Knee osseous

Stanmore Modular Individualised Lower Extremity System (SMILES): Rotating hinge knee prosthesis in primary complex total knee arthroplasty

Authors: Perera, Jonathan; Gikas, Panagiotis; Bayliss, Lee; Aston, William; Carrington, Richard; Pollock, Robin; Skinner, John; Cannon, Stephen; Blunn, Gordon; Bentley, George; Briggs, Timothy

Abstract

INTRODUCTION

The Stanmore Modular Individualised Lower Extremity System, (SMILES), (Stanmore Implants Worldwide), has been shown to be effective in complex revision knee surgery. It incorporates a rotating hinge platform knee joint and can overcome the major problems of bone loss and ligamentous laxity.

OBJECTIVES

We report our experience with SMILES knee prosthesis analysing the functional outcomes of replacements implanted for primary complex knee pathology.

METHODS

36 patients (45 knees) who received a primary SMILES knee prosthesis between 1990 and 2007 were retrospectively studied. Knee function was assessed pre- and post-operatively using the Oxford Knee Score (0-48 scoring system) and the Knee Society Score. Patients with previous joint replacement or those receiving surgery for tumours were excluded.

CONCLUSION

We conclude that the SMILES Knee Prosthesis offers a statistically significant improvement in subjective and objective assessed outcome scores in Complex Primary Knee Arthroplasty. Its use is now well established with greater than 95.3% implant survival over 15 years.