SUPPLEMENTARY FILE A

Summary of the Warwick Agreement on management of patients with FAI syndrome

What is FAI syndrome?

FAI syndrome is a motion-related clinical disorder of the hip with a triad of symptoms, clinical signs, and imaging findings. It represents a symptomatic premature contact between the proximal femur and the acetabulum.

How should FAI syndrome be diagnosed?

Symptoms, clinical signs and imaging findings must be present in order to diagnose FAI syndrome.

Symptoms: The primary symptom of FAI syndrome is motion or position related pain in the hip or groin. Pain may also be felt in the back, buttock or thigh. In addition to pain, patients may also describe clicking, catching, locking, stiffness, restricted range of motion or giving way.

Clinical Signs: Diagnosis of FAI syndrome does not depend on a single clinical sign; many have been described and are used in clinical practice. Hip impingement tests usually reproduce the patient's typical pain; the most commonly used, flexion adduction internal rotation (FADIR) is sensitive but not specific. There is often a limited range of hip motion, typically restricted internal rotation in flexion.

Diagnostic Imaging: An antero-posterior radiograph of the pelvis and a lateral femoral neck view of the symptomatic hip should initially be performed to obtain an overview of the hips, identify cam or pincer morphologies, and identify other causes of hip pain. Where further assessment of hip morphology and associated cartilage and labral lesions is desired, cross sectional imaging is appropriate.

What is the appropriate treatment of FAI syndrome?

FAI syndrome can be treated by conservative care, rehabilitation or surgery. Conservative care may involve education, watchful waiting, lifestyle and activity modification. Physiotherapyled rehabilitation aims to improve hip stability, neuromuscular control, strength, range of motion and movement patterns. Surgery, either open or arthroscopic, aims to improve the hip morphology and repair damaged tissue. The good management of the variety of patients with FAI syndrome requires the availability of all of these approaches.

What is the prognosis of FAI syndrome?

In patients who are treated for FAI syndrome, symptoms frequently improve, and they return to full activity, including sports. Without treatment, symptoms of FAI syndrome will probably worsen over time. The long term outlook for patients with FAI syndrome is unknown. However it is likely that cam morphology is associated with hip osteoarthritis. It is currently unknown whether treatment for FAI syndrome prevents hip osteoarthritis.

How should someone with an asymptomatic hip with cam or pincer morphology be managed?

It is not known which individuals with cam or pincer morphologies will develop symptoms, and therefore FAI syndrome. Preventive measures may have a role in higher risk populations, but it is rarely indicated to offer surgery to these individuals.

Which outcome measures should be used to assess treatment for FAI syndrome?

Specifically designed and well validated patient-reported outcomes measures should be used to assess treatment for FAI syndrome. The international Hip Outcome Tool (iHOT), Hip and Groin Outcome Score (HAGOS) or the Hip Outcome Score (HOS) are recommended.