SUCCESSFUL UPPER EXTREMITY SURGERY IN TETANUS PATIENT WITH TRISMUS PERFORMED UNDER ULTRASOUND-GUIDED SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK : A CASE REPORT

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BACKGROUND

Tetanus is an acute, often fatal, disease caused by exotoxin produced by the bacterium *Clostridium tetani* which characterized by muscle rigidity, autonomic instability, and sometimes convulsions.¹ Increased masseter tone (trismus) occurs in 50% –75% tetanus.patient. ² Brachial plexus blockade provides avoidance of airway instrumentation, decreased hemodynamic instability, and intra-, as well as post-operative analgesia.^{3,4} The aim of this study is to report case of minimal airway interference during upper extremity surgery in tetanus patient with trismus using ultrasound-guided supraclavicular brachial plexus block anesthesia.

Figure 1
43 years old male, moderate tetanus with trismus

Figure 2
Supraclavicular brachial plexus block was performed under ultrasound-guide

Figure 3
Supraclavicular brachial plexus block for external fixation surgery in fully conscious patient

Figure 4
2/10 Wong Baker Faces pain rating scale at 48hours postsurgery

METHODS

A 43-years-old male patient diagnosed with moderate tetanus with trismus scheduled for external fixation of neglected fracture distal radius-ulna. He presented with 1-cm mouth opening and intermittent spasm of neck, stomach, and extremities. Past history revealed intermittent seizure after fell down from tree approximately 12 days ago. Surgical prosedure was performed under ultrasound-guided supraclavicular brachial plexus block (Ropivacaine 0,75% 20 cc).

RESULTS

We had successful supraclavicular brachial plexus block anesthesia technique for external fixation surgery in non-intubated tetanus patient with trismus, guided by ultraound device. Post-operative analgesia considered satisfisying, with 2/10 Wong Baker Faces pain rating scale at 48 hours after surgery.

CONCLUSION

Supraclavicular brachial plexus block provides safe anesthesia technique for upper extremity surgery in tetanus patient with trismus with good post-operative outcomes. This regional anesthesia can be used in patient with difficult airway due to minimal risk of aspiration, laryngeal spasm, and possibility of difficult intubation.

R E F E R E N C E S

1. Tejpratap S.P. Tiwari. 2017. Tetanus. International Encyclopedia of Public Health (Second Edition). Elsevier Inc
2. Mahajan R, Kumar A, and Singh SK. 2014. General anesthesia in tetanus patient undergoing emergency surgery: A challenge for anesthesiologist. Anesthesia Essays and Researches Vol 8(1) : 96-98
3. Mirza F, Brown AR. 2011. Ultrasound-Guided Regional Anesthesia for Procedures of the Upper Extremity. Anesthesiology Research and Practice. Hindawi Publishing Corporation