# Arthroscopic Bone Grafting of the Humeral Head for Treatment of a large Reverse Hill-Sachs Lesion, a new technique using transosseous suture fixation

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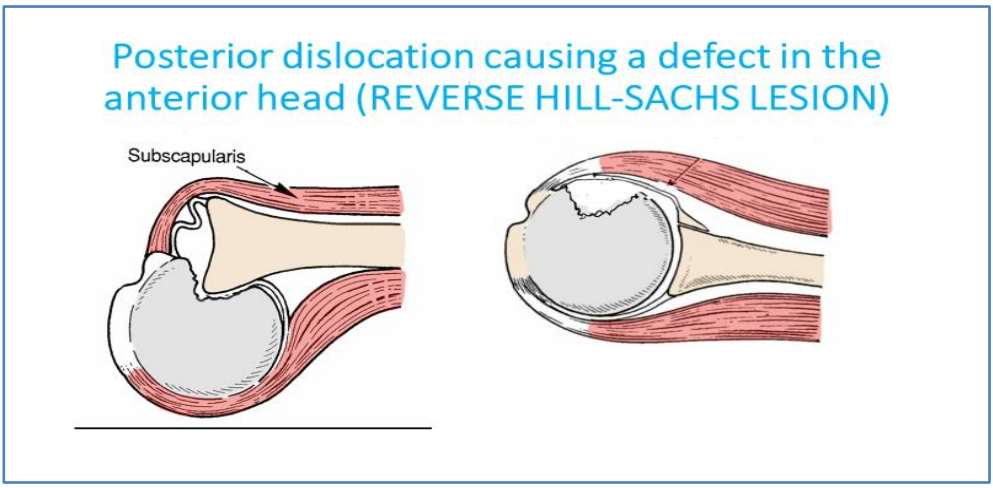
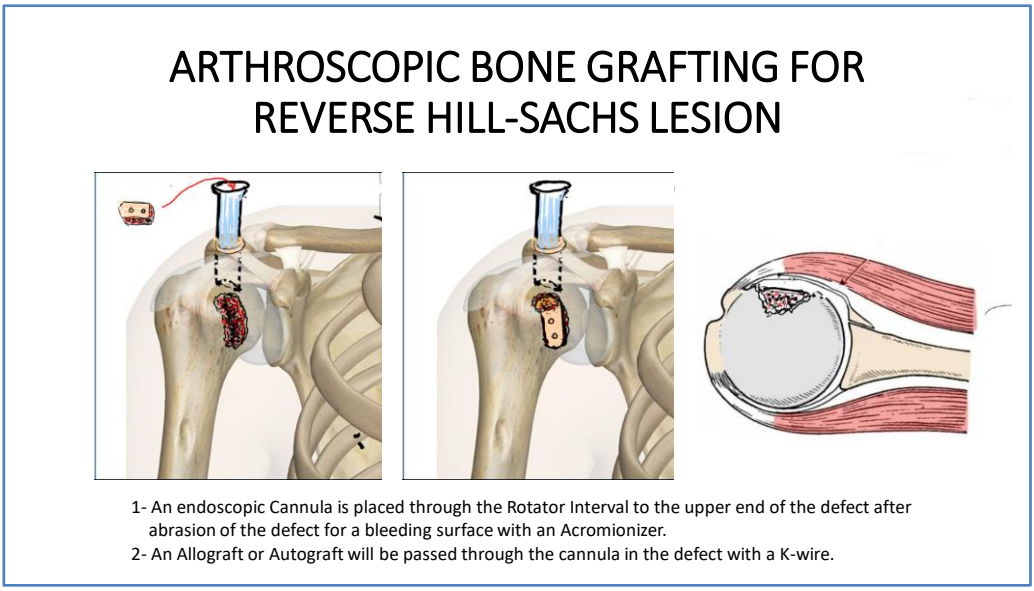
## Aim

Recurrent posterior shoulder dislocation can lead to the presence of a reverse Hill-Sachs lesion. A large reverse Hill-Sachs lesion compromises shoulder stability.
A new technique developed by the second Author of all-arthroscopic bone grafting and transosseous suture fixation to treat a reverse Hill-Sachs Lesion, and its outcome will be demonstrated in this Poster.

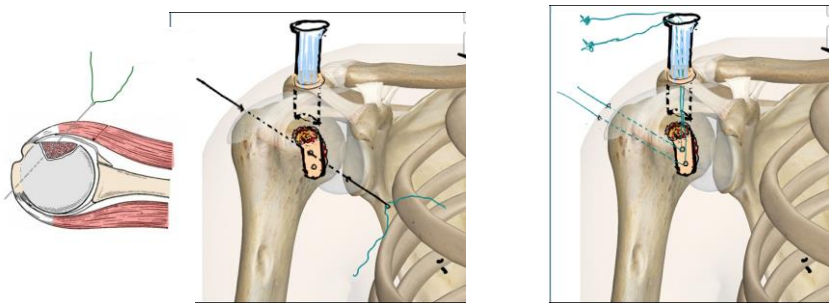



## Methods

The procedure include allograft placement via anterior superior portal and graft suspension fixation using transoseous suture for bone graft compression. The procedure is combined with arthroscopic posterior L-cut inferior capsular shift in treatment of complicated anterior shoulder instability with large Hill Sachs defect.

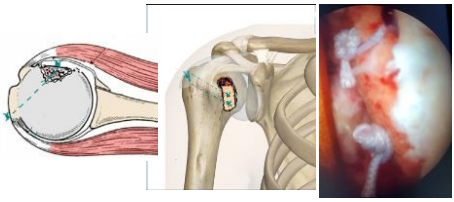



## SUTURE FIXATION OF THE GRAFT



3- Using a wire suture passer, two sutures will be passed through the graft
4- a suture knot bottom will be made and the graft will be fixed with mattress suture

## MATTRESS SUTURE FIXATION OF THE GRAFT

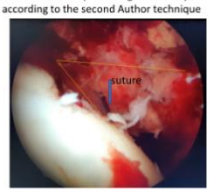


## Arthroscopic anterior bone block placement and suture fixation as well as posterior Inferior Capsular Shift

Reverse Hill-Sacks with posterior dislocation

After Grafting and suture fixation

After Posterior Arthroscopic cutting Inferior Capsular Shift according to the second Author technique




## Postoperative Immobilization in External Rotation for 3-6 Weeks

## Postoperative Rehabilitation 6 Weeks after surgery

Five cases of recurrent posterior shoulder dislocation were treated between 2019 and 2022 by one surgeon in two centers. There were 5 males with an average age of 23years. Arthroscopic inferior capsular shift plus arthroscopic bone grafting was done in all cases. We were able to evaluate all 5 cases with an average follow up of 14 months (between one and three years).

## Results

The postoperative rehabilitation took 4 months. The range of motion and function in all cases was normal. No symptoms of subluxation or dislocation had occurred in any of cases. The strength compared to the opposite normal side was similar. The x-rays done 3 months after surgery showed filling of the empty bone spaces. According to Neer score all cases were rated excellent.

## Conclusions

The clinical and radiographic result strongly encourage using Arthroscopic Bone Grafting for recurrent posterior shoulder dislocation with large reverse Hill-Sachs defect.