Why an Oxford® Partial Knee?

Key Points & Clinical Rationale

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With 40 years' clinical experience, the Oxford Partial Knee is the most widely used[1], clinically proven[2] partial knee system in the world.

It is important to understand the benefits of partial knee arthroplasty and the Oxford Partial Knee. Clinical evidence in published literature suggests that there are several potential clinical benefits with choosing a partial knee: long term results,[2] near normal gait[3]* and reproducible technique.[4]

- After one year, a randomised control study, comparing TKR and PKR, has shown that significantly more Partial Knee patients than Total Knee patients would have the operation again.[5]
- A multi-centre study demonstrated decreased perioperative morbidity and postoperative complications of PKA compared to TKA[6]*
- Proven, safe and reproducible technique with Microplasty® Instrumentation[4]
- Near normal function and gait compared to TKA[3]
- Retains the ACL, which is reported to result in better proprioception[7]
- Best-in-class continuous education programme
- PKA is a cost effective[8–10] treatment for uni-compartmental osteoarthritis

The Oxford Partial Knee is intended for use in individuals with osteoarthritis or avascular necrosis. The Oxford Partial Knee may be implanted with cement or with cementless fixation. It may also be used in the lateral compartment using either the Oxford® Fixed Lateral Partial Knee or Oxford® Domed Lateral Partial Knee.

Long Term Oxford Partial Knee Results

Comprehensive literature review and Meta analysis show Kaplan Meier Survivorship

- 94.0% at minimum 15 year postoperative based on 432 knees[11]
- 91.0% at minimum 20 year postoperative based on 682 knees[2]

Early Return to Function

Quicker return to Low-impact Sports (bowling, dancing, golfing, cycling) than TKA[12]

- Mean Oxford knee score (22.17; SD: 9.03) for UKA was superior to TKA (24.5;SD: 9.68) (p=.04) scores.
- Mean modified Grimby score for UKA (3.89; SD:1.27) was superior to TKA (2.76; SD:1.12) (p<.0001).
- More patients returned to or increased sports following UKA (p=.0003), but no sooner than TKA patients.

Quicker Recovery than TKA (115 knees in 103 patients)[13]

- Hospital Stay: 1.4 days to discharge in UKA vs. 2.2 days in TKA (p=0.0000)
- Range of motion at discharge: 77° in UKA vs. 67° in TKA. (p=0.0000)
- Walking distance at discharge: 57 metres in UKA vs. 41.76 metres TKA (p=0.0000)

More Natural Motion vs Total Knees[3]

Closer approximation to normal knee kinematics

- Closer to normal GAIT patterns compared to TKA patients
- Faster walking speed than TKA patients

*Not all partial knees in this study were Oxford Knees

High Survivorship Rate with Cementless Option:

- A prospective multi-centre, 1000 knees study demonstrated 97.2% survivorship at 6 years[14]
- Pandit *et al*, have shown a 9 minute reduction in operating time with cementless compared to cemented[15]
- Retained cement may increase wear of the polyethylene bearing
- Reduced incidence of radiolucencies (7% incidence in cementless tibial components, compared to 75% in cemented)[15]

Reproducible Technique[4]

Microplasty Instrumentation

- Provides surgeons with the tools to allow for precise and accurate results for each patient
- The Femoral Instrumentation has been shown to be more accurate and reproducible than Phase 3 Instrumentation[4]
- Bone-conserving approach to tibial preparation resulted in a greater number of thinner, 3 mm and 4 mm, bearings implanted (92% vs. 84%; p=0.001)[4] compared to Phase 3 Instrumentation, which has demonstrated better survivorship than 5 mm bearings or thicker[16]
- Microplasty Instrumentation that has shown an average of 9 minute shorter OR time when compared to Phase 3 Instrumentation[17]

References

*Not all partial knees in this study were Oxford knees

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