
  - d. The patient liver function should be tested to ensure that there is no impairment.
3. Zosyn 1 gram in 50 ml NS IVPB to infuse over 30 minutes q8h times 2 doses
  - a. Pharmacological
    - i. Penicillin
  - b. Therapeutic
    - i. Antibiotic
  - c. The patient is taking this medication due to the fact he was diagnosed with appendicitis which is an infection that requires antibiotics.
  - d. The nurse should know if the patient has any allergies related to penicillin.

### Demographic Data

**Admitting diagnosis:** Appendicitis

**Psychosocial Developmental Stage:** The patient is in the industry vs. inferiority stage because he is between the ages of 6 to 11 years of age. In this stage, children begin to develop a sense of pride in their accomplishments and abilities through social interactions (Ricci et al., 2021).

**Age of client:** 8 years old

**Sex:** Male

**Weight in kgs:** 25.8 kg

**Cognitive Development Stage:** The patient is in the concrete operational stage based on his age of being between 7 to 11 years old. In this stage time, space, and quantity are understood and can be applied, but not as independent concepts (Ricci et al., 2021).

**Allergies:** Lactose- stomach cramps

**Date of admission:** 01/31/2022

### Admission History

### Pathophysiology

**Disease process:** Appendicitis is the inflammation of the vestigial part of the intestine and can lead to perforation if not treated in a timely manner (Capriotti, 2020). There are usually 2 events that is happening when a patient has appendicitis. The lumen begins to narrow which causes and obstruction and turns to ischemia and then bacteria began to grow which causes pressure and distention (Capriotti, 2020). The patient is in serious trouble when this condition is not treated. If left untreated, it can lead to necrosis and perforation of the appendix (Hinkle & Cheever, 2018).

**S/S of disease:** Some of the clinical presentation of appendicitis includes abdominal pain that radiates to the RLQ which is called the McBurney's point (Hinkle & Cheever, 2018). The patient did not complain of this kind of pain. Some other signs are with any. Jarring movements, coughing, or taking and deep breaths cause the pain to be worse (Capriotti, 2020). The patient mention that when he stops walking, he feels better. Appendicitis can also cause nausea, vomiting, anorexia, fever and chills (Capriotti, 2020). The patient had fever while at the doctor office before admission and the patient was experiencing vomiting episodes.

**Method of Diagnosis:** When healthcare providers are trying to diagnose appendicitis, it is based on combination of physical examination, abdominal x-ray, CT scan, abdominal ultrasound, elevated C-reactive protein, and elevated WBC count (Capriotti, 2020). The patient had a Ct scan of the abdomen completed on 01/31/22 and findings showed dilated appendix with diameter of more than 6 mm, wall thickening more than 2mm, adjacent mesenteric fatty stranding, mesenteric lymph nodes, appendicolith, and perintestinal fluid are present.

**Treatment of disease:** Some treatment for appendicitis can be antibiotic if it is diagnosed in time. The patient should also receive continuous monitoring for peritonitis and IV therapy to restore and maintain electrolyte balance (Capriotti, 2020). The patient was getting his VS sign checked every 4 hours, receiving IV therapy with DS with KCL, and was receiving Zosyn. In acute appendicitis, effective pain management in conjunction with surgical removal is primary treatment (Capriotti, 2020). The patient received a laparoscopic appendectomy on 2/1/22.

The patient came to the hospital by his aunt because he has been having a fever and vomiting for 2 days. The patient went to the doctor and had a fever of 102 degrees and was directed to being admitted to the peds floor of the hospital. The patient mentioned that laying down and not moving helped with the pain but when he moved, he was back in pain.

### Relevant Lab Values/Diagnostics

- Na- 6.0 and 6.8
  - o Normal ranges= 135-145
  - o The patient has been vomiting due to the clinical presentation of appendicitis.
- Glucose- 70
  - o Normal ranges=74- 109
  - o The patient has been vomiting so his glucose can be low due to that.
- Alk phos- 300
  - o Normal ranges= 7-52
  - o The Alk Phos can be elevated due to some type of damage to the digestive system which is what appendicitis is.
- AST- 15
  - o Normal ranges= .3-1.0
  - o The appendicitis can affect the functioning of the hepatocytes of the liver.
- Platelets- 460
  - o Normal ranges= 140- 460
  - o The patient platelets are high due to signs of possible signs of blood clots.
- WBC- 17 ad 15
  - o Normal ranges= 4.0-11.7
  - o The patient platelets are high due to infection from the appendicitis.
- **Diagnostic imaging /procedures**
  - o Laparoscopic appendectomy
    - The patient had a Ct scan of the abdomen completed on 01/31/22 and findings showed dilated appendix with diameter of more than 6 mm, wall thickening more than 2mm, adjacent mesenteric fatty stranding, mesenteric lymph nodes, appendicolith, and perintestinal fluid are present
  - o KUB scan
    - A scan that viewed the kidney, ureter, and bladder.

### Medical History

**Previous Medical History:** The patient had dehydration due gastroenteritis when he was 2 years old.

**Prior Hospitalizations:** Patient was hospitalized when he was 2.

**Chronic Medical Issues:** N/A

**Social needs:** n/a

### Active Orders

- VS q4 with blood pressure
  - o The vital signs can help determined of the client in pain or possible changes in infection status.
- Repeat CBC and CMP
  - o The repeat is to see if the treatment for the patient is working based on labs.
- Clear liquid
  - o The patients have been vomiting for 2 days which is why the clear liquid diet initiated. The patient may also need other procedure that require no solid foods.
- Incentive spirometry
  - o This device is used to help keep lungs healthy while patient is in the hospital.

**Assessment**

General	Integument	HEENT	Cardiovascular	Respiratory	Genitourinary	Gastrointestinal	Musculoskeletal	Neurological	Most recent VS (highlight if abnormal)	Pain and Pain Scale Used
<p>Overall, the patient was alert and oriented to person, time, place and situation. The patient was in distress due to having pain. The patient overall appearance seems well groomed and age appropriate.</p>	<p>The patient had 3 puncture sites located in umbilicus, lower left quadrant, and suprapubic area. There was no pain at puncture sites.</p>	<p>The patient head and neck appeared to be midline with no deviation, and his ears were intact and symmetrica l. No drainage and eyes appeared to be symmetrica l with no drainage. The sclera was white, and conjunctiva was pink.</p>	<p>S1 and S2 heard. No murmur or gallop present. Pulses 2 + bilaterally in the carotid arteries, radial, and dorsalis pedis arteries. Capillary refill was less than 3 seconds in all extremities. The patient had no present edema.</p>	<p>The patient breath sounds were clear in all lobes. The patient was not using accessory muscles and I did not see any chest deformities.</p>	<p>The patient urine was yellow and clear. The patient denied any pain while urinating.</p>	<p>Bowel sound are present and active and all 4 quadrants.</p>	<p>The patient has left shoulder blade pain at puncture site. The patient was able to show me active ROM in upper and lower extremities. The patient needed passive ROM with left arm due to pain.</p>	<p>The patient is alert and orientated times 4. The patient mental status is fully intact, and speech is clear and within normal vocal range. The patient sensation is intact, and the patient level of consciousness is alert.</p>	<p><b>Time:</b> 1200 <b>Temperature:</b> 98.8 <b>Route:</b> oral <b>RR:</b> 22 <b>HR:</b> 96 <b>Oxygen saturation:</b> 97% <b>Oxygen needs:</b> N/A</p>	<p>Pain is 2/10 using faces scale. The pain is located in his abdominal.</p>

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<p align="center"><b>Nursing Diagnosis 1</b> Risk for infection related appendicitis as evidenced by CBC labs.</p>	<p align="center"><b>Nursing Diagnosis 2</b> Risk for electrolyte imbalance related to vomiting as evidenced by hyponatremia.</p>	<p align="center"><b>Nursing Diagnosis 3</b> Impaired comfort related to appendicitis as evidenced by pain level initially being 5/10.</p>
<p align="center"><b>Rationale</b></p> <p>If appendicitis not treated in a timely manner, I can lead to perforation and cause infection in the bloodstream.</p>	<p align="center"><b>Rationale</b></p> <p>Since the patient was vomiting for two days, it made his sodium level very low which can be dangerous.</p>	<p align="center"><b>Rationale</b></p> <p>Managing pain is key to improving quality of life and helps the child go back to regular activities.</p>
<p align="center"><b>Interventions</b></p> <p>Intervention 1: Monitor vital signs for signs of infection. Intervention 2: Monitor CBC for signs of inflammation and infection.</p>	<p align="center"><b>Interventions</b></p> <p>1. Intervention 1: The patient had D5 1/2 NS 20 mEq KCl @ 50 ml/hr running continuously to replace electrolytes.  Intervention 2: The patient was place on a clear liquid to hopefully help him from continuing</p>	<p align="center"><b>Interventions</b></p> <p>Intervention 1: The child was given acetaminophen. Intervention 2: The patient was mostly bedrest to preventing from hurting while walking.</p>

	<b>vomiting.</b>	
<p><b>Evaluation of Interventions</b></p> <p>The patient labs were checked every 4 hours and the labs were done continuously.</p>	<p><b>Evaluation of Interventions</b></p> <p>The scenario did not mention the patient having trouble with the intervention or did not have updated labs to see if the interventions were working.</p>	<p><b>Evaluation of Interventions</b></p> <p>The patient pain level went from a 5 to a 2 using the faces scale.</p>

### References (3):

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