

Pediatric Appendicitis - What Parents Need to Know by Dr Colin Knight MD FACS FAAP

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What Parents Need to Know

By Colin G. Knight, MD, FACS, FAAP Pediatric Surgeon, HCA Florida Lawnwood Hospital

A Note From Dr. Knight

Appendicitis is the most common reason a child needs emergency abdominal surgery. As parents, you need clear information quickly. This guide explains what appendicitis looks like in children, how I diagnose it, what treatment options exist, and what to expect during recovery. I have cared for many children with appendicitis, and the outcomes are very good when the diagnosis is made promptly.

This guide describes general principles. Surgical decisions are individualized based on each child's specific circumstances. Please contact my office for guidance specific to your child.

What Is Appendicitis?

The appendix is a small finger-shaped pouch attached to the large intestine in the lower right side of the abdomen. Appendicitis happens when the appendix becomes blocked, inflamed, and infected. If it is not treated, the appendix can rupture, which spreads infection into the abdomen.

Appendicitis can happen at any age, but it is most common in children between 10 and 19 years old. It is less common but still possible in younger children, and the diagnosis can be harder in this group.

Symptoms in Older Children and Teens

In children old enough to describe what they feel, appendicitis often follows a classic pattern:

- Pain that starts around the belly button and then moves to the lower right side
- Loss of appetite, sometimes the first sign
- Nausea and vomiting that starts after the pain
- Low-grade fever
- Pain with walking, jumping, or bumping the car on the way to the hospital

- A child who would rather lie still than move

If your older child or teenager has belly pain that is getting worse over several hours and they have lost their appetite, this is worth a same-day evaluation.

Symptoms in Younger Children

In children under 5, and especially in toddlers and infants, the symptoms can look very different. Younger children often cannot localize the pain, and the appendix may rupture before parents or doctors recognize what is happening.

Watch for these signs in younger children:

- Persistent crying or fussiness
- Pulling the legs up to the belly
- Refusing to eat or drink
- Vomiting that does not stop
- Fever
- Lethargy or unusual sleepiness
- Diarrhea, which can mimic gastroenteritis and delay diagnosis
- A swollen, tender belly

Because appendicitis in younger children is harder to recognize, I have a lower threshold for thorough evaluation. If your young child seems sicker than a usual stomach bug or if symptoms persist for more than 24 hours, please seek evaluation.

How I Diagnose Appendicitis

Diagnosis starts with a careful history and a physical examination. Most pediatric surgeons use a combination of the child's story, exam findings, and laboratory tests, supported by imaging when needed.

Laboratory tests: A complete blood count looks for an elevated white blood cell count. C-reactive protein and urinalysis are also commonly checked.

Imaging considerations: In children, I prefer to limit radiation exposure when possible. Ultrasound is usually my first imaging choice because it does not use radiation and can directly visualize the appendix. When ultrasound is not conclusive and additional imaging is still needed for the diagnosis, a CT scan is the next step.

Observation: In some cases, when the diagnosis is not clear, I admit the child for a few hours of observation and re-examination. This is a normal part of careful pediatric surgical care, not a delay.

Treatment Options

Single-incision laparoscopic appendectomy For most children with appendicitis, I recommend laparoscopic appendectomy, the standard of care in modern pediatric surgery. I use a single-incision

technique most of the time, which means the entire operation is done through one small incision hidden inside the belly button. The scar settles into the navel and is essentially invisible once it heals. In the uncommon case where I cannot safely complete the operation through that single incision, I add two small additional trocars to give myself the working room I need. The operation usually takes under an hour.

Benefits of the laparoscopic approach include smaller scars, less post-operative pain, faster return to normal activities, and a lower risk of wound infection.

Open appendectomy Open appendectomy through a single larger incision was the traditional approach before laparoscopic techniques became standard. It remains a valid option, but in my own practice I have always been able to complete the operation laparoscopically.

Antibiotics-only protocols For carefully selected patients with early, uncomplicated appendicitis, treatment with antibiotics alone, without surgery, has been studied. Some children do well with this approach, but a meaningful percentage will eventually need their appendix removed anyway. I do not recommend antibiotics-only treatment as a routine option. I acknowledge it exists and am willing to discuss it with families who want to consider it. Antibiotics-only treatment is not appropriate for children with perforation, abscess, or appendicolith.

Perforated vs Nonperforated Appendicitis

Nonperforated appendicitis means the appendix is inflamed but has not ruptured. Treatment is usually laparoscopic appendectomy, and most children go home within 24 hours.

Perforated appendicitis means the appendix has ruptured and spilled infection into the abdomen. These cases are more involved. Treatment depends on the situation. Sometimes I operate right away to wash out the abdomen and remove the appendix. Other times, especially when there is an organized abscess, I treat with intravenous antibiotics first and consider an interval appendectomy several weeks later. The hospital stay is longer, usually 4 to 7 days, and recovery takes more time.

The good news is that even children with perforated appendicitis usually recover fully.

What to Expect After Surgery

In the hospital: After a routine laparoscopic appendectomy for nonperforated appendicitis, most children stay one night and go home the following day. They start eating once they feel up to it, and the IV is removed when they are drinking well and pain is controlled.

Pain control: As part of the operation, I administer long-acting local anesthesia directly at the incision site. This pre-emptive numbing means your child wakes up comfortable and stays comfortable through the early hours when pain would otherwise be at its peak. Once the local anesthesia wears off, most children do very well with over-the-counter acetaminophen and ibuprofen alternated as needed for the first day or two. I do not prescribe stronger pain medications for appendectomy.

Wound care: I close the small incisions with dissolving sutures under the skin and cover them with waterproof dressings. You do not need to do anything special with the wounds. Your child can shower right away.

Activity: I do not restrict activity after a laparoscopic appendectomy. Your child can return to normal play and sports as soon as they feel ready. The only restriction is that children should stay home from school while they still need pain medication. A child in pain is not at their best for school, and a child still taking medication is not ready to be there.

Recovery Timeline

- **Days 1 to 3:** Some soreness at the incisions. Mild swelling and bruising is normal. Tylenol and ibuprofen as scheduled. Stay home from school while pain medication is still needed.
- **Days 4 to 7:** Most children are off pain medication and back to school and normal activity. No restrictions on sports, play, or showering.
- **Perforated cases:** Slower timeline, often 2 to 6 weeks total recovery depending on severity.

I see your child in the office about 2 to 4 weeks after surgery for a routine check.

When to Call My Office

After discharge, call my office at (772) 462-3939 for:

- Fever over 101 degrees Fahrenheit
- Increasing belly pain
- Vomiting that will not stop
- Redness, warmth, or drainage from the incisions
- A hard or swollen abdomen
- Any concern you have, day or night

For anything that feels urgent, go to the nearest emergency room.

Final Thoughts

Appendicitis is frightening the first time you hear the diagnosis, but it is a problem we know how to fix. Most children are back to their usual selves within a week or two. The most important thing parents can do is bring children in early if something does not seem right. I am available to answer your questions anytime.

This educational resource is provided for general information and does not replace individual medical advice. Please contact my office for guidance specific to your child.