

# TOXIC SYNOVITIS

Toxic synovitis has a scary name, but it's not a scary condition. This temporary inflammation of the hip can cause limping and pain in the hip and leg. This can be unpleasant for a child and unsettling for a parent — especially when symptoms start suddenly — but toxic synovitis usually goes away within a week or two, and causes no long-term problems.

## What is Toxic Synovitis?

Toxic synovitis (also known as **transient synovitis**) is a common cause of hip pain and limping in children. Doctors don't know its exact cause, but many kids develop it after having a viral infection (such as a cold or diarrhea). Because of this, some doctors think that toxic synovitis is caused by substances produced by the body's immune system to fight the infection.

Toxic synovitis can happen at any age, but is most common in kids between 3 and 8 years old. It's also more common in boys.

Sometimes toxic synovitis can be confused with septic arthritis, or infectious arthritis, a more serious condition caused by a bacterial infection that invades the joints and can cause long-term joint damage. Doctors can rule out septic arthritis or other conditions through a physical exam and diagnostic tests.

## What are the symptoms?

When kids have toxic synovitis, the pain starts suddenly and usually is only on one side of the body. Other signs to look for:

- a recent viral infection, such as a cold or stomach virus
- low-grade fever (up to 101°F [38°C])
- limping with toes turned outward, the knee bent or straightened
- walking on tiptoes
- hip discomfort that happens after a long period of resting the joint (such as sitting in a car or at a desk, or watching TV)
- knee or thigh pain with no hip pain
- in younger children, crying
- in some cases, a refusal to walk

In babies, the most common signs of toxic synovitis are abnormal crawling and crying, and they may cry in situations where their hip joints are being moved, such as diaper changes.

## How is it diagnosed?

The first thing a doctor will do is examine your child, checking to see what kind of movement is painful by moving the knee, the hip, and other joints. This is to confirm that the limping is caused by joint pain.

Next, the doctor may order an ultrasound of the hip. This imaging test will show whether there is fluid in the hip joint. Fluid means there is swelling and inflammation of the tissues. The doctor also may do a blood test to see how much swelling there is.

Sometimes, the blood test results make it hard for the doctor to rule out septic arthritis, so fluid might be taken from the joint for a culture (a lab test to detect bacteria). The doctor also may do other tests and X-rays to look for or rule out other potential causes of your child's limping and pain.

### **How is it treated?**

Treatment for toxic synovitis usually includes anti-inflammatory drugs such as ibuprofen or naproxen. Your child may take these for up to 4 weeks until the inflammation goes away. The doctor also may prescribe medicine for pain, such as acetaminophen.

Resting the hip joint is important, and it's best if your child avoids putting weight on the hip while recovering. Kids usually can walk again comfortably within a day or two of taking the anti-inflammatory medicine. However, participation in activities like gym class or sports will have to wait until your child fully recovers.

### **Outlook**

Toxic synovitis usually goes away within a week or two, but sometimes can last for 4-5 weeks. While most kids have no long-term effects from it, some can develop toxic synovitis multiple times during childhood. If your child has a history of toxic synovitis, let your doctor know.