Conversion of hip arthrodesis to hip resurfacing: a case report

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ABSTRACT

Patients with hip arthrodeses are at risk of developing back pain or pain in other joints in the long term. Conversion to a total hip replacement or hip resurfacing leads to resolution of symptoms in most patients. We report a 40-year-old man who underwent conversion of a hip arthrodesis to hip resurfacing with good results.

Key words: arthrodesis; hip joint

INTRODUCTION

Hip arthrodesis is a treatment option for degenerative hip diseases, but the patient is at risk of developing back pain or pain in other joints in the long term. Conversion to a total hip replacement or hip resurfacing leads to resolution of symptoms in most patients. We report a 40-year-old man who underwent conversion of a hip arthrodesis to hip resurfacing with good results.

Key words: arthrodesis; hip joint

CASE REPORT

In February 2002, a 37-year-old man presented to our hospital with a painful, stiff right hip, with a flexion of 45°, no rotation, and zero abduction and adduction. The contralateral hip had an excellent range of movement. He was diagnosed with osteoarthritis secondary to epiphyseal dysplasia. He underwent an in situ intra-articular hip arthrodesis, because conservative treatment was ineffective. The joint surface was breached using a cannulated drill via a direct lateral approach. A compression hip screw and a 6.5-mm cannulated screw were inserted into the hip joint (Fig. a). He wore a hip brace for 3 months postoperatively.

Over the next 12 months, he developed increasing pain in his back and left hip. At 18 months, the left hip was so deteriorated that he underwent a left hip resurfacing. Nonetheless, his low back pain did not reduce pain in the adjacent joints. We report a 40-year-old man who underwent conversion of a hip arthrodesis to hip resurfacing.
resolve completely and he requested that the right hip arthrodesis be converted to hip resurfacing. Three years after the hip arthrodesis, the patient underwent conversion to a hip resurfacing using a hardinge approach. The peripheral cortex of the femoral head could be seen, but the hip had fused so tightly that it needed to be osteotomised using curved revision gouges (Gray’s revision instruments). The femoral head and acetabulum had the appearance of raw, bleeding cancellous bone. The overall bone stock was adequate (but a bit soft) and a hip resurfacing was performed (Fig. b). At the 5-year follow-up, the back pain had resolved, and the patient was able to perform all his usual activities of daily living. There was no bone resorption.

**DISCUSSION**

Conversion of a hip arthrodesis to total hip replacement when necessary may yield a good outcome.\(^5\) The use of metal-on-metal bearings in a hip resurfacing is widespread, particularly in younger patients, but the results are still early.\(^6\) Hip resurfacing is more feasible if the anatomy of the hip joint is not overly distorted. Nonetheless, as in our patient, where the anatomy can be reconstructed, conversion to a hip resurfacing is still feasible.

**REFERENCES**