Suprascapular block for chronic shoulder pain, retrospective evaluation of results

A. Bainac Albadalejo¹, R. Diaz Jover¹, M. Revuelta Rizo¹, A. Parera Ruiz¹, M. Melo Cruz¹, E. Català Puigbò¹

¹Hospital de la Santa Creu i Sant Pau - Barcelona (Spain)

Background

To provide pain relief and to facilitate functional rehabilitation of patients suffering chronic shoulder pain (CSP), suprascapular nerve block (SSNB) can be made as a useful treatment. The objective of our study is to retrospectively evaluate the analgesic effect of SSNB with local anesthetics combined with corticoids and pulsed radiofrequency (PRF).

Material and methods

We studied retrospectively a cohort of 50 consecutive patients receiving suprascapular nerve block for chronic shoulder pain between January 2014 and January 2017. We evaluate demographic characteristics and Numerical Rating Scale (NRS) before and after nerve block at 1 month and 3 months. We consider significant pain relief if reduction of NRS is >30%.

Results and discussion

Demographic characteristics; mean age 76 ± 3 years old, 82% of women and 18% men

Pain relief evaluated at 1 and 3 month are showed in figure 1 & 2

Figure 1

TECHNIQUE

- Patient was placed in sitting position.
- Under sterile conditions, and after skin and soft tissues were anesthetized with 1 ml 1% lidocaine.
- Under ultrasonographic view 23G radiofrequency needle with 5mm active tip (Electrode CR-6, Cosman Medical, Burlington, USA) was advanced until suprascapular notch position was obtained.
- Sensory and motor stimulation at 50 Hz and 2 Hz respectively was performed. Stimulation threshold was required to be less than 0.6V to identify nerve position.
- PRF was performed for 240 seconds and after a mixture of ropivacaine 0,2% (4ml) + triamcinolone 40 mg were injected

SIGNIFICANT PAIN RELIEVE (NRS>30%)

Figure 2

Conclusions

The use of SSNB with local anesthetics and corticoids combined with PRF achieves a reduction of NRS for 12 weeks in our patients with no complications reported. One of our goals is relief pain to facilitate physiotherapy and improve range of movement, this is possible due to SSNB provides fast analgesia in movement. However, we cannot conclude that it was the corticoid or PRF that caused the improvement. Further studies are needed to confirm these results.

References

Liu A, Zhang W, Sun M, Ma C, Yan S. Evidence-based Status of Pulsed Radiofrequency Treatment for Patients with Shoulder Pain: A Systematic Review of Randomized Controlled Trials. Pain Practice, 16, 4 (2016) 518-525