THE ROLE OF THE SUBACROMIAL BALLOON

ANGEL CALVO, MD; PHD

*President of the Spanish Arthroscopy Association (AEA) 2013-2016

*President of ESA (Shoulder Section of ESSKA) 2014-2016

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BAD PROGNOSIS FACTORS

* Size and number of involver tendons
* Subscapularis Tears
* Retraction
* Soft tissue quality
* Bone quality
* Fatty infiltration & degeneration
IRREPARABLE TEARS AND NON-VIABLE TEARS:
TWO CONCEPTS, THE SAME PROBLEM

What to do?
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Decision Making is too difficult an many factors are involved

*Age
*Activity Level
*Tissue Quality
*Reparable or not
*Clinical Pattern
*Subescapularis Tear or not
*Risk factors for failure
*Osteoarthritis
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THE BEST TECHNIQUE

Arthroscopic Procedure
Minimally invasive
Easy recovery

But...

To provide a painful shoulder
To reestablish the function
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WHAT IS THE BALLOON?

* Simple concept ??
* Easy technique (maybe too easy??)
* Just a fashion ??
* Why 11000 balloons have been used in Europe?
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TREATMENT OPTIONS

Rule WYDYG-8085

1. Debridement +/- Tenotomy
   Rockwood 1995: 83%
   Kempf: Doesn’t slow the progression to OA
2. Partial repair
   Burkhart 1993
3. Debridement and Partial Repair
   Berth 2010
4. Interval Slide
   Tauro 1999
5. Tuberoplasty
   Feulin 2002: 81%
   Progression to OA
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TREATMENT OPTIONS

6. Grafts
   * Neviaser 1978: Allograft
   * Allografts: Graftjacket (Snyder 2008)
   * Xenografts: Porcine
   * Synthetic: Dacron, GoreTex, Mersilene, etc

7. SEN Release/Ablation 50-75%

8. Arthroscopic Superior Capsule Reconstruction

9. Subacromial Spacer (Balloon)

10. Tendon Transfer

11. Reverse Prosthesis
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ADVANTAGES

- Minimally invasive
- Easy technique
- Fast recovery
- Pain improvement
- Open doors to failure
THE QUESTIONS

* Is it efficient?
* Is the debridement or tenotomy the responsible of improvement?
* Is it really absorbable?
* Is it resistant?
* What are the indications?
* What happens after resorption?
* Can it prevent osteoarthritis?
* Any technical trick?

*How does it work?*
- Fibrous layer?
- Decreasing friction?
- Humeral head depressor?
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IS IT EFFICIENT?

Prospective clinical study of a novel biodegradable sub-acromial spacer in treatment of massive irreparable rotator cuff tears
Vladimir Senekovic · Boris Poberaj · Ladislav Kovacic · Martin Mikek · Eliyahu Adar · Assaf Dekel

20 patients. Average age 70.5 y.o.
Follow up: 34.7 m (4-95 m)
CONSTANT PRE 33.4 /CONSTANT POST 65.4
Significative improvement in all aspects
Improvement of strength at 18 m.

The results are maintained at 3 years

…and at 5 years!!!! CS 66.39
IS IT EFFICIENT?

* It decreases friction on repaired tendon
* It can improve the tendon healing because the tendon needs less force for depressing the humeral head.
* Potential risk of decreasing vascular flow
* NOT recommended in PSEUDOPARALYSIS

Gregor Szöllösy, M.D., Claudio Rosso, M.D., Simon Fogerty, M.B.Ch.B., Kalojan Petkin, M.D., and Laurent Lafosse, M.D.

Subacromial Spacer Placement for Protection of Rotator Cuff Repair

*Arthroscopy Techniques, Vol 3, No 5 (October), 2014: pp e605-e609*
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IS IT EFFICIENT?

Malte Holschen¹ · Florian Brand² · Jens D. Agneskirchner³

Subacromial spacer implantation for massive rotator cuff tears. Clinical outcome of arthroscopically treated patients


*¹1 repair + SAD + Tenotomy
*¹² + balloon
*Improvement of CS in both
*Best improvement CS group B
*NOT recommended in
PSEUDOPARALYSIS
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IS IT EFFICIENT?

E. Gervasi¹ • E. Maman² • A. Dekel³ • E. Cautero¹

Fluoroscopy-guided biodegradable spacer implantation using local anesthesia: safety and efficacy study in patients with massive rotator cuff tears.


*15 patients
*15 points of improvement in 85% of patients
*Improvement at 6th week
*Results maintained at 1 year
*1 case to reverse prosthesis
BALON SUBACROMIAL. ¿Y NADA MÁS?

MY OWN EXPERIENCE: 20 PATIENTS. 6M-2.5 YEARS
The Role of the Subacromial Balloon

Clinical Results: 3 Scenarios

* Painful passive ROM Pattern
* False Pseudoparalytic Pattern
* True Pseudoparalytic Pattern
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INDICATIONS: BEST PREDICTABLE RESULTS

Irreparable Massive Tears and Re-tears

No pseudoparalytic pattern

Main symptom is PAIN

No Glehumeral Osteoarthritis
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TECHNICAL TRICKS

*Acromioplasty
*LHB Tenotomy
*Oversize
*Adjust to recommended volume
*On the remaining tissue
*Medialize 1-2 cm
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HOW DOES IT WORK?
ONLY AN EXPENSIVE COSMETIC PROCEDURE?

The secret is to obtain a pain-free shoulder for a good rehab.
HOW DOES IT WORK? A GLOBAL VISION

We can only understand this pathology Understanding the shoulder as the whole of its joints.
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TAKE HOME

Offer to the patient the most predictable result.

*Age
*Level of activity
*Reparable / Viable tissue
*Risk factors for failure
*Clinical pattern
*Osteoarthritis

The spacer has a space

Patient selection
Control of PT

More studies are needed