## **CASE STUDY: Hip injection**

Mr. Lu is a 74 years old active male. He came to me complaining of severe right hip, difficult walking, which start 10 years ago duo to MVA. Mr. Lu has tried a lot of different therapy without much success.

Physical exam of right hip is remarked for the following findings: Antalgic gait, reduced range of motion in all directions (Internal and external rotation, flexion, extension, adduction and adduction). Positive Trendelenburg test and positive Thomas test.

## **Clinical diagnosis**

Right hip posttrauma Osleoarthritis.

MRI findings: severe degenerative change of the right hip consisting of severe loss of superolateral joint space height, subchondral sclerosis, and mild osteophyte formation with osseous remodeling of the right femoral.

## **Treatment**

Right hip synvisc injections for three weeks.

Mr. Lu achieved very good pain control with increased right hip range of motion.

## **Discussion**

The hip is a ball-and-socket joint formed between the proximal end of the femur and the acetabular fossa of the pelvis. It is supported by a synovial membrance, a layer of supporting ligaments, and the largest group of muscles of the body: the gluteus muscles posteriorly, the quadriceps and iliopsoas muscles anteriorly and adductor medially. Anterior hip pain( groin pain) is the classic condition affecting the hip joint. When anterior pain is associated with the gradual loss of the interal and external roration, osteoarthritis is the most likely diagnosis.

Synvisc is one of a group of medications that are referred to as viscosupplements. These medications work on the synovial fluid, the fluid that provides the lubrication inside the joint. The current belief is that the synovial fluid becomes much less viscous over the course of time, much like the engine oil in your car. The theory behind viscosupplementations is to increase the viscosity by injecting hyaluronate, the key component of synovial fluid, directly into the joint.

Viscosupplementation is indicated for patients who do not get enough pain relief from simple analgesics, or from exercise and physical therapy. Because the overall benefit is felt to be by improving the lubrication and cushioning of the knee, there is a strong sentiment, and suggestion by some research, that viscosupplements may not only help pain, but also slow the progression of osteoarthritis.

Given that Mr. Lu have developed right hip arthritis and failed other management, medical evidence would support the use of viscosupplementation. There is a very low risk and a relatively large potential benefit.