Toxic Synovitis of the Hip

Toxic synovitis is one of the many causes of hip pain in young children. It is most common in boys between the ages of two and ten years of age and frequently follows an upper respiratory infection. It is a self-limited inflammatory process probably related to a viral infection. Typically, a child with toxic synovitis will complain of pain in the affected hip with limited motion and muscle spasm. The child may limp or even refuse to bear any weight on the leg. A low grade fever is not uncommon.

Toxic synovitis is often difficult to distinguish from an infected joint or rheumatoid arthritis. These more serious conditions should be ruled out when diagnosing a child with toxic synovitis. Blood tests can be helpful in determining the cause of a child’s hip pain. Hip x-rays of the child with toxic synovitis will be normal.

An ultrasound can be ordered to determine whether there is increased fluid in the painful hip. If imaging studies show an increased amount of fluid in the hip then a sample of this fluid may be drawn out with a needle and analyzed for evidence of infection. Most serious causes of hip pain can be either diagnosed or dismissed with the results of the blood tests, x-rays, ultrasound and joint fluid analysis. Once these other causes are ruled out then the diagnosis of toxic synovitis is made.

Toxic synovitis is treated with rest and non-steroidal anti-inflammatory medication (Ibuprofen). A child with significant pain may be placed on complete bed rest for 2-3 days until the pain subsides. Milder symptoms may resolve with less stringent restrictions, such as limiting running and jumping activities for four weeks.

By definition, toxic synovitis resolves on its own leaving the child a normal hip. Once the inflammation subsides the child may return to normal activity without restrictions.