Ultrasound guided pectoral nerve II block for intractable thoracic postherpetic neuralgia

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Background

Postherpetic neuralgia (PHN) is a painful complication of acute herpes zoster. However, treatment of intractable PHN remains clinically challenging because both peripheral and central pathophysiological mechanisms contribute to PHN pain.

Peripheral nerve block with local anesthetics have been used in the treatment of neuralgia and can provide pain relief in the region supplied by blocked nerve.

Also, pectoral nerve (Pecs) II block was recently reported as a simple interventional procedure that produces good analgesia after breast surgery.

Therefore, we report the successful treatment of PHN with Pecs II block.

Case description

An 82-year-old man visited our pain clinic with chronic pain around left nipple (Fig. 1). He was diagnosed with PHN.

Over the last 2 years, he has received several medications and interventional treatments, including radiofrequency ablation, epidural block and paravertebral block at other clinics.

However, localized allodynia around nipple was not improved, though spontaneous pain and its intensity and distribution were diminished gradually.

We decided to perform ultrasound guided Pecs II block with 20 ml of 0.2% ropivacaine between pectoralis minor and serratus anterior (Fig. 2).

His pain scale showed a reduction of 70-80% after the procedure. Pain relief continued to be thereafter, following repeated Pecs II blocks were conducted at 1-week intervals.

Figure 1. Pigmented scar is seen around the nipple on the left chest

Figure 2. Ultrasound image of the local anesthetic solution. Arrowheads indicate the needle placement.

Pm, pectoralis minor muscle; Sm, serratus anterior muscle; LA, local anesthetic.

Discussion

We report successful treatment of intractable thoracic PHN which did not respond to conventional treatments.

In this case, we performed the ultrasound guided Pecs II block, and it resulted in great improvement of localized allodynia.

Peripheral nerve block may be used as an alternative option for localized peripheral neuropathic pain treatment because irritable peripheral nociceptor contribute to pain mechanism of PHN.

In Pecs II block, local anesthetic spread between pectoralis minor and serratus anterior. Pecs II block, as it covers thoracic intercostal nerve from T2-T6, long thoracic nerve and thoracodorsal nerve, it is useful treatment for localized pain around nipple.

Conclusion

We suggest ultrasound guided Pecs II block might be a good alternative choice of intractable localized anterior chest wall pain associated with PHN.

References

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