AN ENDOSCOPIC TECHNIC FOR AC JOINT DISLOCATION IN SPORTSMAN

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Basic Anatomy

• Articular capsule
• AC ligaments
Basic Anatomy

- Articular capsule
- Articular complex
- meniscus
Basic anatomy

- Coraco-clavicular ligaments
  - Conoïde
Basic anatomy

- Coraco-clavicular ligaments
  - Trapezoïde
Classification of AC joint dislocation

- *Patte*
- 4 types
Classification of AC joint dislocation

- **Rockwood**
- 6 types
What about classifications?

- Complete REDUCIBLE dislocation
- Complete UNREDUCIBLE dislocation
Review

- SFA 2009 Dr Charousset, Nové-Josserand, Graveleau
- 16 articles about arthroscopic procedures
- Small series or technical notes
- Acute and/or chronic
  - Assisted coracoclavicular osteosynthesis
  - Non absorbable sutures with anchors or button
  - Artificial ligament
  - ACL transfer associated
  - Semi-tendinous allograft
Assisted Osteosynthesis

- **K Wire**

- **Screw**

Arthroscopic treatment of acute acromioclavicular joint dislocation

*Rolla PR et al*


RIGIDITY
Other arthroscopic technics

- **Arthrex**

  Arthroscopic reconstruction of chronic AC joint dislocations by transposition of the coracoacromial ligament augmented by the Tight Rope device: a technical note

  *Hosseini H et al*

  Knee Surg Sports Traumatol Arthroscop

  2009 Jan; 17(1) 92-7

  4 mm Hole

  +/- ACL transfer
Assisted ACL transfer: Cadenat

Arthroscopic treatment of acute and chronic acromioclavicular joint dislocation

Lafosse L et al
Assisted ACL transfer/ Weaver Dunn

TRAITEMENT ARTHROSCOPIQUE DES DISJONCTIONS ACROMIO-CLAVICULAIRES CHRONIQUES PAR AUTOGREFFE OSÉOLIGAMENTAIRE ET DOUBLE-BOUTON (OPÉRATION DE WEAVER-DUNN-CHUINARD)

P. Boileau, N. Brassart, Y. Roussanne, G. Moineau, I. Hovorka, C. Pelegri, Ch. Trojani
(Maitrise Orthopédique 174, Mai 2008)
Assisted Semitendinous allograft

Arthroscopic coracoclavicular ligament reconstruction using biologic and suture fixation
*Pennington WT et al*
*Arthroscopy. 2007 Feb ;22(2): 228. e1-228.e6.*

Arthroscopically assisted acromioclavicular joint reconstruction
*Baumgarten KM et al*
*Arthroscopy. 2006 Feb ;34(2): 236-46.*
SEM ligament procedure

Coraco-clavicular *renforcement* (acute)
Coraco-clavicular *reconstruction* (chronic)
Ligament SEM
Ligament SEM
Ligament SEM
September 2008 to September 2009: 42 cases

Rockwood Classification:

- **Stage 3 (reducible):** 37 (all extra articular procedure)
  - 32 success
  - 3 loss of reduction (> half clavicle) without pain
  - 2 failures (early ligament rupture)

- **Stage 4 (unreducible):** 5
  - 3/5 all extra articular procedure: 3 failures
  - 2/5 Weaver Dunn Procedure supplementation: no failures
Clinical Review

- **Acute cases**: 32 All extra articular procedure
  - 30 success
  - 2 failures (ligament rupture at 3 weeks)

- **Chronic cases**: 10
  - 3/10: Weaver Dunn procedure supplementation
    - 2 success, 1 failure
  - 7/10: All extra articular procedure alone
    - 2 success, 5 failures (1 technical mistake, 2 stage 4)
24 yrs, with pain
Complications

- Algodystrophia: 2
- Metal hardware migration: 1
- Infection: 0
- Neurvascular injury: 0
- Fracture of clavicle: 1
Better results for acute cases
Chronic cases need an additional graft or ligament transfer
Be careful in case of unreducible joint
Preservation of AC joint (acute and reducible)
Anatomic reduction with endoscopic view