Autogenous Bone Graft of Hill-Sachs Lesion Combined with Bankart and Putti-Platt Operation for the Treatment of Recurrent Anterior Dislocation of the Shoulder

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Bankart와 Putti-Platt의 병합 술식과 더불어 Hill-Sachs 병변에 자가골 이식술을 시행하여 치료한 견관절의 재발성 전방 탈구 정 문상, 백 구현 서울대학교 의과대학 정형외과학교실

Combined Bankart and Putti-Platt operation for the treatment of the recurrent anterior shoulder dislocation provides good stability and range of motion.

However significant size of Hill-Sachs lesions may cause instability when the humeral head is pushed posteriorly or when the patient moves his shoulder in extreme abduction and external rotation postoperatively. To overcome this possible risk, an autogenous iliac bone was grafted into the Hill-Sachs lesion with combination of Bankart and Putti-Platt operation, when size of the defect was significant.

We had experienced total 46 shoulders in 45 patients of the recurrent shoulder dislocation from January 1980 to December 1994. Autogenous bone graft of Hill-Sachs lesion combined with Bankart and Putti-Platt operation were performed in 10 patients(bone graft group), while the combined Bankart and Putti-Platt operation were done in 26 shoulders of 25 patients, and others in 10. Among them we analyzed total 10 patients of bone graft group and 25 patients of combined Bankart and Putti-Platt operation. The duration of follow up was average 23 months in bone graft group, and 57 months in combined Bankart and Putti-Platt operation group. The average age of them were 22.4 years and 25.8 years. The patients were reviewed in the aspects of the recurrence rate after operation, range of motion, and radiological integration of bone graft into the Hill-Sachs lesion.

In bone graft group, the grafts were well incoporated into the Hill-Sach's lesion, in all the 10 patients, which were confirmed by simple X-ray and computed tomography. There was no significant difference of postoperative range of motion, forward elevation and external rotation, betwen two groups respectively. Two shoulders out of 26 who had combined Bankart and Putti-Platt operation showed redislocation at postoperative 17 and 30 months. There was no recurrence in bone graft group although the duration of follow-up was rather short.

In summary, the combined Bankart and Putti-Platt operation was considered as one of the good methods for the treatment of recurrent anterior shoulder dislocation. For the patients who had significant size of Hill-Sachs lesion, iliac bone graft of this lesion combined with Bankart and Putti-Platt operation, iliac bone graft of this lesion combined with Bankart and Putti-Platt operation may increase the stability in extreme situation.