

**UNICOMPARTMENT MOBILE BEARING  
KNEE REPLACEMENT:**

**OXFORD<sup>®</sup> (PARTIAL)  
KNEE REPLACEMENT**



*Should We  
Sacrifice The  
Whole Joint  
When Only  
Partial Knee  
Replacement  
Is Needed?*

*By Dr Goh Eng Tat  
Orthopaedic, Joint Reconstruction & Trauma Surgeon  
MBBS (M'lore), M.S. Ortho. (UM), FRCS (Ire), CMIA (M'sia),  
F'ship in Joint Reconstruction (St. George, Sydney)*



If knee pain is affecting your lifestyle, then you need to know this: the new concept in joint replacement surgery is to replace only the worn out portion of the arthritic joint and save as much of the natural knee as possible.

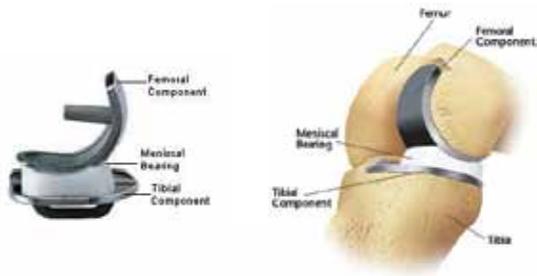
A large number of people with osteoarthritis of the knee have worn out only the cartilage of one of the three compartments in the knee. If this is the case, the individual may only require a partial replacement, preserving the unaffected compartments of the knee and all the ligaments of the joint.

Oxford® Knee Replacement is an implant that can accomplish this task with a proven track record of 95% success at 15 years and beyond. For this reason, the Oxford® makes a total knee joint replacement unnecessary in many cases. In some centres in the US, the number of Oxford® Partial Knee Replacement has reached almost 50% of all joint replacement surgeries.

The photograph below represents one (sided) compartment of bone-on-bone osteoarthritis. This occurs due to wear and tear of the articular cartilage. The other compartment cartilage is still normal. Once this situation develops, the individual usually has severe pain. An Oxford® is ideal for this situation.



The x-ray photographs above demonstrate a pre-operation x-ray and post operation x-ray (after an Oxford® has been placed). One can see that the bone on bone rubbing condition has been replaced by the Oxford® with its mobile bearing (the white horizontal line between the metal).



**The Oxford® Unicompartmental Knee Replacement System offers these advantages:**

- At 15 years following surgery, 95% of implants are still functioning well
- Preserving other compartments of knee while only the affected inner portion of knee is resurfaced
- Preserving all the ligaments of the knee thus allow more normal, natural and physiological motion of the human knee
- Only a portion of the knee is replaced, making this procedure available to a younger population
- Minimally invasive - a small incision is utilized
- Less pain due to a smaller operation scar and dissection
- Blood transfusion is rarely needed
- Two to three nights in hospital
- Quicker recovery - discontinue walking aid as fast as one week

The Oxford® Unicompartmental Partial Knee Replacement prosthesis allows for better range of motion of the knee by replicating the function of the menisci and more normal motion of the human knee. With the Oxford® partial knee replacement, only a portion of the knee is replaced. In performing an Oxford®, the anterior cruciate and posterior cruciate ligaments are always preserved. In performing a total knee replacement, the cruciate ligaments are always removed.

In some cases, this prosthesis may be applicable to individuals who were previously considered too young to undergo a total knee replacement. The Oxford® implant utilizes a minimally invasive procedure in which patients may experience less pain and a quicker recovery time, contrasted with a total knee replacement.

To be qualified to implant an Oxford®, the United States Food and Drug Administration requires an orthopaedic surgeon to attend a special training course. This training is required because the implantation technique for this procedure is very delicate. I personally attended one of the training courses in Chicago in 2011 and have since been using Oxford® with favourable outcome.

If you have substantial pain in your knee, you should go for a complete evaluation of your knee pain problem. You may only require an arthroscopic surgery, you may need an Oxford® knee replacement, or you may need a total replacement. Most substantial knee pain problems can be helped or cured by modern orthopaedic surgery. EZ

