Hip Problems and Ehlers-Danlos Syndrome

Derek Ochiai, MD

http://www.nirschl.com/hip-problems-and-ehlers-danlos-syndrome-blog.asp

What is EDS?

Ehlers-Danlos Syndrome (EDS) is a condition characterized by fragile skin and overly flexible joints. Because of extensive research and better understanding of the disease, EDS is being identified more frequently, and it is estimated that one in 5,000-10,000 people in the world have this condition.

How is it diagnosed?

The diagnosis is usually first suspected through clinical examination. Patients with EDS have hypermobility. Sometimes, patients report that they are "double jointed", and demonstrate unusual ways they can move their joints. Physicians will use the Brighton Criteria, which are specific tests for documenting hypermobility. Definitive diagnosis of EDS can be made with genetic tests.

Figure 1: Picture of a patient with EDS. Notice the extreme internal rotation possible of the left hip, such that the toes can point behind the patient.

How can it affect hips?

Because of the hypermobility of the all joints in patients with EDS, there is increased stress on these joints. For hips in particular, patients with EDS can put increased stress on the labrum (the cartilage rimming the outside of the socket), and be more

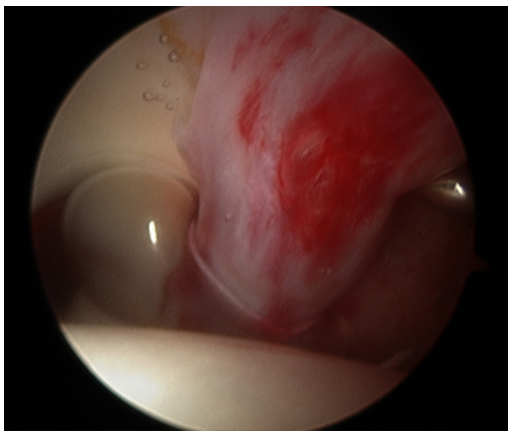
prone to labral tears of the hip. This will usually manifest as pain near the front of the hip, near the groin. Once a patient has a labral tear, they may experience pain going from sitting to standing, pain with twisting activities, and pain getting in and out of cars. The abnormal motion of the hip can also predispose a patient to earlier onset arthritis of the hip.

I have got EDS, and I have started to have hip pain. What should I do?

Orthopaedic evaluation is critical. X-rays can determine if a patient has significant arthritis or a shape of their hip that can predispose them for labral tears of the hip. MRI can help to determine if a patient has a labral tear. Many times, the MRI will be done after an injection of contrast into the hip joint (MRI Arthrogram) which can better assess if there is a subtle labral tear of the hip.
Physical therapy should be the first course of treatment for a labral tear associated with EDS. Many times, there is associated weakness of the muscles surrounding the hip (especially the gluteus medius and minimus), and exercises to strengthen those muscles can help to dynamically stabilize the hip, and improve symptoms.

What is there to do if physical therapy doesn't work?

If a patient has a hip labral tear associated with EDS, an option would be hip arthroscopy, using cameras and small instruments inside the hip joint to stabilize the labral tear, address any predisposing bony impingement, and reinforce the capsule (the tissue surrounding the hip joint). Especially with EDS, it is important that the arthroscopic surgeon repairs the labral tear, as opposed to trimming out a significant part of the labrum. The labrum is especially important in EDS, since hip stability is compromised already, and the labrum is a structure that gives additional stability to the hip. The arthroscopic hip surgeon operating on patients with EDS needs to be aware of the decreased stability of the hip, and compensate for that during the hip arthroscopy. A recent study presented at the International Society for Hip Arthroscopy in Brazil 2014 by Dr. Christopher Larson showed that hip pain and function can improve in patients with EDS following hip arthroscopy, so long as special attention is given to this challenging condition. However, because of the abnormal cartilage of the hip joint, even with optimal surgical technique, the labrum can fail and re-tear. Sometimes, labral reconstruction (where the torn labrum is taken out, and replaced with a tendon graft) is required.



If there is significant hip arthritis, then hip replacement would be the preferred treatment, just like with hip arthritis without EDS. Typically, in my patients with EDS undergoing hip arthroscopy, I tailor their rehabilitation to decrease stress on the healing hip.

Figure 2: Typical Inflamed, torn labrum as seen in an EDS patient

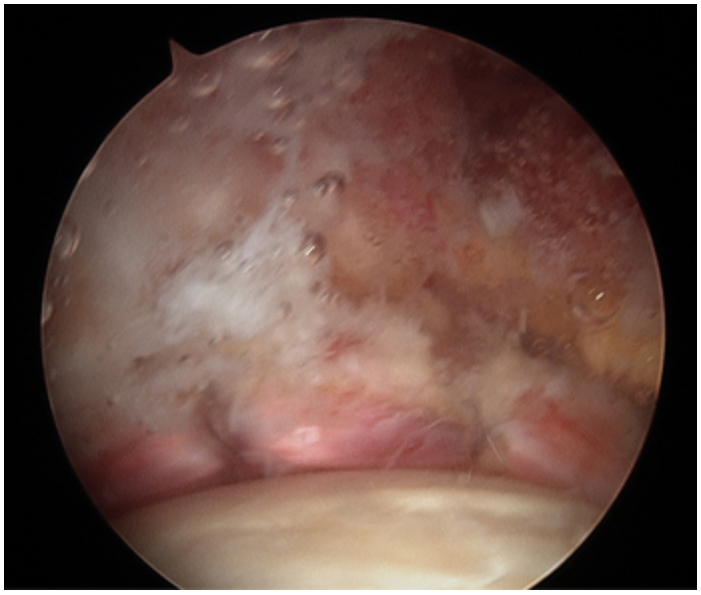


Figure 3: Anchors and sutures have been arthroscopically placed to stabilize the labrum

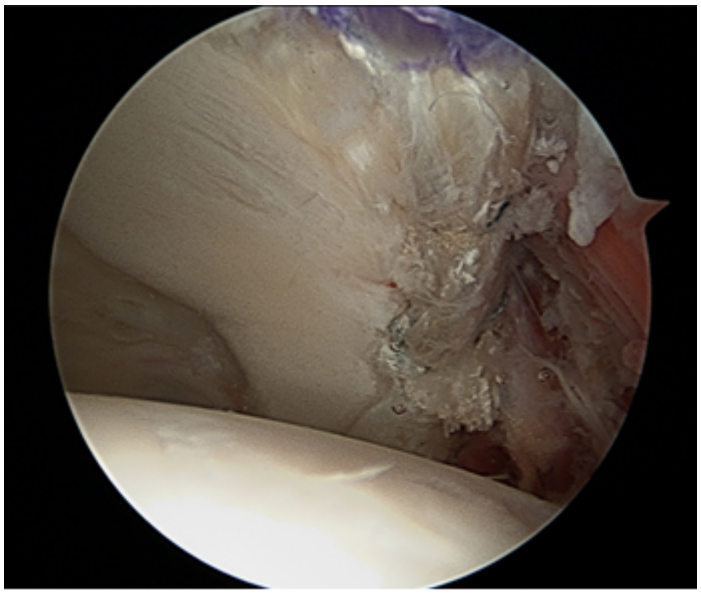


Figure 4: Labral reconstruction with a tendon graft.