Case Series of Pecs-1 and Pecs-2 Peripheral Nerve Blocks for Adolescent Reduction Mammaplasty

Angela R Ingram MD, Franklyn Cladis MD, Mihaela Visoiu MD, Lorelei Grunwaldt MD
Department of Anesthesiology, Children’s Hospital of Pittsburgh of UPMC, Pittsburgh, Pennsylvania

INTRODUCTION

• Paravertebral blocks are commonly used as a component of multimodal analgesia for breast surgery, however, risk of pneumothorax, epidural spread of local anesthetic, and inadequate analgesia have helped the Pecs-1 and Pecs-2 peripheral nerve blocks emerge as a novel regional technique for postoperative pain in adults.

• In addition, the Pecs-1 and Pecs-2 not only block thoracic sensory nerves but also cover the brachial plexus innervation from medial and lateral pectoral nerves.

• This case series describes the Pecs-1 and 2 single injection nerve blocks in adolescent patients presenting for bilateral reduction mammaplasty and the impact on postoperative pain and opioid consumption as compared to their cohorts who received paravertebral single injection blocks.

METHODS

• Four adolescent females presenting for bilateral reduction mammaplasty between September 2016-November 2016 were prospectively selected for single injection Pecs1 and 2 blocks.

• Pecs1 and 2 blocks were performed using ultrasound guidance under general anesthesia prior to surgical incision.

• Pain scores and average opioid consumption at POD 0 and POD 1 were retrospectively compared to their cohort (matched for age, gender, ASA status) who received paravertebral single injection blocks.

RESULTS

Table 1: Comparison of pain scores and average opioid consumption at POD 0 and POD 1 of patients with Pecs 1 and 2 blocks or Paravertebral (PVB) single injection for reduction mammaplasty.

• Pecs 1 and 2 blocks provide similar analgesia to single injection paravertebral block when used as a component of multimodal postoperative pain management for reduction mammaplasty in adolescents.

• Pecs 1 and 2 blocks are a safe and effective alternative to paravertebral blocks in adolescents having reduction mammoplasty surgery.

CONCLUSION