Foot/ankle/leg

Results of patelloplasty of the medial facet of the patella in patellar instability associated to femoral patellar dysplasia: A study of 26 cases

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Abstract

INTRODUCTION

In case of objective patellar instability, the dysplasia of the femoral trochlea is, in most cases, associated to a patellar dysplasia with an elongated lateral facet and short medial facet, even very short (Wiberg III). In some cases, this short medial facet, has an over convexity that prevents not only the proper centering of the patella but also can cause a femoral patellar osteoarthritis by medial hyper pressure. In 1997, we have thought about a hypothesis that the patelloplasty of the medial facet of the patella can help us preventing these problems.

OBJECTIVES

The aim of this study was to evaluate the mid-term results of 26 patelloplasties done between 1997 and 2007.

METHODS

The population was composed of 23 patients (27 knees), 9 men and 14 women. The mean age was 26.8+/-8.85 years old (range 15 to 52). All the patients had objective patellar instability with multiple episodes of dislocation and all of them had, on the lateral X-rays and patellar views, a femoral patellar dysplasia with bulging of the medial facet of the patella. According to Dejour's classification, we operated on 4 trochlear dysplasia of type A, 12 of type B, 6 of type C and 4 dysplasia of type D. The mean Caton and Deschamps index was 1.17+/-0.23 (0.9 to 1.74) and the trochlear patellar index was 0.64+/-0.10 (0.5 to 0.9). In all the cases, we did a medial transfer of the tibial tubercle, a patelloplasty of the medial facet and a resection of the lateral patellar retinaculum. In 7 cases, we did a distal transposition of the patellar tendon insertion and in 4 cases, we did a trochleoplasty as described by Albee.

CONCLUSION

Patelloplasty of the medial facet of the patella, in selected cases, did not have particular morbidity to a mid-term follow up. The rate of patients' satisfaction was very high and particularly encouraging.

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