BREAST CANCER SURGERY AND A STANDARDIZED PERIOPERATIVE PAIN TREATMENT REGIMEN - OPPORTUNITIES FOR IMPROVEMENT

Martin Vedel Nielsen^{1*}, Mette Dam¹, Christian Kruse Hansen¹, Katrine Bayer Tanggaard¹, Thomas Fichtner Bendtsen², Jens Børglum¹
¹Department of Anaesthesiology and Intensive Care Medicine, Zealand University Hospital, University of Copenhagen, Denmark
²Department of Anaesthesiology, Aarhus University Hospital, Denmark
*Corresponding author: Martin Vedel Nielsen, Department of Anaesthesiology and Intensive Care Medicine, Zealand University Hospital, University of Copenhagen, Sygehusvej 10, DK-4000 Roskilde, Denmark. E-mail: martinvedel@gmail.com

Background

Postoperative pain (PP) after breast cancer surgery is a common problem and we wanted to evaluate the standard of care in regards to pain treatment regime for these patients. Particularly in regards to unilateral mastectomy and primary reconstruction (UMPR).

Methods

A two-year (2016-2017) retrospective study evaluating selected surgical breast cancer procedures at Zealand University Hospital was conducted. The study investigated if the patients had received the standardized multimodal analgesic regime consisting of preoperative peroral paracetamol, NSAIDs, gabapentin, dexamethasone and dextromethorphan and intravenous sufentanil 0.3-0.5µg/kg prior to emergence in the operating theater. Moreover, PP in the post anaesthesia care unit (PACU) measured by the highest patient reported numeric rating scale (NRS) 0-10 value and cumulated 24hrs postoperative opioid consumption.

All opioids were converted to peroral morphine equivalents (PME).
The local ethics committee refrained from a claim of approval for this qualitative assessment.

Results

111 patients were included in the analysis, NRS and PME averages are listed in Table 1. All patients received the standardized multimodal analgesic regime. Regarding the UMPR subgroup, we found 53% of the patients with a NRS score 5≤ in the PACU and 77% receiving PME within the first 24hrs at the ward.

Conclusion

Even though the patients received a multimodal analgesic regime, the majority of the patients had moderate to severe pain and a substantial need for long-lasting opioid. An improved and more standardized approach involving regional anaesthesia techniques is warranted.

Surgical breast cancer procedures	NRS	PME+S/24hrs (mg)	PME-S/24hrs (mg)
Mastectomy, unilateral	2.3	98.4	29.5
Mastectomy and primary reconstruction, unilateral	4.5	180.2	86.1
Mastectomy and primary reconstruction, bilateral	4.2	206.5	76.7
Primary reconstruction, unilateral	5	182	110
Secondary reconstruction, unilateral	2.3	108.8	25.3
Secondary reconstruction, bilateral	4.9	145.3	63.6

Table 1. Averages. NRS 0-10 (highest patient reported value in the PACU). PME+/-S: PME including/excluding intraoperative sufentanil delivered 30 minutes prior to emergence.