

## Détails de votre résumé

[< Retour liste](#)

**EPAULE** Alexandre Lädermann

**#12088 : Est-ce que l'acromioplastie est utile? Une étude prospective randomisée.**

**Titre (anglais) :** Is Acromioplasty Planification Useful? A Prospective Randomized Trial

**Type de soumission souhaité :** Communication particulière

**Auteurs :**

Alexandre Lädermann (1), Frank Kolo (2), Sylvain Chagué (3), Caecilia Charbonnier (3)

1. Service de chirurgie orthopédique et traumatologie de l'appareil moteur, Clinique La Colline, Genève, Suisse
2. Radiologie, Rive Droite Radiology Center, Switzerland., GE, Suisse
3. Medical Research Department, Artanim Foundation, Meyrin, Suisse

**Mots clés :** Shoulder; Subacromial impingement; Acromioplasty; Surgical planning; 3D simulations; ArthroPlanner software; Rotator cuff repair; Range of motion; Clinical and radiological results; Postoperative function.

**Ce résumé est-il issu d'un mémoire de DIU d'arthroscopie ? :** Non

**Type d'étude :** Etude clinique \ Etude prospective randomisée

**Nombre de cas étudiés :** plus de 30 par groupe

**Recul minimum :** Moins de 2 ans

**Résumé :**

The primary objective of this study was to compare radiological results including persistent subacromial impingement in a series of patients operated from a posterosuperior rotator cuff repair with or without a computer-assisted planning solution, called "ArthroPlanner", for acromioplasty. As individual scapular anatomy and patient's expectations are highly variable, we hypothesized that standard morphological bony measurements, as well as 3D simulations of the patient's joint during everyday shoulder activities could play a role in understanding the potential zones of impingements according to movements and activities routinely performed by the patient, and in guiding the surgeon intraoperatively for more precise bone resection, if indicated. The secondary goal was to determine if a planning solution would improve clinical outcomes and allowed less bone removal. The primary outcome measure of this randomized controlled trial was to determine the change in subacromial impingement. The secondary outcome variables/of interest were amount of bone removal on the acromion, the retear rate determine by ultrasound, active shoulder ROM, and functional scores. All functional outcome scores significantly increased or both groups revealing significant effect of the surgical intervention for the Constant score ( $F(1, 56) = 74.75; P < 0.001$ ), ASES ( $F(1, 56) = 173.68; P < 0.001$ ), SSV ( $F(1, 56) = 88.93; P < 0.001$ ) and SST ( $F(1, 56) = 99.57; P < 0.001$ ). There was however no interaction with groups for postoperative scores, range of motion or healing rate. This study detected a significant difference in dynamic subacromial impingement between the preoperative and repaired shoulders of patients who had surgical repair of a rotator cuff tear. Acromioplasty planification shows a trend toward less acromial bone resection compared to unplanned acromioplasty. It seems that an acromioplasty 3D planning solution may play a role in impingements relief and bone preservation. The study failed to detect any significant clinical and tendon healing difference between the ArthroPlanner and the control groups. Short terms clinical and radiological results were excellent in both groups.