Total Knee Replacement – SHARED DECISION MAKING

Diagnosis: Knee Arthritis

Your surgeon will have been through the implications of this and explained that the joint has reduced cartilage thickness and in some areas there is bone on bone which explains the pain and stiffness with the joint. On examination the knee was extremely irritable to examine causing severe knee pain with no evidence of groin and thigh pain or discomfort. The X-rays show significant arthritis of the knee.

Discussion of Treatment

There is no cure for arthritis but there are a number of treatments that may help relieve the pain and disability it can cause. These include:

- Lifestyle modification
- Weight loss: reduces stress on the knee
- Switching from high impact activities (like jogging or tennis) to lower impact activities (like swimming or cycling) will put less stress on your knee
- Physiotherapy
- Brace and supports: An "unloader" brace shifts weight away from the affected portion of the knee
- Painkillers: anti-inflammatory tablets
- Corticosteroids (also known as cortisone) are powerful anti-inflammatory agents that can be

injected into the joint. These injections provide pain relief and reduce inflammation; however, the effects do not last indefinitely. There is a small risk of infection or the steroid flaring up the pain before making it better. The risk is 1 in 100. An infection may need a washout and antibiotics.

- Glucosamine and Chondroitin are substances found naturally in joint cartilage, and can be taken as dietary supplements. Although patient reports indicate that these supplements may relieve pain, there is no evidence to support the use of glucosamine and chondroitin to decrease or reverse the progression of arthritis.
- Self help websites such as www.surreyimsk.com are useful resources for more ideas and information.

Having tried the conservative options above, we talked about the option of a knee replacement, as this is the one and only form of long-term definitive care that will offer an improved quality of life and long-term pain relief.

Knee Replacement- What to expect?

Your investigations have indicated that the pain in your knee is secondary to arthritis. As discussed it may now be appropriate for you to consider total knee replacement. Your surgeon will have explained that the knee replacement would use a cemented metal femoral (thigh bone) resurfacing part with cemented metal tibial (shin

bone) baseplate and a plastic liner in-between to form a hinge joint of metal on plastic. Your surgeon may not routinely resurface the patella or kneecap as most people do well with just the thigh component part being resurfaced.

The procedure itself takes about an hour, you will be with us for approximately two to three days in hospital and then will be discharged when safe to recover and walk with crutches for a few weeks in your own home. If you have surgical wound clips, these will be removed at two weeks and most people at six weeks stage feel 80% better and generally can manage to drive and walk without crutches.

Your surgeon has explained it may take over a year to get fully better.

It is normal for the leg to ache and swell for a few months after the operation, especially if you have been on your feet all day. The outside half of the scar is numb as the nerves come from the inside of the leg and the scar causes a shadow of numbness across the outside part of the knee.

After the operation, you will see and receive physiotherapy to move the new knee replacement. It is very important to keep moving the knee to prevent scar tissue building up inside the new joint, which will cause

stiffness. When lying in bed, please keep the knee fully straight and do not allow any pillows or rolled up towels to sit behind the knee as this will stop it from fully straightening. When sitting, please bend the knee to at least 90 degrees and use the opposite leg to push it back further by crossing your non-operated leg in front of the operated side at the ankles. This has been shown to you in clinic and on the ward.

Risks and Complications of Knee Replacement:

You must inform your surgeon if you have any history of blood clots, Deep-Vein thrombosis (DVT) and Pulmonary embolism (PE).
You must inform the surgeon if you have any sensitivity to costume jewellery or a known Nickel allergy.

Knee replacement in general is a very successful operation but there are a number of associated risks and complications that you should be aware of:

1. Anaesthetic risks and complications
2. Infection. Infection is extremely rare (Risk: 1%) but deep infection in the joint can result in further procedures and the need to have the knee

replacement removed. If an infection takes hold, this can lead to further surgery and even amputation in 1 in 1000 cases.

3. There will be a scar with superficial skin nerve damage.
4. Intraoperative fracture of the bone. This is generally identified and dealt with by the surgeon.
5. Deep vein thrombosis. Lower limb operations can result in clots developing in the legs. Early mobilisation is encouraged to diminish the likelihood of developing blood clots. If not contraindicated you will be asked to wear compression stockings and given some blood thinning injections or tablets post operatively to reduce this risk and subsequent risk of pulmonary embolus which can be dangerous.
6. A risk of using chemical injections to thin the blood is that the blood becomes too thin and forms a haematoma or collection of blood around the joint. This may require a further operation to wash out the blood and prevent an infection. This can happen in 1 out of 200 cases.
7. Post operative stiffness. Stiffness of the knee replacement and substandard range of movement is unusual. In a small number of patients, less than 5 per cent, the range of movement is less than we would desire. Factors that relate

decreased range of movement are whether there is significant stiffness preoperatively and compliance with physiotherapy regimes.

8. Ongoing discomfort. A small percentage of people have ongoing discomfort about the knee following knee replacement, particularly with climbing stairs.

Will my new Knee Replacement need to be replaced?

The new knee replacement may wear out after about 15 to 20 years, and there is also a small risk of loosening and fracture if there is a fall. If the knee replacement loosens or wears out, the knee replacement may be removed and replaced. This is called a revision procedure.

Will my legs be the same length?

Achieving stability and balance in the new knee joint are the primary focus.

More than 95% of the time the legs are measured within 5mm of each otherwhich is an acceptable standard and a normal within the population.

Rare Significant Risks:

The risk of dying in the operating theatre under anaesthetic is extremely small. For a healthy person having planned surgery, around 1 person may die for every 100,000 general anaesthetics given.

Bleeding and Nerve Injury

If there is severe injury to the major blood vessels immediate emergency surgery during the knee

replacement operation may be required and can lead to amputation if unsuccessful. This risk is less than 1 in 1000.

About 1 in 200 (0.5%) of the time the tibial or peroneal nerves can also become injured during the surgery, although the symptoms of nerve damage usually resolve within six to nine months. If the sciatic nerve is injured and doesn't recover, this can result in a foot drop and as an outpatient you will have crutches and orthotics to help with this.

Fat Embolus:

During surgery the bone marrow can become dislodged into the blood stream and this can cause injury to the lungs in the form of a fat embolism. This can become worse if cement is also used for the stem preparation. This happens in all cases to a very minor extent but rarely, especially if you have a weaker respiratory system this fat embolism syndrome can cause the lungs to become inflamed and congested with fluid. This may require high dependency unit support and monitoring and possible assisted breathing whilst the lungs recover, which may take a few days but can also increase the risk of a chest infection.

Heparin Induced Thrombocytopenia (HIT).

Up to 1 in 500 of people using blood thinning injections can develop this condition where the blood platelets

become consumed due to the blood thinning injections. This can be an emergency where you need to be admitted and treated for generalised clots within the body which can lead to multi-organ failure in severe cases as well as a platelet transfusion. A blood test to measure your levels will usually be performed to check your platelet levels are fine.

Patient instructions

Signs and symptoms suggesting blood clots (Venous thromboemboilism VTE):

Swelling and pain, redness, or vein distension in a limb, as well as pleuritic sharp chest pain or dyspnea- difficulty breathing. because 75% of postoperative clots occur following discharge from hospital.

Please consult your doctor immediately if you experience any of these symptoms or any experience necrotic reactions (black skin, not bruising) at an injection site, because this may suggest HIT. Finally, you should seek immediate medical attention for symptoms suggesting a severe allergic reaction, such as breathing difficulty, wheezing, and swelling of the face, lips, tongue, or throat.

Further reading:

www.surreyimsk.com

BMI knee replacement leaflet

Nuffield health knee replacement leaflet

Consentplus.com

www.surreyorthopaediclinic.com

24 hour hotline 02031304050

iwantgreatcare.org

Please read and reflect on your consultation and the notes provided. Please discuss and ask any questions regarding any specific goals, worries or concerns, and questions with your surgeon.

Please confirm that a shared decision about all aspects of your care and treatment plan have been completed to your entire satisfaction.