

PECS 1 AND PECS 2 IN BREAST SURGERY

Dott.ssa MARIANGELA SOTTOSANTI (1), Dott.ssa ROBERTA PUCE (2), Dott.ssa FIORENZA FAVA (1), Dott.ssa ADELE SGARELLA (3), Dott. ANDREA SCOTTI FOGLIENI (3), Prof. FRANCESCO MOJOLI (2)(4), Prof. GIORGIO ANTONIO IOTTI (2)(4), Dott. MARCO MAURELLI (1)

(1) IRCCS Policlinico San Matteo - Rianimazione Il cardio-polmonare, viale C. Golgi, 19, Pavia, Italia.

(2) IRCCS Policlinico San Matteo - Rianimazione Generale, viale C. Golgi, 19, Pavia, Italia.

(3) IRCCS Policlinico San Matteo - Dipartimento di Chirurgia Generale, viale C. Golgi, 19, Pavia, Italia.

(4) Università degli Studi di Pavia - Scuola di specializzazione in Anestesia Rianimazione Terapia Intensiva e del dolore, viale C. Golgi, 19, Pavia, Italia.

Argomento: Anestesia loco-regionale e analgesia

BACKGROUND: Breast cancer surgery can cause severe pain, especially in case of reconstruction with expanders or subpectoral prosthesis. Pectoral nerves blocks PECS 1 and 2 performed before surgical incision should provide the benefits of pre-emptive analgesia, i.e. better pain control, earlier mobilization, reduced opioid administration and prevention of chronic post-surgical pain.

OBJECTIVE: Evaluation of safety and efficacy of PECS 1 and 2 in the management of intra- and post-operative acute pain.

MATERIALS AND METHODS: We analysed data of 25 patients who underwent mastectomy ± reconstruction ± lymph node biopsy ± axillary dissection between 2016 and 2018. These patients underwent ultrasound-guided PECS 1 and 2 with levobupivacaine after induction of general anesthesia and received intraoperative analgesia with paracetamol ± morphine and postoperative intravenous PCA morphine, paracetamol and rescue ketorolac. We collected pain level (NRS, numeric ranking scale) at rest and during movement, amount of analgesic administered and adverse events 8,24 and 48 hours after surgery.

RESULTS: After PECS 1 and 2 12% of patients had pain immediately after awakening and 12% of patients had NRS≥4 8h after surgery. 24% and 28% of patients had significant pain at 24h at rest and during movement respectively. Among them 83% underwent reconstruction. In the post-operative period the amount of paracetamol administered was 3.2g/48h per patient, rescue therapy was requested 6 times in total by 5 patients,,morphine was used only during the first 24-48h hours (maximum 20 mg/48h) and 4 out of 5 patients who asked for ketorolac underwent breast reconstruction(tab.1).

CONCLUSIONS: PECS 1 and 2 provided effective pain control with low need for morphine and rescue therapy in the first 24 hours after all types of analised breast surgery. Breast reconstruction seemed to represent a risk factor for pain at 24h.