Medications

Acetaminophen (Tylenol) 425.6mg Q6hours PO

Pharm: Nonsalicylate, Para-aminophenol derivative (Jones & Bartlett, 2021)

Therapeutic: Antipyretic, nonopioid analgesic (Jones & Bartlett, 2021)

To relieve mild to moderate pain (Jones & Bartlett, 2021)

The client takes Tylenol to alleviate pain or fever

Nursing assessment: Ensure the correct amount is prescribed due to hepatic impairments with inappropriate dosing. Assess client's pain and fever prior to administration (Jones & Bartlett, 2021).

Toradol (ketorolac tromethamine) 14.1mg IV push (0.47mL) Q6hours

Pharm: NSAID (Jones & Bartlett, 2021)

Therapeutic: Analgesic (Jones & Bartlett, 2021)

To relieve moderate to severe pain that requires analgesia at the opioid level (Jones & Bartlett, 2021)

The client takes Toradol to relieve severe pain from laparoscopic appendectomy

Nursing assessment: Assess client's pain prior to administration. Assess client's stools for signs of bleeding (Jones & Bartlett, 2021).

Zosyn (piperacillin-tazobactam) 3.195mg (142mL/hr) Q8hours IV

Pharm: Penicillin (Jones & Bartlett, 2021)

Therapeutic: Broad-spectrum antibiotic (Jones & Bartlett, 2021)

To treat symptoms of bacterial infections (Jones & Bartlett, 2021)

The client was prescribed Zosyn prophylactically to prevent the infection from bacteria due to perforated appendix.

Nursing assessment: Assess the client for signs and symptoms of infection (Jones & Bartlett, 2021)

Demographic Data

Admitting diagnosis: Acute Appendicitis

Psychosocial Developmental Stage: Initiative vs. Guilt

Age of client: 6 years-of-age

Sex: Male

Weight in kgs: 28.4kg

Cognitive Development Stage: Preoperational - intuitive thought

Allergies: None

Date of admission: 07/03/22

Admission History

Pathophysiology

Perforated Appendix

Disease process:

The appendix becomes obstructed causing inflammation resulting in appendicitis (Hinkle & Cheever, 2022). Obstruction is caused by a kink or foreign body such as seeds or a tumor (Hinkle & Cheever, 2022). Blood flow is reduced to the appendix and bacterial growth ensues (Hinkle & Cheever, 2022). If appendicitis is not treated promptly perforation occurs (Hinkle & Cheever, 2022).

S/S of disease:

Localized pain in the right lower quadrant (Capriotti, 2020). Low-grade fever, nausea, and decreased appetite are related to appendicitis (Capriotti, 2020). Rebound tenderness is present with the release of pressure from the right lower abdomen (Capriotti, 2020). Pain is felt at McBurney's point (Capriotti, 2020). Rovsing's sign is produced with palpation the left lower abdomen with pain felt in the right lower abdomen (Capriotti, 2020).

Method of Diagnosis:

WBC results will show elevation as well as neutrophil elevation (Hinkle & Cheever, 2022). CT scan and ultrasound are done to examine the appendix and evidence of abscess, obstruction, appendicolith, or inflammation (Hinkle & Cheever, 2022).

Treatment of disease:

Laparoscopic appendectomy is performed to remove the appendix (Hinkle & Cheever, 2022). Antibiotics are prescribed after the removal of the appendix to prevent infection (Hinkle & Cheever, 2022).

0800 07/03/22 the client complained of right lower abdominal pain. The father reported they tried to wait to see if the pain got better and gave the client Tylenol. The family went to the lake and the client's abdominal pain became significantly worse and was brought to the emergency department. The client characterized the pain as constant. The client had aggravating factors of nausea, fever, and decrease appetite.

Relevant Lab Values/Diagnostics

(Normal values acquired from Epic)

WBC (normal range: 4.31-11.0): 16.55

- Related to inflammation, stress, and infection due to a perforated appendix (Pagana et al., 2019).

Neutrophils (normal range: 1.63-7.55): 15.47

- Physical/emotional stress, inflammation, and infection due to perforated appendix and surgery (Pagana et al., 2019).

Lymphocytes (normal range: 0.97-3.96): 0.76

- Related to undernutrition because the client was not able to eat appropriate amounts of food before due to severe pain in the abdomen (Pagana et al., 2019).

Ultrasound

- Abscess, presence of appendicolith, and loss of echogenic submucosal layer of the appendix in the ultrasound indicate perforation (Pagana et al., 2019).

Medical History

Previous Medical History: N/A

Prior Hospitalizations: N/A

Chronic Medical Issues: N/A

Social needs: The client is bilingual speaking both English and Spanish. The client is more comfortable with speaking Spanish. Client has an older brother he plays with most of the time at home.

Active Orders

Incentive spirometer Q hourly

- A tool used to help take deep breathes and get rid of all remnants of anesthesia and prevent lung complications such as pneumonia.

Regular Diet

- Ordered to allow client consumption of a normal diet after surgery.

Up Ab Lib

- To alleviate pain from air accumulation in the abdomen after laparoscopic Appendectomy

Antibiotics

- Prophylactic treatment of infection the client is at high risk after a perforated appendix

Assessment										
General	**Integument**	**HEENT**	**Cardiovascular**	**Respiratory**	**Genitourinary**	**Gastrointestinal**	**Musculoskeletal**	**Neurological**	**Most recent VS (highlight if abnormal)**	**Pain and Pain Scale Used**
when given instruction and answers questions appropriately.	incisions from laparoscopic appendectomy without any signs or symptoms of infection. Client reports slight tenderness with palpation of	in size (2+). No abnormality inspected or palpated of the ears. The sclera is white bilaterally. Cornea is clear bilaterally. Conjunctiva pink bilaterally.	are auscultated for heart rate. Pulses are 2+ in all extremities bilaterally. Capillary refill is less than 3 seconds in fingers and toes bilaterally. No edema	shortness of breath reported from the client. Respirations are normal in rate.	Urine is clear and yellow.	show no signs or symptoms of infection. The bowel sounds are normoactive in all four quadrants. Upon palpation the client complains of a little bit of pain.	weakness of the musculoskeletal system. ROM is WDL both actively and passively. Fall score = 2, client walks with IV poll.	answers questions appropriately.	**saturation:** 97% **Oxygen needs:** Room Air no oxygen required	

	abdomen. Capillary refill is less than 3seconds. No clubbing present on nails.	EOMs intact & PERRLA bilaterally. No glasses. The septum is midline and dentition is good. Uvula is midline.	is inspected or palpated in all extremities bilaterally.			Client is on a regular diet. Stools are normal in shape and consistency .				

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Acute pain related to surgical incisions as evidence by reports of pain (Phelps, 2020).	Risk for infection related to perforated appendix as evidence by elevated neutrophils (Phelps, 2020).	Risk for ineffective breathing pattern related to surgery as evidence by not using incentive spirometer constantly (Phelps, 2020).
Rationale The client reported a little bit of pain when assessing vitals. The client is post-op from laparoscopic appendectomy.	**Rationale** The client underwent laparoscopic appendectomy for a perforated appendix. The risk for infection is high and must be assessed frequently.	**Rationale** After surgery, it is important to practice deep breathing exercises because anesthesia needs to be removed and the client is at risk of acquiring pneumonia.
Interventions **Intervention 1:** Encourage ambulation **Intervention 2:** Provide diversional activities	**Interventions** **Intervention 1:** Assess incisions and skin regularly for breaks, irritation, or signs of infection (Phelps, 2020). **Intervention 2:** Administer antibiotics as prescribed.	**Interventions** **Intervention 1:** Play games to encourage deep breathing such as blowing a pinwheel. **Intervention 2:** Encourage the client to walk a lap around the unit.
Evaluation of Interventions The client understood the importance of ambulating to alleviate air in the abdomen and reduce occurrence of pain.	**Evaluation of Interventions** The client understood the importance of taking the antibiotic and not to touch or irritate the incisions.	**Evaluation of Interventions** The client took part in blowing the pinwheel to help expand the lungs. The client walked a lap around the unit and played in the playroom.

References (3):

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

Hinkle, J.L., & Cheever, K. H. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing (15th ed.).* Wolters Kluwer Health Lippincott Williams & Wilkins

Jones & Bartlett Learning. (2021). *2021 Nurse's drug handbook (20th ed.).* Jones Bartlett Learning

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosby's diagnostic and laboratory test reference* (14th ed.). Mosby.

Phelps, L.L. (2020). *Sparks and Taylor's nursing diagnosis reference manual* (11th ed.). Wolters Kluwer.