Ultrasound-guided Erector Spinae Plane (US- ESP) Block associated to Dexmetomidine cooperative sedation for anesthetic management in breast cancer surgery: a case report.

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Background and Aims:

Ultrasound-guided Erector Spinae Plane Block (US-ESPB) is a recently described regional block technique for anesthesia and analgesia of the chest wall. Dexmetomidine (DEX) is an α -2 agonist that can provide cooperative sedation during surgery. We reported a case of US-ESPB associated to intraoperative DEX sedation in a patient undergoing breast cancer surgery.

Methods:

A 42 years-old patient, ASA 2, was scheduled to undergo quadrantectomy with sentinel lymph node biopsy. Before surgery, we performed a US-ESPB and 20 ml of 0,5% Ropivacaine were injected using a 90 mm needle (Temena ®) deep to the erector spinae muscle and superficial to T5 transverse processes. The patient received intravenously DEX in a loading dose of 1 mcg/kg over 15 minutes, followed by an infusion of 0,4 mcg/kg/h and oxygen (4 l/min) was administered by facemask.

Results:

We obtained adequate surgical anesthesia and a good quality postoperative analgesia. Moreoverer, DEX infusion provided cooperative sedation during surgery (Ramsay 3) without causing respiratory depression of the patient. Only 3 g of acetaminophen were administered postoperatively. No complications were recorded.

Conclusions:

This case report suggested that US-ESPB associated to intraoperative DEX cooperative sedation could represent a reliable strategy for anesthetic management in breast surgery.

Keywords:

Ultrasound-guided Erector Spinae Plane (US- ESP) Block, Dexmetomidine sedation, breast cancer surgery.