**Introduction:** Development of more advanced arthroscopic techniques has provided a less invasive and potentially more efficacious means of addressing glenohumeral instability.

Preliminary clinical results of this procedure indicate that arthroscopic shoulder stabilization surger (ASSS) is an effective method of eliminating or significantly reducing excessive capsular laxity without the use of arthrotomy although, literature report failure rate of 6.9-18%.

The purpose of this study was to evaluate the pathological features of ASSS in patients reoperated for recurrence.

**Materials and Methods:** 20 patients previously treated for shoulder instability by ASSS, developed a recurrence of shoulder instability. The mean age was 23±6 years.

These patients underwent arthroscopic revision surgery, and a biopsy via an arthroscopic punch was performed from two capsular sites, one being, the suture threads (GroupA: 20 biopsy) and one from the posterior healthy side of the joint (IGHL posterior band) (Group B: 20 biopsy).

A histologic classification system (HCS) was used to assess the specimens. Crimp morphology and distance from the scar were evaluated.

**Results:** In Group A the HCS demonstrates plump synovial cells, increased fibroblasts, increased vessels and fibrosis, altered crimp morphology (Fig.1). In Group B the HCS demonstrates normal synovial cells, normal vessels and hyalinization (p<0.05), furthermore crimp morphology was preserved (Fig. 2).

The distance from the scar is larger in patient aged < 20 years.

**Discussion:** In this study the joint capsule next to the scar (suture hole) demonstrated histologic abnormalities, altered crimp morphology, that could change normal tensile properties. This lower distance, corresponding to an anatomical weak point, is larger in patients aged < 20 years, this may be responsible for a higher rate of failure.

**References:** Rodeo SA, Suzuki K, Yamauchi M, Bhargava M, Warren RF.

  Analysis of collagen and elastic fibers in shoulder capsule in patients with shoulder instability
