

Human Organs



The Appendix



My Drift

Title: Appendix

Written by: Jerry D. Petersen

Date: 3 May 2021

Article Number: 362-2021-11

This article will provide some general info about the appendix and quite a lot about appendicitis. By the end of this article, you will know why I'm so interested in these things.

The appendix is a finger-like, blind-ended tube connected to the cecum. The cecum is a pouch-like structure of the colon, located at the junction of the small and the large intestines. The appendix used to be considered a vestigial (useless or unneeded) organ, but this view has changed over the past few decades. Recent research suggests that the appendix may serve an important purpose. In particular, it may serve as a reservoir for beneficial gut bacteria.

Structure

The human appendix averages 3.5 inches in length but can range up to 10 inches. The diameter of the appendix is 0.24 inches. The appendix is located in the lower right quadrant of the abdomen, near the right hip bone. The base of the appendix is located 0.79 inches beneath the ileocecal valve that separates the large intestine from the small intestine. Its position within the abdomen corresponds to a point on the surface known as McBurney's point. This point on the lower right quadrant of the abdomen is where the maximum tenderness and pain are in cases of acute appendicitis.

Appendix Functions

It is now thought that the human appendix is a "safe house" for beneficial bacteria in the recovery from diarrhea or in other words, maintaining gut flora. The appendix serves as a haven for useful bacteria when illness flushes the bacteria from the rest of the intestines.

The appendix has been identified as an important component of mammalian mucosal immune function, particularly B cell-mediated immune responses and extrathymically derived T cells. This structure helps in the proper movement and removal of waste matter in the digestive system, contains lymphatic vessels that regulate pathogens, and lastly, might even produce early defenses that prevent deadly diseases.

Diseases of the Appendix

The most common diseases of the appendix are appendicitis and carcinoid tumors (cancer):

Appendix cancer accounts for about 1.2 in 200 of all gastrointestinal malignancies. It is rare.

Appendicitis happens when your appendix becomes inflamed. It can be acute or chronic. In the United States, appendicitis is the most common cause of abdominal pain resulting in surgery. Over 5 percent of Americans experience it at some point in their lives.

If left untreated, appendicitis can cause your appendix to rupture or burst. This can cause bacteria and infection to spill into your abdominal cavity, which can be serious and sometimes fatal.



Severe Abdominal Pain

Appendicitis Symptoms

If you have appendicitis, you may experience one or more of the following symptoms:

- + pain in your upper abdomen or around your bellybutton**
- + pain in the lower right side of your abdomen**
- + loss of appetite**
- + indigestion**
- + nausea**
- + vomiting**
- + diarrhea or constipation**
- + abdominal swelling**
- + inability to pass gas**
- + low-grade fever**

Appendicitis pain may start off as mild cramping. It often becomes more steady and severe over time. It may start in your upper abdomen or bellybutton area, before moving to the lower right quadrant of your abdomen.

If you're constipated and you suspect that you may have appendicitis, avoid taking laxatives or using an enema. These treatments may cause your appendix to burst.

Contact your doctor if you have tenderness in the right side of your abdomen along with any of other symptoms of appendicitis. Appendicitis can quickly become a medical emergency. Get the information you need to recognize this serious condition.

Appendicitis Causes

In most cases, the exact cause of appendicitis is unknown. Experts believe it develops when part of the appendix becomes obstructed, or blocked. Many things can potentially block your appendix, including:

- + a piece of hardened stool**
- + swelling of the lymph nodes**
- + bacteria or viruses**
- + inflammation**
- + intestinal worms or parasites**
- + traumatic injury**
- + tumors**
- + ulcers**
- + vegetable and fruit seeds**

When the appendix is blocked, bacteria build up inside it, leading to pain, swelling, and infection. If not treated promptly, the appendix can burst, spreading infection throughout your body. A burst appendix is a serious, sometimes life-threatening condition.

Tests for Appendicitis

Appendicitis is very common, mostly affecting teens and adults in their early twenties, but it can happen at any age. Appendicitis tests help diagnose the condition, so it can be treated before the appendix bursts. The main treatment for appendicitis is surgical removal of the appendix.

If your doctor suspects you might have appendicitis, they will perform a physical exam. They will check for tenderness and/or swelling in the lower right part of your abdomen.

Depending on the results of your physical exam, your doctor may order one or more tests to check for signs of appendicitis or rule out other potential causes of your symptoms. There's no single test available to diagnose appendicitis. If your doctor can't identify any other causes of your symptoms, they may diagnose the cause as appendicitis.



A CT or CAT Scan can tell Doctors if Appendix is Ruptured.

There's no blood test to identify appendicitis. However, to check for signs of infection, your doctor may order a complete blood count (CBC). A blood sample can show an increase in your white blood cell count, which points to an infection. Your doctor also may order an abdominal or pelvic CT scan and/or X-rays. To rule out urinary tract infection or kidney stones as a potential cause of your symptoms, your doctor may use urinalysis.

Treatment Options

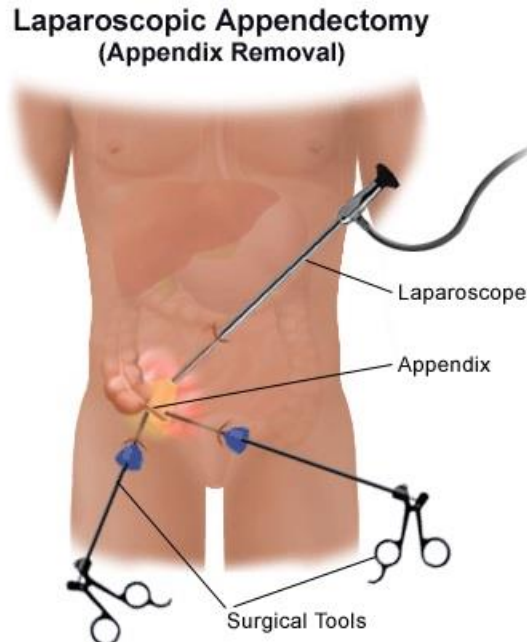
Depending on your condition, your doctor's recommended treatment plan for appendicitis may include one or more of the following:

- + surgery to remove your appendix
- + needle drainage or surgery to drain an abscess
- + antibiotics
- + pain relievers
- + IV fluids
- + liquid diet

In rare cases, appendicitis may get better without surgery. But in most cases, you will need surgery to remove your appendix. This process is known as an appendectomy.

Surgery for Appendicitis

To remove the appendix, your surgeon will use a type of surgery known as appendectomy. If your appendix has burst, they will also clean out your abdominal cavity. In some cases, your doctor may use laparoscopy to perform minimally invasive surgery. In other cases, they may have to use open surgery to remove your appendix.







Like any surgery, there are some risks associated with appendectomy. However, the risks of appendectomy are much smaller than the risks of untreated appendicitis.

Acute Appendicitis

Acute appendicitis is a severe and sudden case of appendicitis. The symptoms tend to develop quickly over the course of one to two days. It requires immediate medical treatment. If left untreated, it can cause your appendix to rupture or burst. This can be a serious and even fatal complication.

Recovery Time for Appendicitis

Your recovery time for appendicitis will depend on multiple factors, including:

-  **your overall health**
-  **whether or not you develop complications**
-  **the specific type of surgery**
-  **infections**







It may take several weeks for you to fully recover from appendicitis and surgery. If you develop complications, your recovery will take longer.

Infection Dangers

Appendicitis can also lead to a ruptured appendix. If your appendix ruptures, it can spill fecal matter and bacteria into your abdominal cavity. If bacteria spill into your abdominal cavity, it can cause the lining of your abdominal cavity to become infected and inflamed. This is known as peritonitis, and it can be very serious, even fatal.

Bacterial infections can also affect other organs in your abdomen. For example, bacteria from a ruptured abscess or appendix may enter your bladder or colon. It may also travel through your bloodstream to other parts of your body. To prevent or manage these complications, your doctor may prescribe antibiotics, surgery, or other treatments. In some cases, you might develop side effects or complications from treatment. However, the risks associated with antibiotics and surgery tend to be less serious than the potential complications of untreated appendicitis.

If you undergo surgery to remove your appendix, your doctor may prescribe antibiotics and pain relievers to support your recovery. In addition to taking medications as prescribed, it may help to:

-  **get lots of rest**
-  **drink plenty of fluids**
-  **go for a gentle walk each day**
-  **avoid strenuous activity and lifting heavy objects**
-  **keep your surgical incision sites clean and dry**
-  **may need to adjust your diet**

WELL, MY APPENDIX BURST AND I HAD TO HAVE EMERGENCY SURGERY. HERE IS THE STORY:

MY MEDICAL EMERGENCY

On Saturday afternoon, April 17th, 2021, I was at COSTCO Waipio to pick up some medications for my wife and do a little shopping. The place was packed. I was standing in the checkout line when all of a sudden something very bad happened to me. I had the chills and started to shake like a leaf all over and I had severe pain in my stomach area which caused me to double over. I almost went down but managed to stay up (I think with a little help from my Guardian Angel) and stagger out of the store and get to my truck. I sat in the truck for about an hour trying to figure out what happened and if I was going to live or die.

I started to feel a little bit better and was able to drive home. I thought maybe I had a case of food poisoning that would pass, and I would be back to normal in a few hours. That was not the case! On top of my other issues, I had diarrhea and developed a skin rash that covered most of my body. It was a miserable couple of days.

I finally talked to my doctor on Tuesday morning, and he told me to get to the nearest ER as soon as possible. (If I was a little smarter, I would have done that on Saturday) So, I drove myself to Wahiawa General ER. They were not busy and after I told the doctor my symptoms, she ordered blood tests, a CAT scan, a chest x-ray and some pain medicine. The results came back a couple of hours later. The doctor told me that I have an extremely high-level infection in the stomach area. She said it was life threatening and I needed surgery quickly. Wahiawa General doesn't have the required surgery facilities, so they arranged to take me by ambulance to Queen's Medical Center West.



Queen's Medical Center West

Queens has the very latest and greatest CAT scanner, and it didn't take them very long to determine that I had a ruptured appendix. The surgeon came to my room to explain the situation and for me to sign the necessary papers for the operation the following morning. So, at 10am on Wednesday, April 21, 2021, I had surgery to remove my appendix. I was completely out and didn't remember a thing until I woke up in the recovery area at about 1pm. Strangely, I had no pain what-so-ever in my stomach area. They took me back to my room. A little while later my surgeon came by my room to explain how the surgery went. Appendix surgery now days is somewhat routine, and they don't need to cut a big hole in your stomach area to get it out. They made three small cuts where they insert the required medical instruments plus a small light and camera. My appendix not only ruptured, it burst! The surgeon showed me a picture of it before they removed it. It was ugly! When the appendix is ready to come out, they make one more small cut near the belly button and pull it out though there. They left in a drain tube to remove excess blood and other fluids. My surgery went as planned with no complications.

Note: Picture of my burst appendix is on the last page by itself. If you have a weak stomach, you better not look at it.

However, my problems were not over. I still had a dangerously high infection to deal with. They started giving me antibiotics through an IV connection they put in my arm. The Infectious Diseases doctor came to see me. He said they were working on a treatment plan but the lab results for the appendix cultures had not come back yet. For now, I was receiving a strong general antibiotic.

After getting this kind of surgery, the medical staff (doctors and nurses) are concerned about getting your digestive system functioning again. Thursday the day after surgery, I finally had to pee – it was bright red. My nurse said this was normal for the first few times. I was not eating solid food yet. My diet was water, juice, and soup. My first bowel movement came on Friday and things were looking up. The drain tube in my stomach stopped draining and my surgeon came by and took it out.

My infection doctor came Friday afternoon with some good news and some bad news. The good news was there was no cancer and the infection types I had were not the really bad ones and could be treated outside the hospital. The bad news was I had three different types of infections that could be treated by one antibiotic called “ertapenem ivpb 1 g”. They started me on this right away – I needed 26 straight days of this IV treatment. The first two treatments were done in the hospital. I was released on Sunday, April 25. So, for now until May 19, I

must drive down to Queens West Sullivan Care Center daily where I get my one-hour IV medication.



Sullivan Care Center

I feel okay now and have started walking my dog again. Apache is happy!



The moral of this story is – If something bad happens to you or you are feeling strange or sick, go to the hospital ER and get it checked out. Don't wait!

Bigdrifter44@gmail.com

Bigdrifter.com

