Keyhole is hip for Willstrop

Simon Redfern speaks to Professor Max Fehily about the hip operation he performed on world no.6 James Willstrop, his rehabilitation and the options generally available to cure hip problems

rofessor Max Fehily is one of the top sports hip surgeons in England – but when he operated on former world no.1 James Willstrop back in September, the 31-year-old Yorkshireman was the first professional squash player to go under his knife.

While Professor Fehily has a particular interest in young athletes with soft-tissue hip problems and performs over 150 hip arthroscopy procedures a year, he mainly deals with footballers and rugby players from his base in Manchester.

"I treat a lot of English Institute of Sport athletes in the North, but most of the sportsmen I see are footballers or rugby players (of both codes) – or from Olympic sports such as taekwondo and athletics," said the lead surgeon at the Manchester Hip Clinic.

Nevertheless, Willstrop's condition – called femoro-acetabular impingement – is a familiar one to Professor Fehily.

"His condition is very common in athletes, particularly male athletes, as they develop an abnormal bump on the ball of the hip," he said.

"Every time it catches on the edge of the hip socket, it damages the rim. We believe it develops in early childhood and is a major cause of osteoarthritis in later years. It is why so many footballers and rugby players have hip replacements early. It is particularly common in these sports. "The bony abnormality is half the problem; the other half is the hip getting into positions which cause pain because the patient is so active. Lots of people have the abnormality, but it's not painful."

It was certainly painful for Willstrop, so much so that he was concerned about competing at the Commonwealth Games in Glasgow, but Professor Fehily eased those fears with an injection.

"That was very good, as it got him through the competition," he said. "It calmed down the inflammation, but it was very much a temporary measure. It can be very useful for getting the pain under control – and enabling him to carry out his rehab – but really the only option for curing it was operating early and using keyhole surgery quickens the recovery."

The injection allied to rehabilitation exercises helped the world no.6 to not only win two medals at the Glasgow Games – a silver in the singles and bronze in the men's doubles – but also land his first PSA Tour title in 18 months at the China Open before he entered the operating theatre.

"When we went in, he had damage to the joint surface of the hip, which we treated," reported Professor Fehily. "Also, he had a torn cartilage which we repaired and treated the bone surface damage. Then we reshaped the ball of the hip, which made it nice and spherical."

Ahead of Willstrop were 6-8 weeks of rehabilitation comprising hip strengthening and flexibility exercises, and hydrotherapy.

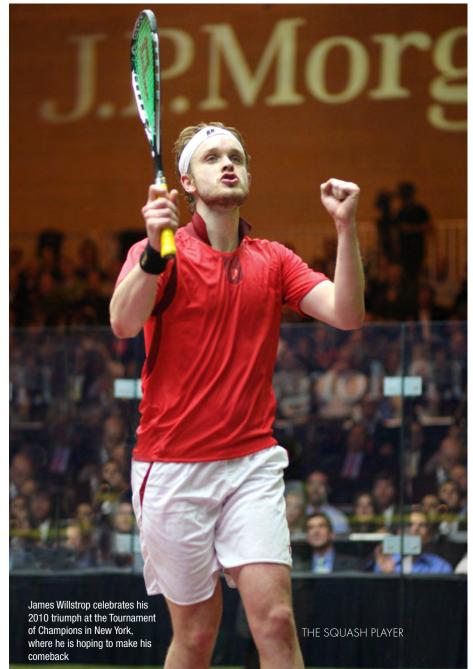
"He started in the pool, as he was quite sore for the first couple of weeks, but moved on to a range of movement exercises to improve flexibility and strengthen the hip, then straight-line running on the cross-trainer, sidestepping, twisting and turning," said Professor Fehily. "He is doing well."

The Irishman is optimistic that he has prolonged Willstrop's illustrious career with his surgical intervention.

"Hopefully the injury won't affect his playing career," he said. "The whole point is that by reshaping the ball of the hip we have prevented further damage. The important thing was to stop further damage and allow him to carry on playing."

Generally, though, the Honorary Salford University Professor advises against the surgical route to cure a hip problem unless it is absolutely necessary.

"You should have rehab before you go anywhere near a surgeon," he stressed. "Core stability and pelvic floor exercises



are really important for athletes. Working on those areas will help a lot of athletes and they may find they don't need to do anything else. You need to keep your core strong and your joint fitness strong.

"Also, warming up is very important – as is warming down. When you get older you have to make more of an effort to do those.

"As well as strengthening exercises, you should look at your footwear and whether you need insoles."

A hip problem would first reveal itself with deep groin pain during exercise, which is made worse by squatting, and may be present on both sides. There may also be an associated deep click, which can be either due to a torn rim cartilage or, more commonly, an inflamed tendon running over the front of the hip.

If the condition has been present for some time, there may also be inflammation of the tissues surrounding the hip, such as the outer hip, the groin muscles or inflammation of tendons in front of the hip.

Eventually, as the damage continues, the patient may begin to develop more arthritic symptoms, such as a dull ache in the groin and increasing stiffness.

Hip-related pain is not always felt directly over the groin; it may also be felt on the outer aspect of the thigh, the buttock or travelling down the leg. Occasionally, the pain you feel in the hip may actually be the result of a problem in your back, a hernia or other diagnoses.

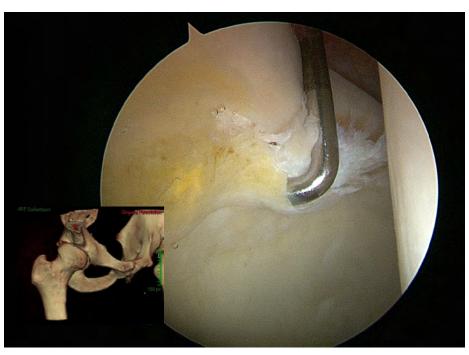
"Go and see a good physio first and do all the rehab," Professor Fehily advised. "If you are still having pain after eight weeks, you need to see someone who specialises in that area."

Patients then undergo specialised x-rays of the hip, as well as more complex scans, such as CT and Magnetic Resonance Arthrography. These scans are used to confirm the soft-tissue damage and to accurately map out the bony deformity.

If there is an underlying bony abnormality and physiotherapy has not resolved the problem, then surgery is recommended. The aim is to correct the bony deformity before there is irreversible joint damage. This is usually done by hip arthroscopy (keyhole surgery) where the deformity is shaved back via two or three small incisions.

"Hip arthroscopy is highly specialised and technically difficult surgery but can achieve excellent results if carried out correctly and on the right patient," said Professor Fehily. "One of the difficulties with keyhole hip surgery is that the joint is much deeper in the body, so access is more difficult and the operation usually involves shaving of both the tissues and the bone, unlike with knee arthroscopy. That's why it takes longer to settle down."

Those who do not benefit include patients with significant hip arthritis, with



A 3D reconstruction of the hip used to plan surgery and (insert) James Willstrop's damaged hip

severe childhood hip disease or with inflammatory hip disease.

Occasionally, the bony deformity may be so large that an adequate bony reshaping is not possible using keyhole surgical techniques. In those cases the operation is done using an open technique; in others the damage caused to the joint by the impingement may be so severe that the only reliable option is a joint replacement.

In general, a patient is likely to be sidelined for 2-3 months after surgery and he or she might be on crutches for 2-4 weeks depending on what work needs to be done.

"Professional athletes will tend to have their own physio and support network around them, as well as being generally fitter than average, so they will recover more quickly," said Professor Fehily.

"Members of the public may be back

in action within 2-3 months, but it can take up to six months for everything to settle down. If you have done a lot of rehab before surgery, recovery will be quicker.

"Post-operative care should involve lots of physio, rehab, hydro and a range of movement exercises involving the hip, core and stability."

That is where Willstrop is at now, with the aim of returning to action at the Tournament of Champions in New York in January.

"I've got quite a love for that event and it's well within the limits of my recovery time, so I'm going for it," he said.

There is no danger of Willstrop rushing back, though. "I will be happy to play squash again at all," he reasoned. "I'm not taking having a big operation like this for granted, especially at 31. If I'm coming back, I'll happily wait!"

PROFESSOR MAX FEHILY

Professor Fehily is the lead surgeon at the Manchester Hip Clinic based at Spire Manchester. He is an Honorary Professor at Salford University and is involved in teaching on both a regional and national basis. He is a member of the British Hip Society, the International Society of Hip Arthroscopy, the British Association of Knee Surgery, the British Orthopaedic Association and is a Fellow of The Royal College of Surgeons in Ireland.

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