Ultrasound Guided Erector Spinae Block for Post Thoracoscopy Pain Syndrome

Emanuele Piraccini
Anesthesia and Intensive Care Unit, Morgagni Pierantoni Hospital, Forlì-Italy

Background and aims

The Erector Spinae plane (ESP) block consists in the injection of drugs deep to the Erector Spinae muscle, it has been used to treat some chronic and neuropathic pain conditions [1].

The drugs injected with ESP block may reach the paravertebral and epidural space and block of the dorsal and ventral rami of spinal nerves.

Methods

We present a case series of 5 patients undergone video assisted thoracoscopic lobectomies, they suffering by post thoracoscopy pain syndrome (PTPS) for more then 3 months not relieved by systemic administration of pregabalin amytriptiline and opioids.

We performed an ultrasound guided ESP block at T5 transverse process (Fig.1), we injected levopupivacaine 25 mg and triamcinolone 40 mg within 15 ml of normal saline (Fig.2). We weekly repeated the injection 2 more times. We recorded NRS and DN4 questionnaire before and 14 days after the end of the treatment.

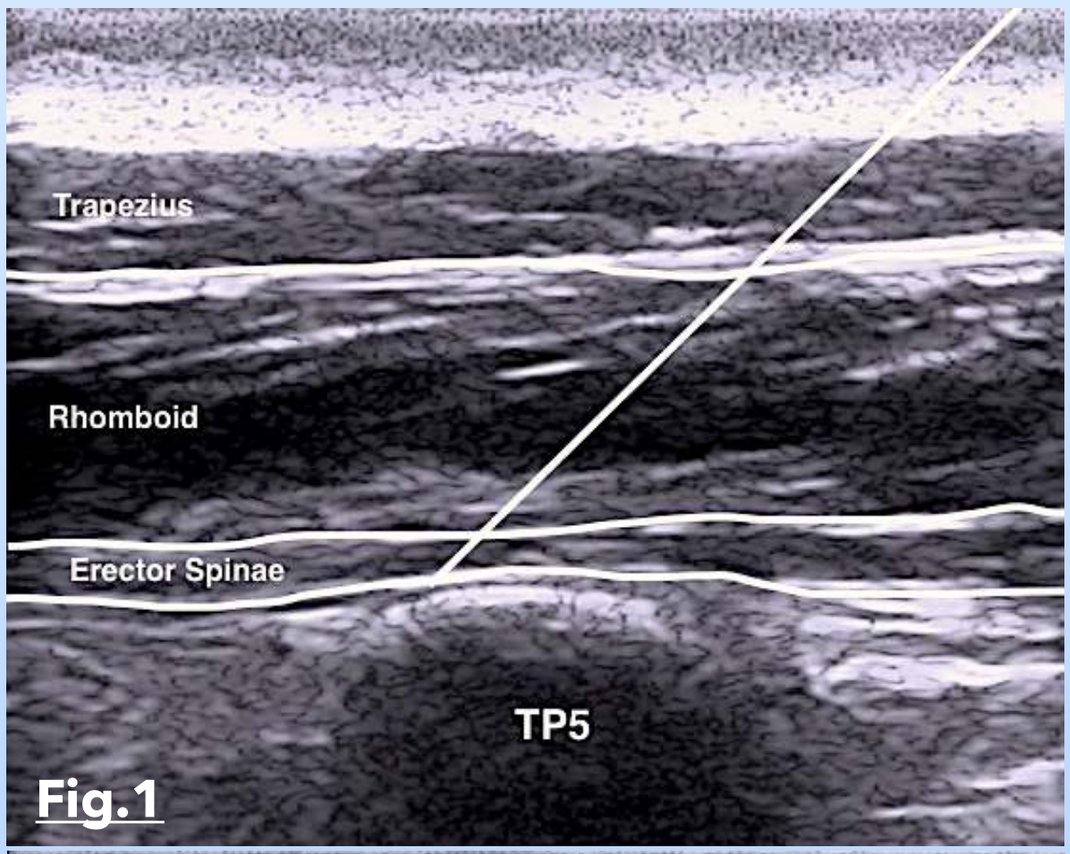

Fig.1

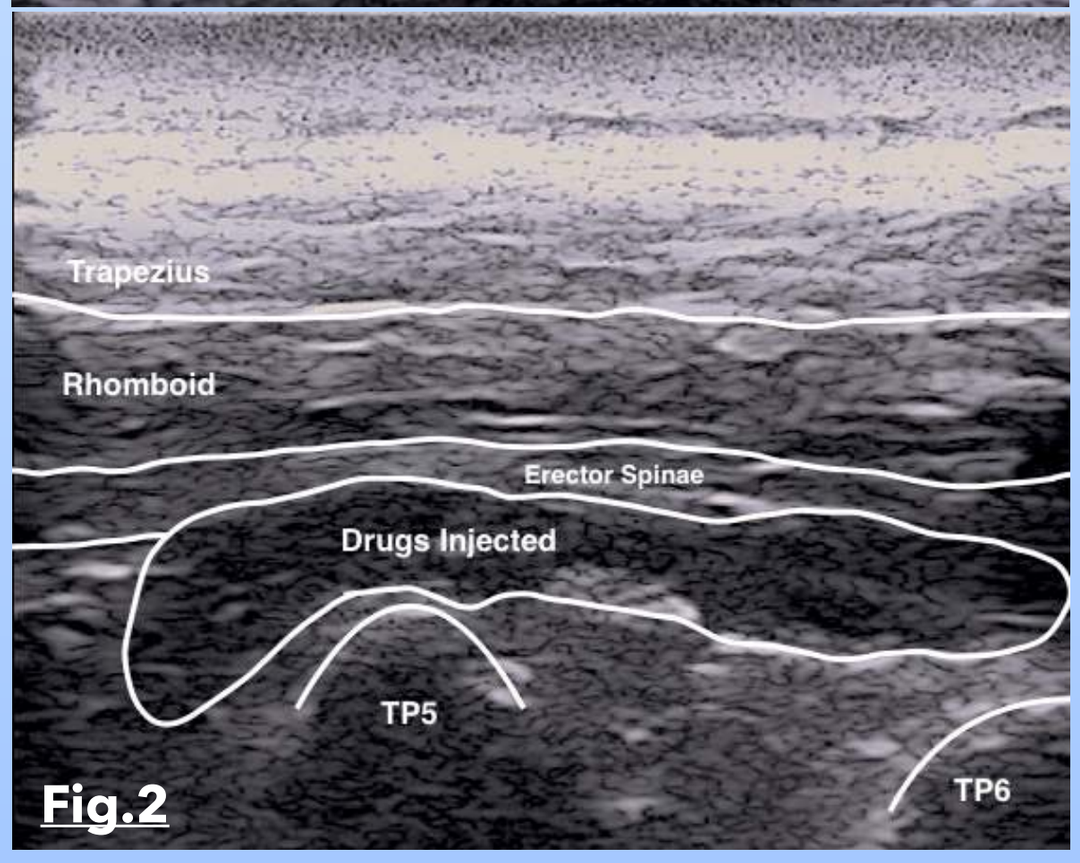

Fig.2

Results

The mean NRS decreased from 8.8±0.84 to 2.4±0.55 ($p<0.0001$, 95%CI= 5.37-7.43) and the DN4 decreased from 4.4±0.55 to 0.2±0.45 ($p<0.0001$, 95%CI=3.47-4.93). We analysed data with a paired student's *t* test.

Conclusion

The local anesthetic and corticosteroid injected allows the abnormal central processing that maintains the neuropathic component of pain to revert to normal and improves a continuous inflammatory condition that may happen in PTPS.

PTPS can also have a myofascial component that increase the pain and a fascial plane block as ESP block could be helpful.

In conclusion our report suggest that ESP block may be effective in reducing PTPS.

References

1.Forero M, Rajarathinam M, Adhikary S, Chin KJ. Erector spinae plane (ESP) block in the management of post thoracotomy pain syndrome: A case series. Scand J Pain. 2017;17:325-29.

drpiraccini@gmail.com