Femoroacetabular Impingement (FAI)

Femoroacetabular impingement is an abnormal condition affecting the ball and socket hip joint. The problem can be related to altered bony anatomy on either the socket (acetabulum) or ball (femoral head) side. Most commonly these abnormalities occur thru development in childhood years. Some people can have these deformities and not experience problems at all. Most people though experience pain and problems associated with activities that flex the hip (getting up from a seated position (car seat or chair), repeated bending / squatting). The abnormality can vary from person to person and even side to side depending on the individual. It usually consists of overgrowth of bone on the socket side (Pincer impingement), an out-of-round ball/femoral head (Cam impingement), or a combination of the two that essentially results in trying to fit a square peg into a round hole – causing the hip to function abnormally and impinging.

When one side of the hip is out of alignment, abnormal wear and tear of the structures in and around the hip can result. The problems associated with the altered anatomy can start anytime into adulthood. The more active an individual is combined with certain repetitive activities can accelerate the problem, bringing symptoms on earlier that later.

FAI usually presents with limited hip mobility in flexion activities, things that internally rotate the hip, and poor hip flexibility. When pain starts to occur with
these activities, joint damage is likely occurring. The pain comes about when the abnormal bone impinges against each other – leading to damage to the labrum and cartilage around the hip. Ignoring the problem can lead to progressive damage to the hip joint, eventually leading to arthritis that may require need for a hip replacement. Secondary problems can also arise around the hip and in the knee or back.

FAI is diagnosed using a few different tools. A good physical exam by an experienced physician combined with x-rays and, in most cases, an MRI scan can pinpoint the causes for pain and impingement around the hip joint. A treatment plan can be formulated based on the available information. The final decision as to what needs to be done is ultimately made during surgery.

FAI has traditionally been treated with open techniques – requiring large incisions and sometimes cutting tendons and bones to access the hip joint to take care of the problem. Hip arthroscopy is a minimally invasive procedure that can address these issues thru small incisions and achieve similar, if not better, results. The minimally invasive nature allows for faster recovery and return to activity.