

Unicompartmental Knee Replacement and Osteotomies About the Knee: A Comparison of Functional Outcomes at 2 Years

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Summary:

A retrospective case-controlled study reviewing patients undergoing osteotomies about the knee for osteoarthritis and comparison of outcomes at 2 years to patients who had undergone a unicompartmental knee replacement.

Abstract:

INTRODUCTION

Medial compartment osteoarthritis (OA) of the knee is common. The surgical options for the management of end-stage disease are limited. We reviewed patients undergoing osteotomies about the knee for this condition and compared their outcomes at 2 years to patients who had undergone a unicompartmental knee replacement.

METHODS

A retrospective case-controlled study using prospectively gathered data. Our departmental database includes over 300 patients who have undergone osteotomies about the knee and over 800 patients who have undergone UKR. We identified 87 patients who had 2yr follow-up following an osteotomy about the knee for the treatment of medial compartment osteoarthritis. A control group of 87 patients who underwent unicompartmental knee replacement for the same condition was randomly selected for comparison. The patients undergoing osteotomies about the knee were significantly younger ($P < 0.01$). As such a sub group analysis of 20 age matched patients was also performed. Oxford knee scores were recorded pre-operatively and at 2 years. Post-operative complications were documented.

RESULTS

Oxford knee scores (OKS) improved significantly in both groups at 2 years ($P < 0.01$). There was no significant difference in OKS between the two groups pre-operatively ($P = 0.3$) or at 2 years ($P = 0.15$). Similar outcomes were seen in the age matched sub-group. Subsequent multivariate analysis revealed that the change in OKS at 2yrs was independent of BMI, K/L score and gender. There was no significant difference in revision rates for the two groups. Whilst there were significantly more wound complications in the osteotomy group this was offset by a greater incidence of venous thrombo-embolism in the UKR group.

CONCLUSION

Both groups improved significantly following surgical intervention. Functional outcomes for osteotomies about the knee are comparable to UKR at 2 year follow up.