

**DR. ARNO SMIT, M.D., F.R.C.S.(C)**  
**ORTHOPAEDIC SURGERY**

Unit 44 - 1480 Foster Street  
White Rock, B.C. V4B 3X7  
Phone: (604) 538-0068  
Fax: (604) 538-0703

Date:

Name:

DOB:

Dear ,

You are scheduled for **unicompartmental (partial) knee replacement, Oxford knee, lateral compartment**. This document summarizes the discussion that you and I had about the benefits and risks associated with this procedure. Please read this document carefully, then acknowledge your understanding and agreement by initialling on the lines provided before the various points. This will help ensure that you fully understand the implications of the decision to undergo this operation.

Please review the following points:

         **1/ Purpose of operation.** The primary purpose of this procedure is relief of pain. Secondary purpose of this procedure is to enhance walking ability. Tertiary purpose is to restore anatomy as closely to normal as possible. The prosthesis is designed for walking, even brisk walking. It is not designed to allow running etc. It must be emphasized that most experience with this prosthesis involves the medial side. The alternative of total knee replacement has been discussed.

**2/ Risks of operation.** It is not difficult to see how this operation may be beneficial to you. However, all of surgery carries inherent risks. Risks pertinent to this operation include the following:

         *-Risk of anesthesia,* general or spinal anesthetic. You will have the opportunity to discuss this further with the anesthesiologist.

         *-Risk of infection.* The infection risk is approximately 1:100. Superficial infection can be managed by antibiotics, and/or washout of the wound and surgical site. On occasion, the prosthesis will become infected. In this scenario, removal of the prosthesis, temporary placement of an antibiotic loaded spacer, and definitive placement of a new prosthesis after approximately two or three months would be necessary. This would most likely involve a total knee replacement, rather than another partial knee replacement. This is a very grave complication, and is fortunately rather rare. Surgery to replace an infected prosthesis would normally be carried out in a university hospital. Extremely rarely, the infection cannot be controlled and a definitive prosthesis cannot be placed. This may lead to a 'flail knee', knee fusion ('stiff leg') or even amputation. Death from uncontrolled infection is extremely rare, but possible. The risk of infection is increased in

the presence of smoking, diabetes, rheumatoid arthritis, and other conditions affecting the immune system. Of note, late infection can occur when bacteria circulate in the bloodstream, In situations such as invasive dental work, urology/gynecology procedures, bowel procedures etc.. If possible, a discussion with the treating practitioner regarding the need for protective antibiotics should be carried out prior to performing these procedures.

\_\_\_\_\_ -*Injury to the neurovascular structures.* Important nerves and blood vessels are located around the surgical site. Great care is taken throughout the operation to avoid damage to these structures. However, on occasion damage to nerves can occur, possibly leading to numbness an/or weakness, possibly paralysis. This is very rare. Damage to the blood vessels is very rare as well. However, such injury could lead to rapid blood loss, and may lead to blood transfusion during surgery. As well, vascular repair could be necessary, ordinarily performed by a vascular surgeon on an emergent basis. This would require emergency transfer to a hospital providing vascular surgery. Fortunately, major vascular injury is extremely rare.

\_\_\_\_\_ -*Deep venous thrombosis/pulmonary embolism* and the need for anticoagulation. This operation can lead to development of a blood clot in the deep veins of the operated and/or non-operated leg. This impairs the circulation in the legs. Furthermore, parts of this blood clot can be released into the bloodstream, these can reach the heart and lungs and cause severe shortness of breath, even sudden death. In order to minimize this risk, you will be asked to start walking as soon as possible after the surgery. The risk of this complication appears to be less than after a total knee replacement. Formal blood thinning does not appear to be necessary, based on recommendations from the Oxford group. It is my preference, however, that you take aspirin, 325 mg per day, for six weeks, as a precaution. Under these circumstances, the risk of death from pulmonary embolism appears to be well below one in thousand. If a blood clot develops in the legs, this may lead to prolonged treatment with a blood thinner. If heart/lungs become involved, intensive care treatment may be required. These complications would ordinarily be treated by an internist.

\_\_\_\_\_ -*Possibility of a blood transfusion.* This operation will lead to some blood loss. Usually, this is between 20 and 200 ml. Most often, blood transfusion is not necessary. No formal arrangements for blood transfusion will be made preoperatively. However, it is possible that occasionally sufficient blood loss would occur to warrant a blood transfusion.

\_\_\_\_\_ -*Possibility of bearing dislocation.* This prosthesis has a mobile bearing. This minimizes wear and tear, and is most likely responsible for the very good long-term results that have been achieved with this prosthesis. It is possible for this bearing to dislocate. This is quite rare medially, less than 1:100. However, it is not quite as rare in the lateral compartment, approximately 10-15%, usually within the first year. Treatment for this would be replacement of the bearing with a slightly thicker bearing, as an urgent operation. Current designs of the lateral bearing hold the promise to diminish this risk. However, this has not been conclusively proven.

### **3/ Expected postoperative course.**

\_\_\_\_\_ -Mobilization after surgery is important to prevent complications, and to resume independent self-care as soon as possible. Usually, fully bearing is allowed immediately postoperatively. Wearing a brace for six weeks may be recommended, based on the inter-operative assessment of the stability of the bearing. At the two-week assessment, a decision will be made regarding the need for physiotherapy. Approximately 80% of patients will not require physiotherapy after unicompartmental knee replacement. Final range of motion achieved after lateral unicompartmental knee replacement is usually not as good as after medial unicompartmental knee replacement, and in my assessment, seldom exceeds 100-110 degrees of flexion, usually just good enough for stationary bike riding. This range of motion will not allow normal stairs walking.

\_\_\_\_\_ -Hospital stay is dependent on achieving pain control through medication by mouth, as well as achieving safe, independent, mobilization. After this operation, the vast majority of patients will be able to go home the morning of the day after surgery.

\_\_\_\_\_ -Arrangements for staple removal and initial assessment are made for the two-week mark, at which time the need for formal physiotherapy will be assessed. As mentioned above, usually, no further physiotherapy is necessary.

\_\_\_\_\_ -I explained that, initially, residual discomfort and swelling are common. Numbness may be present, usually over the lateral aspect of the knee. These issues usually settle in approximately six months, occasionally a year. Rarely, these can persist.

\_\_\_\_\_ - Further standard follow-up will be at 8 weeks, 6 months, and one year. After this, yearly follow-up with X-rays is recommended, to allow early detection of possible problems with the prosthesis.

If after reading this, you fully understand the issues and wish to proceed, your signature on this document will confirm the previously obtained consent for surgery and blood transfusion.

Patient's signature:

Sincerely,

Arno Smit, M.D., F.R.C.S.C.

Cc: chart  
OR-booking