Successful Paravertebral Nerve Block for Bilateral Mastectomies of the Patient with Friedreich’s Ataxia, Obstructive Sleep Apnea, and Traumatic Brain Injury

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Introduction: Friedreich’s ataxia is an autosomal recessive inherited disease that causes progressive damage to the nervous system. It manifests in initial symptoms of poor coordination such as gait disturbance; it can also lead to scoliosis, heart disease and diabetes, but does not affect cognitive function. Paravertebral Nerve Block (PVB) has been successfully utilized for postop analgesia of mastectomies in the past. Here, we would like to report a unique case of the patient with Friedreich’s ataxia, scoliosis, and OSA, who received both single shot and continuous infusion of PVB for elective B/L mastectomies and had no postop narcotic use with 0/10 pain until discharge.

HPI: 30 yo F with PMH of Friedreich’s ataxia, A. Fib. s/p cardioversion in 9/2015, on metoprolol, sotalol, ASA 81, cardiomyopathy, OSA on CPAP, scoliosis, h/o traumatic brain injury, seizures, and depression, came in for elective transgender surgery of B/L mastectomies

Exercise capacity: hand bike 5 miles/day, no chest pain/pressure. Wheelchair bound, unable to ambulate/bear own weight

ECHO: 12/28/16. Normal LV cavity size and wall thickness. Mildly decreased LV systolic function (EF 45%). Normal RV cavity size and systolic function. The RV systolic pressure is 26 mmHg. Mild mitral and tricuspid regurgitation.

Operative Course:

B/L T3 Paravertebral perineural catheters were placed preoperatively as shown in the picture.

Each catheter was bloused with 17ml of 0.5% ropivacaine.

Pt only received 75mcg of fentanyl and 160mcg of remifentanil for induction, and pt had continuous infusion of 0.1 mcg/kg/min of remifentanil intraoperatively as shown in the intraop anesthesia record.

In PACU, dislodgement of right PVB catheter was noticed and subsequently removed.

0.2% ropivacaine @ 8ml/hr was infused to left PVB catheter only postoperatively.

Only pain medication given postoperatively until discharge on POD #1 was PO acetaminophen.

Pt reported 0/10 pain in B/L chests until discharge.

Discussion: Even a single shot PVB with 17ml 0.5% ropivacaine at T3 level can provide excellent post op analgesia for mastectomy.
PVB would be excellent option of post op analgesia for patients with OSA and scoliosis to minimize respiratory depression.

Conclusion: Both single shot and continuous perineural infusion of paravertebral nerve block can offer excellent post op analgesia for mastectomies.

PVB should be strongly considered for patients with OSA and Friedreich's ataxia to minimize post op opioid consumption.