CERVICAL PLEXUS BLOCK FOR NECK DISSECTION-A CASE REPORT

Background and Aims:

Head and neck cancer surgery usually involve dissection of cervical nodes for purpose of clearance of malignancy. Patients may also present with recurrence in the cervical region which requires surgery. Here we present a case of post thyroidectomy recurrence scheduled for a right posterolateral neck dissection .

Methods:

A 70 year old patient weighing 42 kg presented to our hospital with neck node swelling following recurrence from Carcinoma of thyroid for which she had undergone thyroidectomy 8years back. She was on Thyroxine 100mcg supplementation .She was a known hypertensive on Amlodipine 5mg .She was also a known case of asthma on metered dose inhaler. She had been on ventilator following previous thyroid surgery due to exacerbation of asthma.Her Pulmonary function tests showed reversibility with obstructive pattern.Her routine blood investigations were within normal limits.Her room air saturation was 96%.

She was premedicated with 0.5mg Alprazolam on night before surgery and Pantoprazole on morning of surgery. In the receiving area of the operating room she received IV Midazolam 1mg.

Under strict asepsis, a superficial cervical plexus block was performed on the right side under ultrasound guidance using 5ml 0.5% Ropivacaine.Also an intermediate cervical plexus block was done on the same side with 10 ml of 0.5% Ropivacaine.She also received a superficial cervical plexus block on the opposite side with 5ml of 2% Lignocaine with adrenaline

She received 30mcg Dexmedetomidine and 30mcg Fentanyl during the surgery which lasted 90minutes . The procedure and postoperative

period was uneventful. She received IV Paracetamol as rescue analgesic.

Discussion

Superficial cervical plexus block causes anesthesia of the anterior triangle of the neck through the anterior primary rami of C2–C4. The individual nerves emerge as four distinct nerves from the posterior border of the sternocleidomastoid muscle. Blockade of the phrenic nerve does not occur after superficial cervical plexus block, but is common with deep cervical plexus block. Bilateral deep cervical block may create severe respiratory insufficiency due to diaphragmatic palsy and therefore is not recommended. In 2004, Telford and Stoneham⁵ systematized the nomenclature of cervical plexus block, classifying “intermediate” block as the injection of local anesthetic between the superficial and deep cervical fascia. The intermediate approach resulted in improved intraoperative compliance and cooperation on the part of patient. Neck dissection could be effectively completed under cervical plexus block-by combining superficial and intermediate technique so as to achieve motor block of the neck musculature and thus prevented exacerbation of asthma and need for postoperative ventilation.

Conclusions:

Combining a superficial and intermediate cervical plexus block is a viable alternative in high risk patients undergoing neck dissection

References

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