Efficacy of ultrasound guided continuous Serratus Plane Block and Dexmedetomidine sedation for facilitating weaning in a critical chest trauma patient. A case report.

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Background and Aims:

Ultrasound- guided Serratus Plane Block(US-SPB) has recently been described as a regional anesthetic technique to provide complete analgesia of the lateral part of the thoracic wall . We described a case of US-SPB performed in a critical chest trauma patient in order to achieve long-lasting analgesia and facilitate weaning from mechanical ventilation.

Methods:

A 39 year-old man was admitted to the Intensive Care Unit (ICU) after a thoracic trauma due to a road accident. He reported multiple right rib fractures from 4th to 8th with pneumothorax, severe respiratory failure and metabolic acidosis. After extubation, the patient presented paradoxical breathing and did not cough adequately with severe ribcage pain and a period of delirium,so we decided for rapid reintubation. Dexmedetomidine sedation (0,4 mcg/Kg/h) was started and a US-SPB was performed by injecting a total of 30 ml of 0,25% levobupivacaine between the serratus anterior and latissimus dorsi muscle (Figure 1), followed by a catheter placement in order to prolong analgesia.

Results

The patient reported early tracheal extubation, reporting good gas exchange and a long lasting analgesia. No discomfort and other complication were recorded, resulting in a rapid recovery from the ICU.

Conclusions:

This case report suggested that continuous US-SPB in addition to Dexmedetomidine sedation could provide adequate pain relief facilitating weaning in critical chest trauma patients.

Keywords: Dexmedetomidine sedation,Ultrasound-guided Serratus Plane Block,chest trauma patient, weaning .