

What is Hip Impingement. How do I know if I have it?

Hip impingement is a very common condition; in fact, many people suffer from hip or groin pain and pulls for years, not knowing it is hip impingement causing the flare-ups and symptoms. “Hip impingement can be misdiagnosed because when people present with hip pain, it’s typically in the groin and sometimes in the buttock,” explains [Bruce Levy, M.D.](#), orthopedic surgeon, [Mayo Clinic Orthopedics and Sports Medicine](#), Professor, Department of Orthopedic Surgery at the Mayo Clinic in Rochester, Minnesota. When not addressed, hip impingement can cause irreparable damage to the hip joint, so it’s important to get an evaluation from a sports medicine expert if you show any signs at all.

What is hip impingement?

Hip impingement, also known as femoroacetabular impingement (FAI), is a broad term to describe conditions in which extra bone grows on one or both of the bones that form the hip joint. With hip impingement, the ball (femoral head, the upper end of the femur, or thighbone) and socket (formed by the acetabulum, part of the large pelvis bone) don’t fit together properly, causing them to rub against each other during movement. “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. Over time, this friction may cause pain, damage the joint, and limit activity.

What are the types of hip impingement?

- Cam lesions: In this case, the femoral head is not round or smooth, and therefore can’t rotate smoothly inside the acetabulum. It rubs against the socket bone during movement, causing a formation of extra bone (lesion) on the head-neck junction of the hip ball, and is commonly seen in children or adolescents due to their growth plates still being open.
- Pincer lesions: This type of impingement is formed from excess bone growth at the end of the femur. With movement, the neck of the femur bone impinges, or bumps, on the rim of the deep socket and grinds the cartilage inside the acetabulum, resulting in cartilage and labral damage.
- Combined: Both types are present

What causes hip impingement?

Hip impingement is not usually an acute injury that happens with one event, but rather happens over time. “With a single event, you can get an injury, like a labral tear,” explains Dr. Okoroha, “but hip impingement is usually a chronic condition.”

- Abnormal anatomy (genetic/developmental) and normal use: “The most common cause of hip impingement is genetic,” Dr. Okoroha says. Being born with an abnormality either on the femoral neck or on the socket that grows over time can then be exacerbated by athletic activity where repetitive hip flexion causes extra bone formation. FAI may also occur when a child’s hip bones don’t develop normally.
- Normal anatomy and abnormal use: This occurs when the use exceeds what the joint structure can handle and can be an acute injury in an athlete or a chronic injury due to occupational or recreational use.
- Combination of abnormal anatomy and abnormal use
- Certain sports and activities: Activities and sports that require excessive hip flexion, and where there is regular and repeated running, cutting, jumping, and pivoting, such as hockey, soccer, football, baseball, golfing, tennis, and dancing, may cause impingement or exacerbate symptoms. Everyday activities that use hip flexion, such as putting on shoes and socks for example, may also cause symptoms.

What are some signs and symptoms of hip impingement?

Whatever the type of lesion, it causes pain and other symptoms when a person flexed or moves their hip because the extra bone hits the socket bone. “There’s the ball, the socket, and then a ring called your labrum that wraps around and helps hold the hip in place. That ring, the labrum, gets crushed between the bones. Sitting becomes very difficult,” explains Dr. Levy. Hip impingement can also lead to loss of internal rotation of the hip, which triggers pain in the groin area during or after flexing the hip, such as when you run, jump or sit for long periods of time. Common signs of hip impingement include:

- Limited or decreased range of motion in hip
- Hip pain and/or stiffness with flexion activities such as running, cutting, or jumping
- Internal rotation hip pain after prolonged sitting
- Groin pain, dull ache, stiffness, and/or limited range of motion during or after hip flexion activities or sitting for long periods of time

If you are having any signs or symptoms, get them checked out, as it may indicate there is already damage to the cartilage or labrum. “Historically, a lot of these symptoms went overlooked because athletes would complain that they had some groin tightness, or they would have a history of groin pulls, but really what they were is manifestations of underlying impingement,” explains [Aaron Krych, M.D.](#), orthopedic surgeon, co-director, [Mayo Clinic Orthopedics and Sports Medicine](#).

Over time, untreated hip impingement can lead to further deterioration of the joint, possibly causing early arthritis; research has shown that anywhere from 70 to 90% of all hip arthritis cases are caused by either FAI or hip dysplasia, “so if you’re having symptoms,” says Dr. Krych, “you really need to get it checked out early.” Mayo offers hip specialists at the top of their field and provides comprehensive hip care from diagnosis through to recovery and rehabilitation.

Newsletter and Social Media Headlines and CTA’s:

Primary

Headline:

Having pain in your hip or groin? It could be hip impingement

Blurb:

Hip impingement is often misdiagnosed, and when not addressed can cause irreparable damage to the hip joint. Understand the signs and symptoms, so you know when to seek an evaluation.

CTA:

Learn more about hip impingement

Secondary

Headline:

What is hip impingement?

Blurb:

Hip impingement, also known as femoroacetabular impingement (FAI), is a broad term to describe conditions in which extra bone grows on one or both of the bones that form the hip joint, triggering symptoms such as pain and stiffness.

Button:

Hip symptoms to look for