

# Appendicitis/Appendectomy

## UNFOLDING Reasoning



John Washington, 14 years old

<b>Primary Concept</b>		
<b>Inflammation</b>		
<b>Interrelated Concepts</b> (In order of emphasis)		
<ul style="list-style-type: none"> <li>• Pain</li> <li>• Stress</li> <li>• Clinical Judgment</li> <li>• Patient Education</li> <li>• Communication</li> </ul>		
<b>NCLEX Client Need Categories</b>	<b>Percentage of Items from Each Category/Subcategory</b>	<b>Covered in Case Study</b>
Safe and Effective Care Environment		
✓ Management of Care	17-23%	✓
✓ Safety and Infection Control	9-15%	
Health Promotion and Maintenance	6-12%	✓
Psychosocial Integrity	6-12%	✓
Physiological Integrity		
✓ Basic Care and Comfort	6-12%	✓

✓ Pharmacological and Parenteral Therapies	12-18%	✓
✓ Reduction of Risk Potential	9-15%	✓
✓ Physiological Adaptation	11-17%	✓

**History of Present Problem:**

John Washington is a healthy 14-year-old African American male who weighs 150 lbs. (68.2 kg). He came to the emergency department because he woke up this morning at about 2 am with "excruciating" generalized abdominal pain around his belly button that has been progressively getting worse over the past several hours. It is now 2 pm. He took ibuprofen 400 mg PO this morning, which decreased the pain some but is now more painful and uncomfortable. The pain is now localized to his RLQ. The pain increases with walking and movement, but he feels better when he lies down in a fetal position. He vomited three times after he drank some orange juice for breakfast this morning and has had nothing to drink since. He continues to feel nauseated but has not had an emesis since this morning.

**Personal/Social History:**

John lives with his mother and three younger brothers. He is active in athletics and has a strong social network of friends and family in the inner-city neighborhood where he lives.

**What data from the histories are RELEVANT and must be interpreted as clinically significant by the nurse?** (Reduction of Risk Potential)

<b>RELEVANT Data from Present Problem:</b>	<b>Clinical Significance:</b>
Male Age (14) "Excruciating" generalized abdominal pain around belly button Decreased pain some but now worse Localized to RLQ Increased with movement but better in fetal position Vomit x3 Nauseated	<ul style="list-style-type: none"> <li>- Appendicitis is most common in males, and between age 10-30</li> <li>- Kinking of the intestines or blockage by calcified stool can cause the appendix to become inflamed, resulting in increased pressure that narrows the lumen.</li> <li>- Positive McBurney's point/RLQ pain is consistent with appendicitis</li> <li>- Pressure relieved when in the fetal position</li> <li>- Some signs and symptoms of appendicitis include dull pain at the umbilicus, sharp pain in the right lower quadrant that gets worse when moving, constipation, nausea, fever, and vomiting (Hinkle &amp; Cheever, 2018).</li> </ul>
<b>RELEVANT Data from Social History:</b>	<b>Clinical Significance:</b>
John is a minor, older brother Active and athletic Strong friend, family, and inner-city network	<ul style="list-style-type: none"> <li>- John requires the care and consent of his mother for any treatment. He is an older brother so being in the hospital might be scary for his younger siblings. Family support/therapy might be useful</li> <li>- Dealing with the illness/surgery may cause depression and feelings of isolation. A support group, someone to talk to, childcare advocate would be helpful for him</li> </ul>

## Patient Care Begins:

Current VS:	P-Q-R-S-T Pain Assessment:	
T: 100.5 F/38.1 C (oral)	Provoking/Palliative:	Movement, palpation
P: 106 (regular)	Quality:	Sharp, cramping
R: 20 (regular)	Region/Radiation:	Mid abdomen, RLQ
BP: 142/76	Severity:	8/10
O2 sat: 99% RA	Timing:	Continuous

**What VS data are RELEVANT and must be interpreted as clinically significant by the nurse?** (Reduction of Risk Potential/Health Promotion and Maintenance)

RELEVANT VS Data:	Clinical Significance:
Fever 100.5 Tachycardia High pain rating 8/10 (sharp/cramping) Hypertensive (142/76)	<ul style="list-style-type: none"> <li>- Fever is one of the signs of infection</li> <li>- The combination of the tachycardia, high blood pressure, sharp pain, fever are all signs of peritonitis</li> </ul>

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## Initial Assessment by Primary Nurse

**What body system(s) will the nurse most thoroughly assess based on the problem and the clinical data collected to this point?** (Reduction of Risk Potential/Physiologic Adaptation)

PRIORITY Body System(s):	PRIORITY Nursing Assessments:
Gastrointestinal/digestive Integumentary	<ul style="list-style-type: none"> <li>- Pressing on the lower right quadrant (McBurney's point), pressing on the opposite side to check for rebound tenderness (Rovsing's sign), rotating of the leg/hip to check for positive Obturator sign, and flexion of the right hip to assess for pain which would indicate a positive Psoas sign. A complete exam including hydration status since he has been vomiting, and has a fever, inspecting, auscultating, percussion, and palpation of the abdomen</li> <li>- In addition to the physical exam assessment, there are diagnostic tests such as pelvic and abdominal CT scans with or without contrast, ultrasound, abdominal X-ray, lab tests to check for elevated white blood cells that should be done to diagnose appendicitis (Capriotti, 2020).</li> </ul>

Current Assessment:	
GENERAL SURVEY:	Alert, oriented, pleasant, appears tense, uncomfortable, dress appropriate for the

	season, hygiene and grooming normal for age and gender.
NEUROLOGICAL:	Alert & oriented to person, place, time, and situation (x4)
HEENT:	Head normocephalic with symmetry of all facial features. PERRLA, sclera white bilaterally, conjunctival sac pink bilaterally. Lips, tongue, and oral mucosa pink and moist.
RESPIRATORY:	Breath sounds clear with equal aeration on inspiration and expiration in all lobes anteriorly, posteriorly, and laterally, nonlabored respiratory effort on room air.
CARDIAC:	Pink, warm & dry, no edema, heart sounds regular, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks, brisk cap refill. Heart tones audible and regular, S1 and S2 noted over A-P-T-M cardiac landmarks with no abnormal beats or murmurs.
ABDOMEN:	Abdomen round, rebound tenderness in RLQ to gentle palpation. Rebound tenderness present in RLQ, BS + in all four quadrants, bowel sounds diminished/hypoactive
GU:	Voiding without difficulty, urine clear/dark amber
INTEGUMENTARY:	Skin warm, dry, intact, normal color for ethnicity. Cap refill <3 seconds. Hair soft-distribution normal for age and gender. Skin integrity intact, skin turgor elastic, no tenting present.

**What assessment data is RELEVANT and must be interpreted as clinically significant by the nurse?** (Reduction of Risk Potential/Health Promotion & Maintenance)

RELEVANT Assessment Data:	Clinical Significance:
Tense, uncomfortable Rebound tenderness in RLQ to gentle palpation. Rebound tenderness present in RLQ Bowel sounds diminished/hypoactive Urine dark amber	<ul style="list-style-type: none"> <li>- Tense and uncomfortable due to condition, pain, guarding</li> <li>- RLQ rebound tenderness is a positive sign for appendicitis</li> <li>- Diminished bowel sounds due to nausea, vomiting and little food or liquid intake</li> <li>- Dark urine is a sign of dehydration status</li> </ul>

## Radiology Reports:

**What diagnostic results are RELEVANT and must be interpreted as clinically significant by the nurse?** (Reduction of Risk Potential/Physiologic Adaptation)

Ultrasound: Abdomen	
Results:	Clinical Significance:
Enlarged, non-compressible appendix	<ul style="list-style-type: none"> <li>- Some possibilities include kinking of the intestines or blockage by calcified stool which can cause the appendix to become inflamed, resulting in increased pressure that narrows the lumen. A narrow lumen causes reduced blood flow to the appendix resulting in mucus buildup, which creates the perfect environment for bacterial growth (Hinkle &amp; Cheever, 2018). An untreated appendicitis can rupture</li> </ul>

contaminating the peritoneal cavity with bacteria, mucus, and white blood cells (Hinkle & Cheever, 2018).

**Lab Results:**

Complete Blood Count (CBC)					
	WBC	HGB	PLTs	% Neuts	Bands
Current:	14.5	15.2	245	88	0

**What lab results are RELEVANT and must be recognized as clinically significant by the nurse?** (Reduction of Risk Potential/Physiologic Adaptation)

RELEVANT Lab(s):	Clinical Significance:
WBC 14.5 Neutrophils 88	<ul style="list-style-type: none"> <li>- Increased in my patient due to acute appendicitis. Indicative of infection. The immune system responds by increases the number of WBC to fight the infection (Capriotti, 2020).</li> <li>- Neutrophils are the first responders to fight off bacterial infections (Capriotti, 2020).</li> </ul>

**Basic Metabolic Panel (BMP)**

	Na	K	Gluc.	Creat.
Current:	133	3.5	95	0.9

**What lab results are RELEVANT and must be recognized as clinically significant by the nurse?** (Reduction of Risk Potential/Physiologic Adaptation)

RELEVANT Lab(s):	Clinical Significance:
Na 133	<ul style="list-style-type: none"> <li>- Slight decrease in Na is indicative of electrolyte imbalances due to my patient vomiting x3 and not eating or drinking since. Fluids should be given to rehydrate him, and electrolytes should continue to be monitored to ensure proper hydration status and electrolyte balance (Capriotti, 2020).</li> </ul>

**Misc.**

Lactate	CRP

Current:	4.1	55			
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**What lab results are RELEVANT and must be recognized as clinically significant by the nurse?** (Reduction of Risk Potential/Physiologic Adaptation)

RELEVANT Lab(s):	Clinical Significance:
Lactate 4.1 CRP 55	<ul style="list-style-type: none"> <li>- Increased lactate can occur from tissue ischemia or shock. Due to the appendicitis in my patient (Pagana et al., 2022)</li> <li>- Increased CRP indicates inflammatory response. My patient has an inflamed appendix and could also be indicative of a bacterial infection due to possible rupture of appendix (Pagana et al., 2022)</li> </ul>

### Lab Planning: Creating a Plan of Care with a PRIORITY Lab:

(Reduction of Risk Potential/Physiologic Adaptation)

Lab:	Normal Value:	Clinical Significance:	Nursing Assessments/Interventions Required:
WBC  Value: 14.5	5-10  Critical Value: > 10	Elevated WBC indicates infection	Monitor vitals and labs, noting fever also as a sign of infection. Consult with provider for orders for antibiotics and pain relievers. Focused abdominal assessment and monitoring will be important in addition to the labs and vitals

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### Clinical Reasoning Begins...

**1. Interpreting relevant clinical data, what is the primary problem? What primary health-related concepts does this primary problem represent?** (Management of Care/Physiologic Adaptation)

Problem:	Pathophysiology of Problem in OWN Words:	Primary Concept:
Appendicitis with potential for rupture or peritonitis	There are different potential causes for appendicitis. The little pouch- like organ can become blocked up by stool, it can experience a buildup of mucus and become a breeding ground for bacterial growth.	Infection, rupture, peritonitis

### Collaborative Care: Medical Management (Pharmacologic and Parenteral Therapies)

Care Provider Orders:	Rationale:	Expected Outcome:
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<p>Establish peripheral IV</p> <p>0.9% NS 1000 mL IV bolus</p> <p>Morphine 2 mg IV every 2 hours PRN</p> <p>Ondansetron 4 mg IV every 4 hours PRN nausea</p> <p>Ceftriaxone 1 g IVPB x1 now</p> <p>Metronidazole 500 mg IVPB every 12 hours</p> <p>General surgeons</p> <p>consult Strict NPO</p>	<ul style="list-style-type: none"> <li>- For administration of IV meds and established venous access in case surgery is necessary</li> <li>- NS for fluid and electrolyte balance, hydration status and IV patency</li> <li>- Pain relief</li> <li>- Nausea relief</li> <li>- Antibiotic prescribed for the infection</li> <li>- Antibiotic prescribed for infection</li> <li>- Necessary to have surgery consult in the event of a worsening condition requiring an emergency appendectomy, or due to a rupture, or peritonitis</li> <li>- NPO due to nausea/vomiting and possibility of surgery</li> </ul>	<ul style="list-style-type: none"> <li>- To administer medication via IV, to administer fluids and have IV access in the event of surgery</li> <li>- Used for moderate to severe pain relief (8/10)</li> <li>- Reduction of nausea and vomiting</li> <li>- Antibiotics used to treat the infection and decrease the amount of bacteria in the body</li> <li>- Antibiotics don't bring full resolution in some cases and surgery is required to heal the patient</li> <li>- NPO status is necessary for potential surgery to prevent possible aspiration under sedation and for bowel rest from nausea/vomiting</li> </ul>
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## PRIORITY Setting: Which Orders Do You Implement First and Why? *(Management of Care)*

Care Provider Orders:	Order of Priority:	Rationale:
<ul style="list-style-type: none"> <li>• Establish peripheral IV</li> <li>• 0.9% NS 1000 mL IV bolus</li> <li>• Morphine 2 mg IV every 2 hours PRN</li> <li>• Ondansetron 4 mg IV every 4 hours PRN nausea</li> <li>• Ceftriaxone 1 g IVPB x1 now</li> <li>• Metronidazole 500 mg IVPB every 12 hours</li> </ul>	<ul style="list-style-type: none"> <li>- Establish peripheral IV</li> <li>- Morphine 2 mg IV every 2 hours PRN</li> <li>- 0.9% NS 1000 mL IV bolus</li> <li>- Ceftriaxone 1 g IVPB x1 now</li> <li>- Ondansetron 4 mg IV every 4 hours PRN nausea</li> <li>- Metronidazole 500 mg IVPB every 12 hours</li> </ul>	<ul style="list-style-type: none"> <li>- IV access is needed to give meds and fluids</li> <li>- Pain control is priority for the patient to become more comfortable and rest</li> <li>- NS is needed for hydration, line patency and is important so I would hang it next then the ceftriaxone piggyback since it's ordered "now"</li> <li>- The patient has been experiencing nausea and hasn't had relief yet so I would give the PRN ondansetron</li> <li>- Metronidazole is IVPB q12h I would give it last since the ceftriaxone order was for "now" and the metronidazole is q12h</li> </ul>

## Collaborative Care: Nursing

### 2. What nursing priority (ies) will guide your plan of care? *(Management of Care)*

Nursing PRIORITY:		
PRIORITY Nursing Interventions:	Rationale:	Expected Outcome:
Frequent vitals Focused abdominal assessment Pain assessment Med administration	<ul style="list-style-type: none"> <li>- Frequent monitoring of vitals to assess if the patient's condition is getting worse</li> <li>- Focused abdominal assessment will also tell if the patient is having any relief or if his condition is getting worse</li> <li>- Pain assessment and medication administration to help fight the infection, reduce pain and nausea and vomiting</li> </ul>	<ul style="list-style-type: none"> <li>- Vitals will be within normal range, not getting worse</li> <li>- Abdominal pain/tenderness will not get worse</li> <li>- Medication will bring relief to patient and</li> </ul>

		antibiotics will heal his appendicitis
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**3. What body system(s) will you assess most thoroughly based on the primary/priority concern?**  
(Reduction of Risk Potential/Physiologic Adaptation)

<b>PRIORITY Body System:</b>	<b>PRIORITY Nursing Assessments:</b>
GI/GU Integumentary	<ul style="list-style-type: none"> <li>- Vitals, pain, general assessment for s/s of worsening condition</li> <li>- Abdominal inspection, auscultation, palpation, McBurney's point, Rovsing sign, obturator, urine color/clarity for hydration status</li> </ul>

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**4. What is the worst possible/most likely complication(s) to anticipate based on the primary problem of this patient?**  
(Reduction of Risk Potential/Physiologic Adaptation)

**Most Likely PRE-OP Complication:**

<b>Worst Possible/Most Likely Complication to Anticipate:</b>	Rupture which can cause sepsis, peritonitis, death	
<b>Nursing Interventions to PREVENT this Complication:</b>	<b>Assessments to Identify Problem EARLY:</b>	<b>Nursing Interventions to Rescue:</b>
Maintain patent IV, administer medications as ordered Consistent and thorough assessments Proactively consult with Dr. in the event of any concerns of worsening condition	Changes in vital signs (worsening) Increased pain, discomfort, distention Worsening nausea/vomiting, diarrhea	Surgery

**Most Likely POST-OP Complication:**

<b>Worst Possible/Most Likely Complication to Anticipate:</b>	Pneumonia, wound infection,	
<b>Nursing Interventions to PREVENT this Complication:</b>	<b>Assessments to Identify Problem EARLY:</b>	<b>Nursing Interventions to Rescue:</b>

Incentive spirometer, early ambulation Wound cleaning, sterile dressing changes	Auscultate lungs, monitor vitals, ambulate Inspect incision, clean as directed, monitor for redness, warmth, swelling, abnormal/unusual draining	Be prepared with oxygen/resuscitation equipment in the room Notify provider with first signs of pneumonia/lung complications or infection
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**5. What psychosocial/holistic care PRIORITIES need to be addressed for this patient?**

*(Psychosocial Integrity/Basic Care and Comfort)*

<b>Psychosocial PRIORITIES:</b>	Fear, anxiety, depression	
<b>PRIORITY Nursing Interventions:</b>	<b>Rationale:</b>	<b>Expected Outcome:</b>
<b>CARE/COMFORT:</b> <i>Caring/compassion as a nurse</i>  <i>Physical comfort measures</i>	<ul style="list-style-type: none"> <li>- Utilize child life resource specialists to help with explaining procedures</li> <li>- Distraction during uncomfortable procedures like IV insertion or blood draws</li> <li>- Visits from friends/family, facetime, games, movies, and other activities as tolerated and available</li> <li>- High fowlers for ease of breathing and to eliminate pressure on incisions</li> <li>- Advance diet as allowed and tolerated, provide favorite foods/snacks</li> <li>- Open therapeutic communication and therapy/support as needed</li> </ul>	<ul style="list-style-type: none"> <li>- He will feel less anxious, and fearful and more supported by staff, family, and friends</li> <li>- Incorporating visits and calls will help him to feel less isolated and help his mindset which will help his recovery process</li> </ul>
<b>EMOTIONAL (How to develop a therapeutic relationship):</b> <i>Discuss the following principles needed as conditions essential for a therapeutic relationship:</i> <ul style="list-style-type: none"> <li>• Rapport</li> <li>• Trust</li> <li>• Respect</li> <li>• Genuineness</li> <li>• Empathy</li> </ul>	<p>Open communication is important in developing trust. Getting to know the patient and his mom, his likes and his dislikes will be important. Active listening, answering questions and utilizing resources such as child life specialists for pediatric patients will be helpful. Demonstrating kindness, compassion and patience with the patient and his mother will aid in earning trust and respect. Being genuine and empathetic and offering suggestions to help facilitate a good hospital stay will be key for this patient and his mom and will help with reducing fear and anxiety.</p>	<ul style="list-style-type: none"> <li>- He will feel less anxious and more willing to ask questions and express his true feelings when he feels that he has someone he can trust caring for him</li> <li>- He will feel heard and mutually</li> </ul>

		respected and have a more positive experience
<b>SPIRITUAL:</b>	Coping and establishing a positive mindset. He will likely be anxious, fearful, and depressed about the procedure, recovery time and missing out on athletics and activities with his friends	Providing honest and realistic goals, timelines for healing and recovery, instructions and limitations clearly will help him cope effectively.
<b>CULTURAL Considerations (IF APPLICABLE)</b>		

### Evaluation: Four Hours Later...

John had a laparoscopic appendectomy without apparent complications. He is currently in PACU and has just returned to the med/surg floor.

<b>Current VS:</b>	<b>Most Recent (From PACU):</b>	<b>Current PQRST:</b>	
<b>T:</b> 100.4 F/38.0 C (o)	<b>T:</b> 99.8 F/37.7 C (o)	<b>Provoking/Palliative:</b>	Movement worsens
<b>P:</b> 92 (reg)	<b>P:</b> 84 (reg)	<b>Quality:</b>	Dull ache
<b>R:</b> 20 (reg)	<b>R:</b> 18 (reg)	<b>Region/Radiation:</b>	RLQ
<b>BP:</b> 136/86	<b>BP:</b> 124/80	<b>Severity:</b>	5/10
<b>O2 sat:</b> 97% room air	<b>O2 sat:</b> 99% room air	<b>Timing:</b>	Continuous

### Initial Postop Assessment by Primary Nurse

*What body system(s) will the nurse most thoroughly assess based on the problem and the clinical data collected to this point? (Reduction of Risk Potential/Physiologic Adaptation)*

<b>PRIORITY Body System(s):</b>	<b>PRIORITY Nursing Assessments:</b>
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All Systems Focused GI	<ul style="list-style-type: none"> <li>- When a patient comes out of surgery a full assessment would be required</li> <li>- ABC's are priority number one, auscultating lung sounds, cap refill,</li> <li>- Vitals, pain assessment, inspection of surgical site, abdominal/bowel sounds,</li> <li>- Neuro, HEENT, Cardiac</li> </ul>
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<b>Current Assessment:</b>	
GENERAL SURVEY:	Appears to be in no acute distress, the <b>body appears tense. Occasional moans; moves as little as possible and grimaces with movement.</b>
NEUROLOGICAL:	Drowsy, but arousable, alert & oriented to person, place, time, and situation (x4)
HEENT:	Head normocephalic with the symmetry of all facial features. PERRLA, sclera white bilaterally, conjunctival sac pink bilaterally. Lips, tongue, and oral mucosa pink and moist.
RESPIRATORY:	<b>Respiration's shallow, breath sounds clear but diminished</b> with equal aeration on inspiration and expiration in all lobes anteriorly, posteriorly, and laterally, nonlabored respiratory effort on room air.
CARDIAC:	Pink, warm & dry, no edema, heart sounds regular, pulses strong, equal with palpation at radial/pedal/post-tibial landmarks, brisk cap refill. Heart tones audible and regular, S1 and S2 noted over A-P-T-M cardiac landmarks with no abnormal beats or murmurs.
ABDOMEN:	Abdomen flat and tender to gentle palpation. <b>No BS auscultated in all four quadrants.</b> Three small dressings on the abdomen with no drainage present
GU:	<b>Has not voided since surgery</b>
INTEGUMENTARY:	Skin warm, dry, intact, normal color for ethnicity. Cap refill <3 seconds, Hair soft distribution normal for age and gender. Skin integrity intact, skin turgor elastic, no tenting present.

### 1. What data is **RELEVANT** and must be interpreted as clinically significant by the nurse?

(Reduction of Risk Potential/Health Promotion and Maintenance)

<b>RELEVANT VS Data:</b>	<b>Clinical Significance:</b>	<b>TREND: Improve/Worsening/Stable:</b>
Temp Pulse Respirations BP O2 Pain	Vitals are stabilizing, pain level is reduced which indicates that things are going in the right direction after surgery	Improving

<b>RELEVANT Assessment Data:</b>	<b>Clinical Significance:</b>	<b>TREND: Improve/Worsening/Stable:</b>
Body Tense, occasional moaning, moving as little as possible Respiration's shallow, breath sounds diminished No bowel sounds Hasn't voided	<ul style="list-style-type: none"> <li>- Tense, moaning, and grimacing are nonverbal indicators of pain and discomfort</li> <li>- Lack of movement signifies guarding</li> <li>- Shallow respirations and diminished breath sounds are normal right after surgery but need to be monitored</li> <li>- No bowel sounds and lack of voiding is also normal after surgery due to NPO status and anesthesia/sedation but should be monitored and is often required prior to discharge</li> </ul>	Stable

**2. Based on your current evaluation, what are your CURRENT nursing priorities and plan of care?**  
*(Management of Care)*

<b>CURRENT Nursing PRIORITY:</b>	Prevention of post op complications	
<b>PRIORITY Nursing Interventions:</b>	<b>Rationale:</b>	<b>Expected Outcome:</b>
IV access Pain management Fluids/Meds Diet/Nutrition Status Early ambulation/Incentive spirometer High fowlers Frequent vitals and abdominal assessment Voiding	<ul style="list-style-type: none"> <li>- IV access will be important to continue to administer fluids, pain meds and antibiotics as ordered</li> <li>- Patient has been NPO for a while and diet should be advanced as tolerated to help promote healing, hydration, and proper nutritional status</li> <li>- Early ambulation and use of incentive spirometer will help prevent pneumonia and blood clots and promote healing</li> <li>- High fowlers assist with breathing and reduces the pressure on the incision</li> <li>- Frequent vitals and abdominal assessment will help paint the picture of how the patient is recovering and will be a first indicator of a post op complication</li> <li>- Voiding is necessary for discharge</li> </ul>	<ul style="list-style-type: none"> <li>- He will continue to improve, be able to eat and maintain proper nutrition and hydration status.</li> <li>- He will be without complications from surgery</li> </ul>

## Collaborative Care: Postop Medical Management *(Pharmacologic and Parenteral Therapies)*

Care Provider Orders:	Rationale:	Expected Outcome:
<p>Morphine 2-4 mg IV every 4 hours PRN pain</p> <p>Ondansetron 4 mg ODT every 8 hours PRN nausea</p> <p>Ceftriaxone 1 g IVPB every 12 hours</p> <p>Metronidazole 500 mg IVPB every 12 hours</p> <p>D5 ½ NS w/20 mEq KCl 75 mL/hour until tolerating PO fluids</p>	<ul style="list-style-type: none"> <li>- Used for moderate to severe pain relief</li> <li>- Used to relieve nausea</li> <li>- Antibiotic to treat infections</li> <li>- Antibiotic to treat infections</li> <li>- Fluids used for hydration and electrolyte balance</li> </ul>	<ul style="list-style-type: none"> <li>- Patient will not need morphine for long as his pain will be under control</li> <li>- He will no longer be nauseated</li> <li>- Antibiotics used to treat infection and aid in healing</li> <li>- Patient will maintain proper fluid and electrolyte balance</li> </ul>

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It is now the end of your shift. Effective and concise handoffs are essential to excellent care and, if not done well, can adversely impact the care of this patient. You have done an excellent job to this point; now finish strong and give the following SBAR report to the nurse who will be caring for this patient who is now four hours postop: *(Management of Care)*

<b>S</b> ituation:
<p><b>Name/age:</b> John Washington, age 14</p> <p><b>Summary of the primary problem:</b> Appendicitis with emergency appendectomy</p> <p><b>Day of admission/post-op #:</b> Admission date - Today, post op day 1</p>
<b>B</b> ackground:
<p><b>Primary problem/diagnosis:</b> Patient presented to the ED with nausea and vomiting x3, excruciating RLQ pain</p>

**RELEVANT past medical history:** n/a

**A**ssessment:

**Most recent vital signs:** T: 99.8F, P: 84, R: 18, BP: 124/80, SpO2 99% (RA)

**RELEVANT body system nursing assessment**

**data:** All body systems are within normal limits except GI. Bowel sounds absent in all four quadrants. Patient displays nonverbal indicators of pain and discomfort by moaning, grimacing, and guarding his abdomen. Surgical site has no drainage present, clean, dry dressing in place

**RELEVANT lab values:** Prior to surgery his WBC was elevated at 14.5, neutrophils were 88%, Na showed a slight decrease of 133, lactate was 4.1 and CRP 55.

**TREND of any abnormal clinical data (stable increasing/decreasing):** Vitals are coming back within normal range, patient is stabilizing

**How have you**

**advanced the plan of care?** Educated the patient on early ambulation, use of incentive spirometer, advancing diet as tolerated. Continued to monitor vitals, pain, assess incision for redness, swelling, drainage, and kept dressing clean and in place. Keeping the patient in high fowlers position to reduce pressure on the incision and aid in ease of breathing, also educated the patient on splinting with a pillow when coughing or sneezing.

**Patient response:** Patient is displaying nonverbal cues of pain and discomfort from his surgery, so he is not moving much currently. He continues to be encouraged to ambulate to aid in his healing and recovery

**INTERPRETATION of current clinical status**

**(stable/unstable worsening):** Stable. He has nonverbal pain indicators rather than reporting excruciating pain and is no longer reporting nausea, no vomiting

**R**ecommendation:

**Suggestions to advance the plan of care:**

When watching TV, use your incentive spirometer during commercials, otherwise use it every hour

Ambulate before or after meals (3x per day)

Monitor for signs and symptoms of infection

Advance diet and liquids as tolerated

Maintain adequate hydration

Reassess pain, vitals, and abdomen

Keep dressing clean and intact

## Education Priorities/Discharge Planning

*What educational/discharge priorities will be needed to develop a teaching plan for this patient and/or family? (Health Promotion and Maintenance)*

<b>Education PRIORITY:</b>	Infection prevention
<b>PRIORITY Topics to Teach:</b>	<b>Rationale:</b>
s/s of infection Cleaning wound Changing dressing Post ops follow up with primary care	<ul style="list-style-type: none"> <li>- Monitor for redness, swelling, drainage/oozing/pus, warmth, new or unusual pain, odor, fever</li> <li>- Wash your hands thoroughly before changing soiled dressing, wash hands before cleaning wound</li> <li>- Begin showering 1-2 days post op</li> <li>- Keep follow up appointments with provider and contact provider if there are any signs of infection</li> </ul>

*What additional considerations need to be made when teaching the parents of a pediatric patient?* When dealing with a pediatric patient, both the patient and the parent need to be addressed, educated and able to ask questions and receive answers in a way they can both understand. With pediatric patients, it is helpful to utilize a childcare specialist who can help with explaining things in a way the younger patient can understand, and in a way that helps make it less scary

## Use Reflection to THINK Like a Nurse

*What did you learn that you can apply to future patients you care for? Reflect on your current strengths and weaknesses of this case study identified. What is your plan to make any weakness a future strength?*

<b>What Did You Learn?</b>	<b>What did you do well in this case study?</b>
Appendicitis can affect anyone of any age, at any time. Something that seems to be a minor infection can turn bad, real fast and can be fatal	I think I did well with prioritizing my patients care with pain meds and interventions to make him more comfortable, also utilizing childcare specialists to help facilitate communications and lessen anxiety in my patient
<b>What could have been done better?</b>	<b>What is your plan to make any weakness a future strength?</b>

Having more of a past medical history, family history, spiritual/coping mechanisms would have been helpful

To always keep learning, asking questions and looking for different, more efficient ways to critically think and problem solve.