



# PATIENT-CENTRED Orthopaedic treatment IN THE HEART OF Cape Town

Over the years research into knee injuries has shown that sports like professional football can put huge strains on the neuromuscular system. The sudden, aggressive changes in pace and direction that a player's legs experience in a game effectively reduces knee strength, and knee-injury risks increase as knee joint laxity and electromechanical delay (EMD) of the hamstrings also increases.

Greater joint laxity means that the tibia (shin bone) can be displaced further forward which may strain the anterior cruciate ligament (or ACL, the strap of connective tissue that stabilizes the knee joint), and greater EMD means the hamstrings cannot be recruited as quickly and so will be less effective in controlling ACL strain.

The knee joint is the largest and most heavily loaded joint in the body. It connects the upper leg with the lower leg and transfers the entire weight of the body to the lower leg.

Strong forces act on the knee joint, especially during sports activities involving rotational and transverse movements. This often leads to excessive strain and painful injury to the knee structure – in particular: the cruciate ligaments, cartilage surfaces and menisci.

The menisci are two crescent-shaped disks consisting of fibrous cartilage located in the knee joint between the femur and the tibia. There is a medial and a lateral meniscus. They play an important role in knee function and transfer the load from the upper to the lower

leg, and stabilize the knee during bending, stretching and torsional movements. In addition, the menisci distribute the load on the articular surfaces; act as shock absorbers; and help lubricate and nourish the knee joint.

## Meniscus Injuries

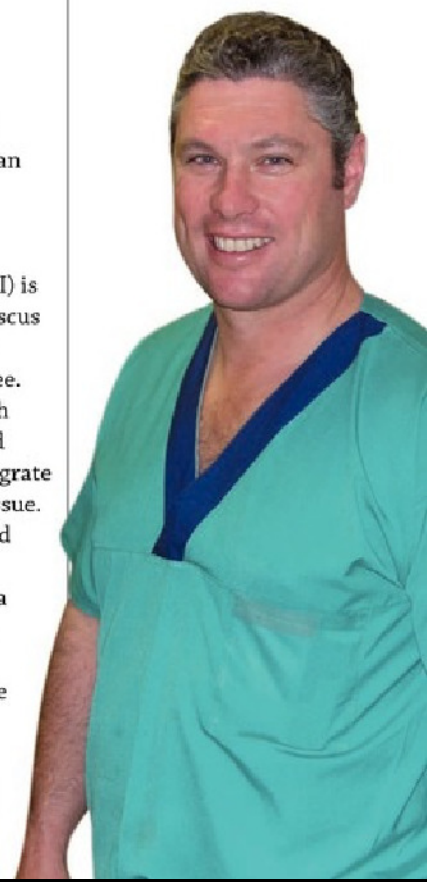
"Injury of the meniscus is the most common knee injury, especially amongst the sporting community," Dr van Zyl explains.

"A knee that has separated from the meniscus becomes unstable and painful with time. Osteoarthritis can be accelerated after a menisectomy." Today, nearly all knee injuries can be treated by a minimally invasive approach.

## Treatment

The Menaflex Collagen Meniscus Implant (CMI) is designed for patients with an irreparable meniscus tear or loss of meniscus tissue. Meniscal tears are one of the most common injuries of the knee. The CMI is a biological, resorbable implant with a spongy texture consisting of a highly purified collagen. The body's own cells progressively migrate into the implant and build up meniscus-like tissue. After about one year the CMI is largely resorbed and has been replaced by new native tissue.

By inserting a Collagen Meniscus Implant via key-hole surgery, the patient is able to resume sport or active outdoor activities within 6 months. "Using key-hole surgery, the procedure takes about an hour and the patient stays





As schedules increase knee injuries become more common, so footballers need the best treatment to ensure long careers. Dr Ockie van Zyl, one of South Africa's leading Orthopaedic surgeons, specialises in total knee replacement, total hip replacement and the latest arthroscopic knee reconstruction procedures.

overnight in hospital. After the surgery the patient spends six weeks in a knee brace using crutches, and then needs to participate in rehabilitation for around three months. The operation can also serve as a buffer between the femur and the tibia for patients who are in the early stages of arthritis."

He goes on to say that between 2003 and 2008 more than 2 000 Menaflex implants were surgically implanted worldwide.

The outcome studies have shown that about 90 per cent of patients have regrowth of meniscal tissue, while regaining over 70 per cent of their original meniscus tissue volume. Dr Ockie van Zyl was one of the first surgeons to introduce the Menaflex CMI to South Africa in 2008.

### Recuperation

When you choose Dr Van Zyl as your surgeon you also choose to recuperate post the operation in one of the most beautiful settings in the world.

The Cape Town and Panorama Medi-Clinics offer magnificent panoramic views of Cape Town's Table Mountain, Peninsula and the beautiful coastline. They are conveniently situated within easy reach of major arterial traffic routes, airport, city centre and other large commercial centres.

With the magnificent Table Mountain as a backdrop, patients can regain their strength and mobility surrounded by outdoor views and fresh mountain air, which are known to aid recovery. Patients have the best of both worlds: unparalleled scenic beauty with

state-of-the-art technology. Hydrotherapy is included in post-operative rehabilitation.

### The Panorama and Cape Town Medi-Clinics

Both hospitals offer local, national and international patients a broad spectrum of professional medical services, including:

- Professional consultations by highly qualified medical specialists in a wide range of disciplines within well-equipped consulting rooms
- Quality medical care in comfortable units staffed by highly trained, professional and compassionate nursing, medical and other personnel
- Well-equipped operating theatres staffed by top medical personnel
- Specialised medical units and clinics offering world-class private health care services
- A wide range of patient and family support groups and services.

**For more information about Dr van Zyl's services please contact him via email:**

**ovanzyl@intekom.co.za, or website:**

**www.kneeandhipsurgery.com**



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### Procedures

*Dr Ockie van Zyl performs the following knee and hip procedures:*

- Knee Arthroscopy**
- Chondral damage (cartilage surface)
  - Meniscus tears (removal or suture)
  - Reconstruction of ligaments
  - Patella (knee cap) problems
  - Relief of arthritis symptoms

**Knee Cartilage Procedures**

- Treatments range from a micro fracture technique, cartilage transplantation and mosaicplasty. In Mosaicplasty, the TRU FIT procedure uses tiny artificial cartilage plugs which are inserted into the gap when an injury or blow to the knee damages a chunk of articular cartilage.

**After mosaicplasty**

- Knee Ligament Reconstruction**
- Anterior Cruciate Ligament Injury (ACL)
  - Hamstring graft before ACL reconstruction
  - Inserting graft in knee
  - Anterior Cruciate Ligament tear

**After ACL reconstruction**

- Posterior Cruciate Ligament Injury (PCL)
- Collagen Meniscus Implant
- Before meniscus implant
- After meniscus implant

**Knee: Osteotomy • Minimally Invasive Partial Replacement**

- Patello-Femoral Replacement
- Total Replacement
- Replacement Computer Assisted Surgery
- Revision Replacement
- Hip Resurfacing: Total Hip Replacement**