My Child is Complaining of Hip Pain. What Could it Be?

As a parent, it can be concerning to see your young athlete suffering from, and complaining about, hip pain. Whether present from birth, or due to your child's growth plates still being open as they develop, the two most common causes of hip pain we see at our clinic in children and young adults are hip dysplasia and hip impingement. Research has shown that 70-90% of all hip arthritis cases are caused by either of these conditions, and if left untreated can lead to hip degeneration and arthritis, and the eventual need for hip replacement. As such, getting these conditions evaluated and treated as soon as possible is important.

If you are concerned about hip symptoms your child or adolescent may be displaying, here are causes and symptoms to be aware of:

1. **Femoroacetabular impingement (FAI)**
   Hip impingement is a broad term used to describe conditions in which the ball and socket of the hip joint don't fit together properly, and occurs when there are abnormalities, either on the femoral head or the acetabulum socket. "The hip motion is normally smooth, but when you have excessive bone on the femoral head or the acetabulum, it's like trying to fit a square peg in the round hole," explains Kelechi Okoroha, M.D., orthopedic surgeon, Mayo Clinic Orthopedics and Sports Medicine, team physician for the Minnesota Timberwolves. This causes pain and other problems when patients flex their hip because they're impinging that bump on the femoral head (ball of the hip) with the acetabulum (cup of the hip), called FAI, or femoroacetabular impingement.

   FAI is usually aggravated by activities that include excessive hip flexion, such as hockey, ballet, football, soccer, and those that involve deep squatting, cutting, running, jumping, and pivoting, and in addition to hip arthritis can be associated with labral tears and cartilage damage.

   Causes of FAI in children and adolescents:

   Cam lesions:
   - One type of FAI is a cam lesion, the formation of extra bone on the head-neck junction of the hip ball, resulting in a bump. In this case, the head of the femur is not smooth, and it rubs against the socket bone during movement, causing a lesion. Participating in certain physical activities that involve hip flexion may cause "a collision or abnormal contact between the ball and socket when their growth plates are open," says Aaron Krych, M.D., orthopedic surgeon, co-director, Mayo Clinic Orthopedics and Sports Medicine. This stimulates the bone to grow.

   Genetic or developmental:

- Acetabular retroversion, a condition in which the socket grows too far over the front of the ball (femoral head) of the hip joint, happens when the socket (acetabulum) develops irregularly as a child grows.
- A person may be born with an abnormality either on the femoral neck or on the socket that grows over time and can be exacerbated by athletic activity. The repetitive hip flexion causes extra bone formation, "which creates a vicious cycle," says Dr. Krych.

2. Hip dysplasia

Hip dysplasia occurs when the hip socket doesn't fully cover the ball portion of the upper thighbone, allowing the hip joint to become partially or completely dislocated. This is a condition that people are usually born with and tends to be more common in females.

What symptoms should I be screening for in my young athlete?

- Hip stiffness and limited or loss of range of motion, particularly with hip flexion and internal rotation
- Pain during and after periods of hip flexion such as running, jumping, or sitting for long periods of time
- Certain activities consistently bringing out the same hip pain and symptoms
- Complaints of groin tightness or ache, or history of groin pulls; "these can be manifestations of an underlying impingement," says Dr. Krych.

What should I do?

If your child or adolescent is showing any of these signs, schedule an evaluation with an orthopedic surgeon. Our research has shown that treatment at a young age cannot only relieve immediate pain, but also change the natural course of the condition. "If we get to these patients early, then we can really alter their function," says Bruce Levy, M.D., orthopedic surgeon, Mayo Clinic Orthopedics and Sports Medicine, Professor, Department of Orthopedic Surgery at the Mayo Clinic in Rochester, Minnesota. "Unfortunately, if we get to them late, this impingement causes a lot of irreparable damage to the hip joint."

This is why we have the Young Hip Clinic within our Hip Preservation Clinic at the Rochester, MN location of Mayo, specializing in the evaluation and treatment of young people who have hip pain. At all Mayo locations, we have the goal of avoiding or at least postponing a young athlete's need for an artificial hip joint. Our orthopedic surgeons work with other sports medicine physicians, physical therapists, and rehabilitation specialists to develop a comprehensive plan.

Newsletter and Social Media Headlines and CTA's:

Primary

Headline:
My child is complaining of hip pain. What could it be?

Blurb:
Causes and symptoms to be aware of in young athletes with hip pain

CTA:
Learn more about hip pain in young athletes

Secondary

Headline:
Things to know if your child complains of hip pain

Blurb:
Symptoms and causes of hip conditions in young athletes

Button:
Hip pain help for young athletes