

Fact Sheet-Acute Pancreatitis in Children

What is acute pancreatitis?

Acute pancreatitis is irritation of the pancreas. Your child's pancreas is an organ located in the upper abdomen that is important for digestion and blood sugar regulation.

Pancreatitis occurs when the pancreas sustains injury and becomes inflamed. There are a variety of different reasons (detailed below) that the pancreas can become injured. This initial event triggers inflammation. As the inflammation proceeds, further injury to the pancreas occurs. The extent of this damage determines the severity of acute pancreatitis. The damage and irritation to the pancreas typically resolves over time. Thus, acute pancreatitis is a reversible inflammation of the pancreas.

What causes pancreatitis?

Many cases of pancreatitis occur in children who have a separate illness. Some of these illnesses affect multiple organs and can make your child sick enough to require care in an Intensive Care Unit.

Other common causes of acute pancreatitis in children include physical injury, certain medications, gallstones, or problems in the anatomy of the ducts (tubes) in the liver or pancreas.

Bicycle handle-bar injuries or blunt trauma to the mid-upper abdomen can cause pancreatitis. Common medications that are associated with pancreatitis include anti-seizure medications, chemotherapy agents and certain antibiotics.

In up to 35% of children with acute pancreatitis, a cause will not be identified.

What are the symptoms of pancreatitis?

Common symptoms include abdominal pain, nausea, and vomiting. However, not every patient with pancreatitis will have all of these symptoms. Pancreatitis symptoms are nonspecific and can easily be confused with signs of another disease. They also vary depending on your child's age and developmental level; for instance, non-verbal infants may present with increased crying.

How do you diagnose pancreatitis?

There is no single test to diagnose pancreatitis. The diagnosis is clinical and depends on the presence of symptoms consistent with acute pancreatitis, abnormal blood tests, or radiographic images showing inflammation in the pancreas. A diagnosis of acute pancreatitis can be made if two or more of these criteria are fulfilled.

Amylase and lipase are the most commonly measured blood tests. Both are enzymes which are made by the pancreas to aid digestion of foods. When the pancreas is injured or inflamed, the blood levels of both amylase and lipase can rise above normal. Since other conditions can also raise these enzyme levels, they are not specific for pancreatitis. Thus, in the absence of concerning symptoms or radiologic signs of pancreatitis, an elevation in either the amylase or the lipase level does not necessarily lead to a diagnosis of pancreatitis.

Ultrasound and CT scans are the most common imaging modalities that can be used to look for pancreatic irritation. Importantly, the pancreas can sometimes appear normal on these scans during an episode of pancreatitis.

How do you treat pancreatitis?

The treatment of pancreatitis is supportive care. There is no single medication or treatment that will help the pancreas to recover.

Patients who have abdominal pain can be treated with pain medications. Some patients do well with acetaminophen (Tylenol), while others may require stronger, narcotic pain medicines. Nausea and vomiting are treated with anti-nausea medications.

If a patient can't tolerate eating by mouth because of pain, nausea, or vomiting, he or she will not be allowed to eat and will be hydrated with intravenous (IV) fluids.

Your child can start eating when he or she feels hungry and is ready to eat. Any number of initial diets may be offered, ranging from clear liquids to regular food. The choice depends on how ill your child is and the preference of the doctors caring for your child.

Most children feel well enough to start eating within the first day or two after an episode of acute pancreatitis. Occasionally, their symptoms may be more severe or persist for a longer period of time. If this is the case, your child may be given nutrition through a feeding tube or an IV to prevent malnutrition and improve healing.

Does my child have to stay overnight in a hospital if he/she gets pancreatitis?

Not necessarily. If your child can tolerate eating enough food or drinking enough liquids to stay hydrated, and pain can be controlled with oral medications, he or she might not need to stay in a hospital for treatment. In the past, diagnosing pancreatitis in children was a lot harder. Many children who were actually having acute pancreatitis were likely diagnosed with a stomach virus and kept home without problem.

How long will pancreatitis last?

On average, symptoms of pancreatitis will last about a week. This does not mean your child will be in the hospital for that whole time period, since symptoms do improve over time. A few patients have more severe disease and may end up staying in the hospital for a month or more.

If my child gets acute pancreatitis, are there any long-term complications?

The complications of acute pancreatitis depend on the severity of the pancreatic irritation. The most common complication is the collection of fluid around the pancreas. These collections can be small or large enough to cause abdominal distension. Generally, the fluid will go away with time. If the pockets of fluid cause symptoms, doctors may recommend draining the fluid. The symptoms of fluid collections include vomiting from blockage of the stomach or part of the small intestine and fever due to infection. Rarely, the fluid collections will cause bleeding into the abdomen or intestines.

Can my child die from acute pancreatitis?

Death from acute pancreatitis is quite rare in children--but it can happen. Most deaths associated with pancreatitis occur in children who have a significant illness that damages multiple organs.

Can pancreatitis recur?

Yes, it can. About 10% of children will experience another bout of acute pancreatitis. Even fewer will have multiple episodes. If your child has another episode, his or her doctor will do additional testing to search for known causes of recurrent acute pancreatitis.

How can I prevent pancreatitis?

There are some treatable causes of acute pancreatitis. These include gallstone disease, high blood calcium, high blood triglycerides, and abnormalities of the bile ducts that come from the liver, or the ducts within the pancreas. Treatment of these disorders can help prevent future episodes. Unfortunately, for most patients, there is no way to prevent pancreatitis.

The National Pancreas Foundation thanks the following physicians for providing this information:

Mark E. Lowe, MD, PhD

Professor of Pediatrics
Director, Pediatric Gastroenterology, Hepatology and Nutrition,
Children's Hospital of Pittsburgh

Julia B. Greer MD MPH

Research Assistant Professor
University of Pittsburgh School of Medicine
Department of Medicine, Division of Gastroenterology, Hepatology and Nutrition

Arvind Srinath, M.D.

Pediatric Gastroenterology Fellow
Children's Hospital of Pittsburgh



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