21st Congress of the European Society for Surgery of the Shoulder and the Elbow

Physiotherapy protocol for rotator cuff tendinitis; results for a group of 96 patients.

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AIMS

The purpose of this study is to present the results, and the efficiency of a physical therapy protocol (C.G.E.© Method) for the medical treatment of nonruptured and non calcifying rotator cuff tendinitis

This protocol is based on manual specific mobilisation of the gleno-humeral joint to restore the passive range of motion in flexion, abduction, and cross body adduction.

MATERIALS

- 96 patients (46 women and 50 men) with rotator cuff tendinitis were included.

- The mean age was 52.

- The average Constant score was 56 at the beginning of the treatment.

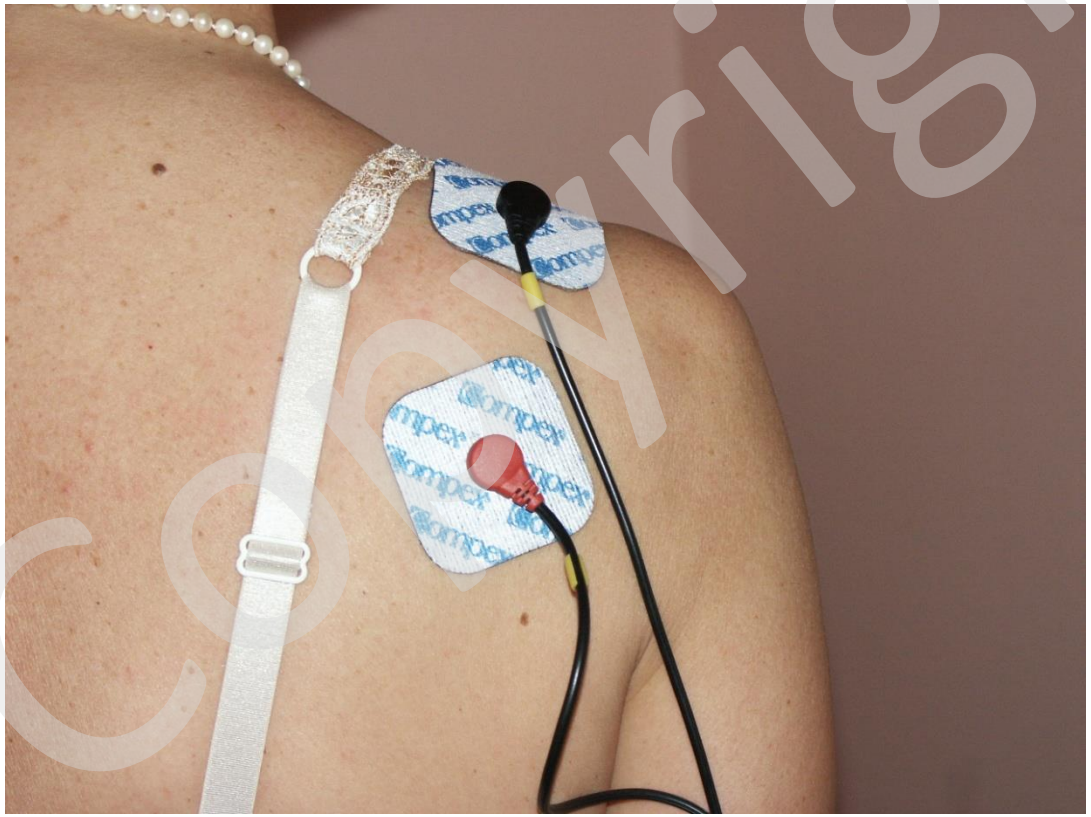
The protocol of rehabilitation relied on specific passive mobilization to recover the glenohumeral mobility quickly without triggering a painful reaction.

Recovering of flexion

Recovering of abduction by manipulation

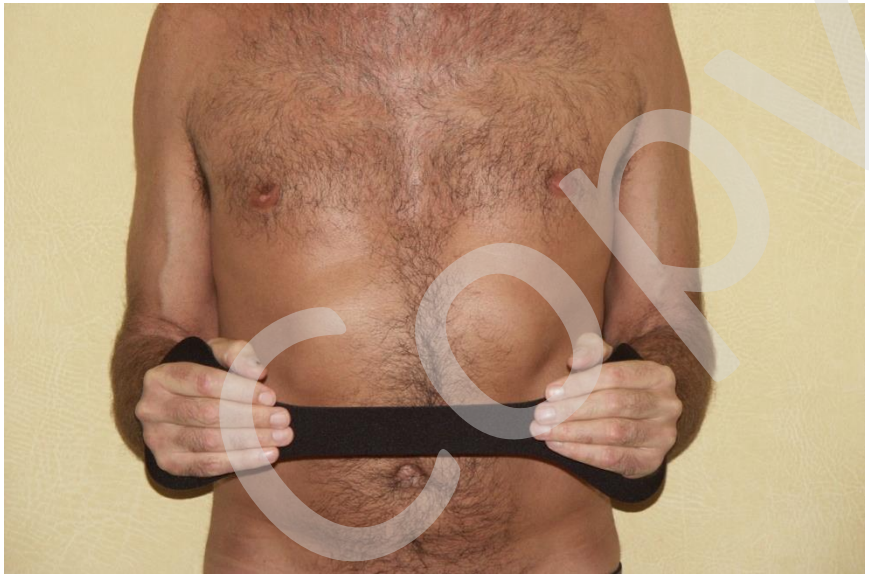
A stretching of the posterior capsule was then performed.

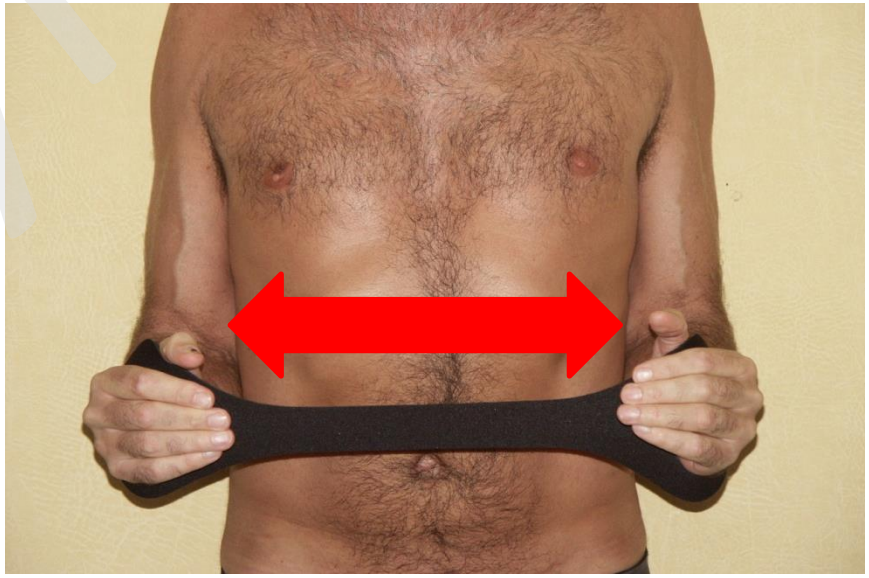
A functional electrical stimulation was applied until the pain disappeared.



Supra and infraspinatus functional electrical stimulation

When the shoulder was painfree, lateral rotator strengthening was assured via exercises with a rubber band in ER 1 position in little range of motion.





The regimen of the sessions was 3, then 2 and finally 1 per week (average 23 sessions) with autorehabilitation at home.

Inferior and posterior capsule stretching

External rotators strenghtening

Results

The mean Constant score increased from 56 to 82 (gain of 26 $p<0,0001$).

The improvement is not correlated to age.

Women progress more than men ($p=0,05$).

Functional improvement (Constant's score) is correlated to the improvement of the passive range of motion :

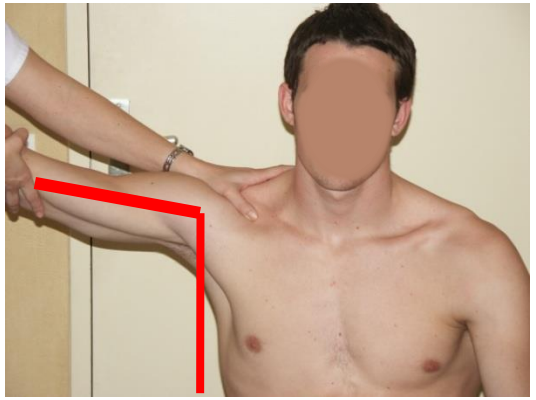
- In flexion (p = 0,007)
- In abduction (p = 0,0001)
- In cross body adduction (p = 0,01)

All pre treatment passive range of motion losses are predictive of post treatment gain:

flexion (p = 0,004), abduction (P = 0,0005), cross body adduction (p = 0,006) .

Results

Medial and lateral rotation range of motion was never mobilized as the gain of range of motion is a direct consequence of the gain in abduction.



Conclusion

The protocol of rehabilitation (C.G.E. © Method) showed significant improvement of the functional state (26 points) of patients presenting with a rotator cuff tendinitis.

This technique using specific passive mobilization is the key to significant functional improvement. The training involved in this manipulation requires a learning curve, but it enables the physical therapist to treat precisely the biomechanical abnormalities responsible for the functional deficit.