

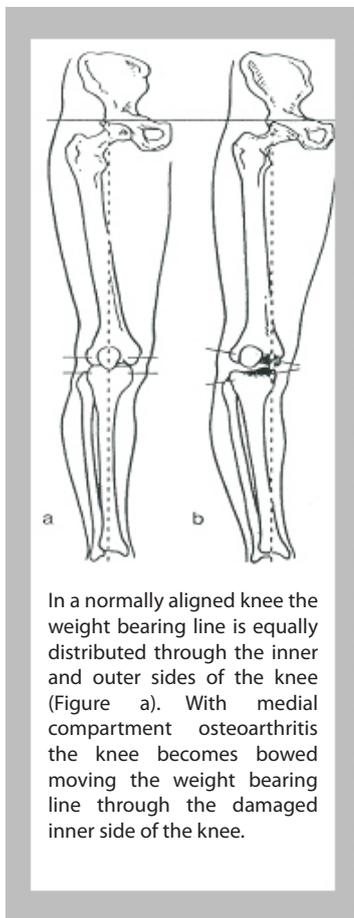
A painful osteoarthritic knee in a middle-aged recreational patient is one of the most difficult problems to manage. Initially, all patients should be treated conservatively. However, when pain worsens as the osteoarthritis progresses, surgical treatment should be considered. There are two major types of osteoarthritis in the middle aged: post-traumatic and non-traumatic. Post-traumatic osteoarthritis occurs in patients who have had a previous knee injury as a young adult and may have had their meniscus, or part of it removed surgically. Non-traumatic osteoarthritis occurs in patients who have not had a previous knee injury and in whom the osteoarthritis is strongly genetically determined. Such patients often report a family history of early osteoarthritis.

SYMPTOMS AND SIGNS

The predominant symptoms of osteoarthritis of the knee are pain, swelling, stiffness and a decreased activity level. The pain generally worsens with activities and improves with rest. Commonly, wasting of the thigh muscle occurs. This in turn may increase pain and may also cause symptoms of giving way. Symptoms such as locking and catching may also be present. Isolated medial compartment osteoarthritis, affecting the inside of the knee, may be associated with progressive "bow-legs".

TREATMENT OPTIONS

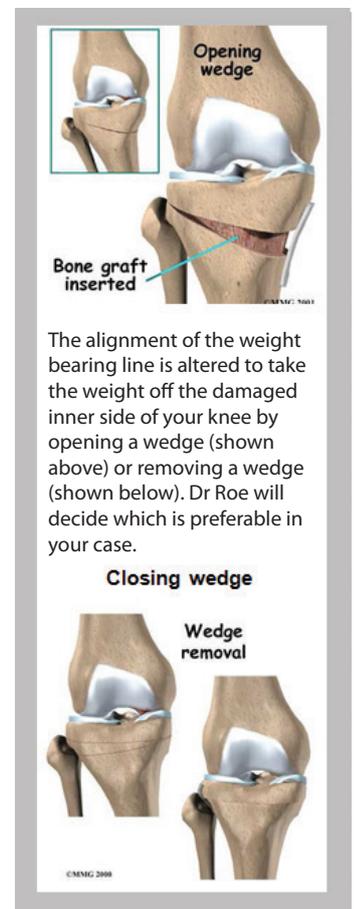
An osteoarthritic knee in a young patient is a difficult problem to manage. Only certain patients will respond well to osteotomy, therefore Mr. Vioreanu will carefully consider whether you are a likely successful candidate. Some patients are able to be successfully managed with conservative means but for the middle aged patient who wishes to remain active in work and play an osteotomy may be a viable alternative. An osteotomy is most successful when performed during the early stages of osteoarthritis when patients have specific medial pain and difficulty performing routine activities.



OSTEOTOMY

Osteotomy is an appropriate surgical option in selected cases of arthritis affecting one side of the knee only. The purpose of osteotomy is to transfer the load to an uninvolved joint surface. Osteotomy is most commonly performed for patients where the weight bearing surfaces of the knee joint become worn away on one side. The affected side of the joint is no longer smooth and free running and this leads to stiffness and pain.

It should be stressed that this surgery is designed to allow patients to walk without discomfort, not to return them to sporting activities. If adequate correction is achieved, the success rate of high tibial osteotomy is up to 80% at 10 years. Osteotomy is strongly recommended for the middle-aged patient with osteoarthritis. If the patient is nearing the age of 60, it is worth considering continuing with conservative measures for as long as possible so that when complete deterioration of the joint has occurred, joint replacement may be performed.



WHAT IS INVOLVED FOR YOU AS THE PATIENT

Before admission into hospital: You will need to book your surgery at Sports Surgery Clinic. You will receive a package of information from us containing your admission, consent and questionnaire forms, which need to be completed and sent to Sports Surgery Clinic. You should also inform your Surgeon and Anaesthetist of any medical conditions, previous treatments or allergies as this may affect your operation. **You must contact our office before you go into hospital if there is any evidence of pimples, ulcers or broken skin around the area to be operated on OR if you have a cold, cough or infection evident.** Check with the doctor as to whether you need to stop taking any of the medication prior to your surgery.

After your surgery: When you wake after surgery you will be in the recovery ward. From here you will be transferred back to your ward. Your leg will be placed in a brace when you wake. This will stay on for the next 4-6 weeks. You will be given regular pain relief by the nursing staff in the form of an injection or tablet as required.

A physiotherapist will visit you in the afternoon of your surgery, or the following day. They will show you some exercises for your leg and get you up for a walk. You will begin walking with crutches and will need to avoid putting full weight through your operated leg. Once you are able to safely mobilise and care for yourself you will be discharged from hospital, usually 3-4 days after your surgery.

After your hospital stay: You will receive instructions from the nursing staff prior to being discharged from hospital. However, it is usual to be reviewed at 2 weeks after surgery for removal of the dressings and checking of your brace. The brace will be on for a further 2-4 weeks depending on Mr. Vioreanu's instructions. At 4 weeks after surgery you may begin to take partial weight through your operated leg as instructed. Mr. Vioreanu will review you at 6 and 12 weeks after surgery.

POTENTIAL COMPLICATIONS RELATED TO SURGERY

- **Pneumonia:** After any general anaesthetic there is always a risk of developing a chest infection. This risk can be minimised by early mobilisation and performing deep breathing exercises after surgery. If you have any history of respiratory problem you should inform the staff at the hospital.
- **Deep vein thrombosis and pulmonary embolus:** A combination of surgery, immobilisation of the limb, smoking and the oral contraceptive pill or hormonal replacement therapy all multiply to increase the risk of a blood clot. Any past history of blood clots should be brought to the attention of the surgeon prior to your operation. The oral contraceptive pill, hormonal replacement therapy and smoking should cease one week prior to surgery to minimise the risk.
- **Excessive bleeding** resulting in a haematoma is known to occur with patients taking aspirin or anti-inflammatory drugs- such as Voltaren, Naprosyn or Indocid. They should be stopped at least one week prior to surgery.
- **Infection.** Surgery is carried out under strict germ free condition. Antibiotics are administered intravenously at the time of your surgery. Any allergy to any known antibiotics should be brought to the attention of your surgeon or anaesthetist. Despite these measures, following surgery there is a less than 3% chance of developing an infection. Most commonly these are superficial wound infections that resolve with a course of antibiotics. More serious infections may require further hospitalization and treatment.

POTENTIAL COMPLICATIONS SPECIFICALLY RELATED TO HTO SURGERY

- **Neuromuscular Injury:** injury to the peroneal nerve can occur in patients following high tibial osteotomy. This may result in sensory loss or muscle impairment example: footdrop. Most patients recover without any permanent functional disability.
- Injury to the blood vessels around the knee during surgery is a very rare complication (less than 1%).
- **Delayed or non-union** of the osteotomy site may occur in 2 to 4% of cases. In such cases, further surgery is then required to get the bone to heal.
- Other potential problems include postoperative **stiffness, pain and wound problems.**

QUESTIONS COMMONLY ASKED

Q. Anaesthetic?

A. General anaesthetic

Q. Duration of operation?

A. Approximately 60-90 minutes.

Q. What medications should I cease prior to the surgery?

A. Any blood thinning medication should be stopped.

Q. Driving a car?

A. Driving an automatic car is possible as soon as you can walk comfortably after surgery. You will not be fit to drive a car for at least 6 weeks after surgery.

Q. How long does it take for the swelling to go away?

A. Swelling in the operated knee and leg may take as much as 4-6 months to go away.

Q. How long do I need off work?

A. Sedentary and office workers may return to work approximately 4-6 weeks following surgery.

Q. When do I need to see Mr. Vioreanu after the surgery?

A. You will return for removal of the superficial dressings and a wound check at 7-10 days from surgery, then at the 6-8 week mark and then the 6 month mark after surgery.

Q. How long will it take to get back to normal activities?

A. It will usually take a minimum of 3 months to improve your gait, strength, fitness and movement enough to get back to normal following the osteotomy surgery

Q. Will the leg look different?

A. The leg alignment will look different forever following the surgery. The muscle bulk and tone will be reduced and take some time to rehabilitate.

Q. Does the arthritis get removed from the knee joint?

A. The knee joint is not altered during the surgery. The alignment and consequent loads going through the arthritic areas of the knee joint are changed.