Editorial

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Arthroscopic capsular release versus manipulation under anesthesia for primary frozen shoulder

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Arthroscopic capsular release (ACR) and manipulation under anesthesia (MUA) are treatment options for primary frozen shoulder (FS). Both of these are useful for primary FS [1-3]. In addition, MUA is possible without the surgical equipment needed for an arthroscopic procedure. The indications for the two procedures are not different, either [1,2].

On this topic, a study by Lee et al. [4], "The necessity of arthroscopic capsular release in primary frozen shoulder: Can manipulation under anesthesia alone provide clinical outcomes similar to arthroscopic circumferential capsular release in primary frozen shoulder?" retrospectively reviewed 54 patients treated with MUA and 22 patients treated with ACR. They compared the clinical outcome of both groups with one year follow up after the procedures, and reported that the outcome variables at 3 months after surgery and the improvement of outcome variables did not show any difference between both groups, but in the evaluation of pain and range of motion at 1 week, the MUA group showed significantly better results than the ACR group. They concluded that MUA alone can provide a similar clinical outcome as ACR in refractory FS.

Although MUA is an useful option for primary FS, several complications such as proximal humerus fracture, shoulder dislocation, brachial plexus stretching injury, rotator cuff injury, and glenoid fracture may result [1-3,5]. Therefore, MUA should be performed with great caution. They reported that 11 patients (12.2% in the MUA group and 18.2% in the ACR group) needed additional steroid injection between 8 to 16 weeks after surgery, and the necessity of additional injections was three times higher in diabetics compared to nondiabetics. Previous studies have reported that intraarticular steroid injection is a useful treatment option for primary FS in out-patient department [6-8]. However, additional steroid injection within the follow-up period could be a bias that compromises the reliability of this study.

In addition, a retrospective comparative study by Lee et al. [4] compared patients treated with MUA to patients treated with ACR that followed a limited MUA. The preceding limited MUA could be a source of bias, also. Therefore, the results of this study should be interpreted with caution. Another comparative study reported greater gain in range of motion in a MUA group compared to an ACR group[1]. According to a systemic review of 22 studies, which included 989 patients, there were minimal differences in shoulder range of motion or Constant score between MUA and ACR groups for treatment of refractory FS, and it concluded the data available demonstrate little benefit for ACR instead of, or in addition to, MUA [2]. Well-designed comparative studies are needed.

In my opinion, MUA and ACR are good treatment options for primary FS. MUA is more simple and easy than ACR because ar-

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throscopic equipment is not necessary. However, MUA can lead to several serious complications [1-3,5]. If experienced surgeons perform ACR, it can be more safe than MUA. Moreover, ACR is convenient for patients with rotator cuff tears combined with secondary FS [9]. Also, ACR followed by MUA could be better than MUA followed by ACR to avoid the mentioned complications seen with MUA.

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