Appendicitis Management Pathway

Introduction

This pathway is for use with children aged 2-18 years old with no underlying disease or co-morbidity who have a confirmed diagnosis of appendicitis (either non-perforated or perforated) by the General Surgery Team who require a surgical appendectomy or medical management. Patients are to be removed from this pathway if there are significant postoperative complications (eg. bowel obstruction or prolonged TPN) or a change in diagnosis.

Target Users

- General Surgery Surgeons, Residents, Fellow, Nurse Practitioners, and nurses on the inpatient units

Definitions

- **Non-perforated appendicitis** - Appendix is normal, injected, inflamed or suppurative. Presence of cloudy fluid +/- local fibrinous exudate, or gangrenous appendicitis but with no visible hole in appendix, abscess or free fecalith
- **Perforated appendicitis** - Visible hole in appendix, free fecalith, diffuse peritonitis with fibrinous exudate or abscess
- **Appendectomy** - surgical removal of the appendix
- **Fever** - a fever is defined as any temperature reading greater than 38°C
Appendicitis Algorithm

Recommendations - Printable Version

Appendicitis Management Pathway
# Inpatient Non-Perforated Appendicitis Care Pathway

## Pre-Operative

1. Hydration maintained
2. Adequate pain control
3. Patient prepared for OR
4. Child/parent are advised of pre-op bath. Wipes to be used upon arrival. Refer to procedure document.

## Post-Operative

1. Alkaline
2. Adequate pain control
3. Ambulating
4. Able to tolerate diet (clear fluids to regular diet)
5. Incision intact, no drainage, dry and intact
6. Child/caregiver teaching

## Physical Exam

- Obtain history
- Complete physical exam
- Assess vital signs
- Complete pain assessment (refer to Pain Assessment Guidelines)
- Obtain accurate in and out
- Complete abdominal assessment

## Nutritional

- Ensure that patient is NPO
- Administer OSS and 2.5% NaCl with 50mEq KCl at maintenance
- Status as indicated
- Refer to Fluid and Electrolyte Guidelines

## Medication

- Colloids/Infusion added, if allergy then Clinodial or Diphenoxylate & Atropine. Refer to e-formulary
- Pain medication as needed, morphine as needed
- Acetaminophen as needed for pain/fever
- Monitor or bypass as needed for pain management
- Morphine IV bolus PRN

## Activity/Lifestyle

- Activity as tolerated
- Consent for surgery
- Post-op instructions for child and caregiver
- Review parental involvement in care (pre and post-operatively)

## Diet

- Advance diet as tolerated

## Pain

- Acetaminophen and ibuprofen (if not contraindicated) for 48 hours then as needed
- Review need for pain management

## Inclusion criteria

- Leaves steri-strips until fall off on own or remove after 10 days
- Once steri-strips removed, may wash incision gently with soap and water

## Signs and symptoms of wound infection:

- Fever
- Redness around incision
- Drainage from incision
- Increasing pain around incision

## Follow-up

- May shower or bathe, 48 hours after surgery
- Activity: Ambulate in hallway
- May return to normal daily activities as patient feels able

When to call surgeon’s office:
- Wound infection
- Vomiting
- Fever
- Pain

Follow-up:
- Confirm need for follow-up with Primary Surgeon
- Family doctor/physician can in 1-2 weeks

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**Inpatient Perforated Appendicitis Care Pathway**

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<tr>
<th>DAY OF ADMISSION</th>
<th>DAY #1</th>
<th>DAY #2 - 3</th>
<th>DAY #4</th>
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<td><strong>GRADES</strong></td>
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<td>History &amp; Physical</td>
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<td>Vital Signs</td>
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<td>Pain Assessment (focus on abdomen) every 4 hours</td>
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<td>Vital signs as per BPERM (Refer to Sepsis Clinical Pathway)</td>
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<td>Fluid &amp; Electrolyte Guidelines</td>
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<td><strong>POST-OPERATIVELY:</strong></td>
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**ACTIVITY**

- Ambulating
- Ambulating to chair daily
- Progress to ambulating in hallway X 5

**INPATIENT MEDICATION**

- Consider an abdominal ultrasound to evaluate for drainable intra-abdominal collection if child is not improving or clinically worsens
- If collection is found, refer to Appendicitis Algorithm for child with drainable collection

**INCISION CARE**

- Leave drain-strips until fall off on own or remove after 10 days
- Once drain-strips removed, may wash incision gently with soap and water

**SIGNS AND SYMPTOMS OF WOUND INFECTION**

- Fever
- Redness around incision
- Drainage from incision
- Increasing pain around incision

**Bathing**

- May shower or bath, 48 hours after surgery

**Activity**

- Ambulate in hallway at least 5 times
- May return to normal daily activities as patient feels able

**WHEN TO CALL NURSE’S OFFICE**

- Wound infection
- Vomiting
- Fever
- Pain

**Follow-up**

- Confirm need for follow-up with Primary Surgeon
- Family doctor/physician can be seen in 1-2 weeks

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**PRINTABLE VERSION**

**Related Documents**

- E-formulary
- Sepsis Pathway
- Pain Management Guidelines
- Pain Assessment Guidelines
- Fluid & Electrolyte Guidelines

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References


6. Children’s Hospital of Philadelphia: Appendicitis without Known GI Disease Clinical Pathway- Emergency

7. Cincinnati Children’s Hospital: Appendicitis Clinical Pathway


13. Inpatient and Surgical Care: Appendectomy for Ruptured Appendix with Abscess or Generalized Peritonitis Care Guideline


27. University Hospitals of Cleveland: Pediatric Appendicitis/Simple Laparoscopic/Open Technique Care Path


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Attachments:
- appendicitis algorithm.docx
- appendicitis algorithm.pdf
- Non perforated appy pathway.pdf
- Non perforated appy pathway.rtf
- Perforated appy pathway.pdf
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