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Original Research Paper

Anaesthesiology

ANAESTHETIC MANAGEMENT OF A DIFFICULT AIRWAY IN LONG STANDING THYROID SWELLING POSTED FOR THYROIDECTOMY

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ABSTRACT **Introduction:** Appropriate airway management is an essential part of anaethesiologist's role. Securing airway, intubation and extubation requires skillful management and timely decision to reduce morbidity and mortality. Patients with large neck swelling pose airway challenges to anesthetist as there is decreased neck movements, decreased mouth opening, tracheal deviation and compression. **Case Report:** A 50 years old female patient weighing 50kg presented with swelling 10 x 8 cms in front of neck since 20 years diagnosed as diffuse goitre with nodular hyperplasia and posted for subtotal thyroidectomy. USG neck revealed enlarged bilateral lobes of thyroid gland, right lobe 10x3.5x8cms and left lobe 6x2.5x4cms. Patient was on T.Thyroxine 125mcg OD since 20yrs and was known hypertensive and diabetic on regular medications. Intraoperatively a difficult airway was anticipated and equipment necessary were kept ready.18G IV cannula was secured. All ASA standard monitors were attached. Patient pre-oxygenated via facemask and premedicated and induced with propofol, airway secured using ETT with external manipulation and pressure. Intra-op course uneventful. Patient was reversed and extubated following leak test and observed for signs of stridor and respiratory obstruction. Patient shifted to post-op ward and post-op analgesia given. **Conclusion:** Meticulous planning for managing difficult airway and perioperative care in planned extubation after confirming the absence of airway compromise is of prime importance. Difficult airway algorithms and experience of anesthesiologist plays a major role in management and outcome of procedure.

KEYWORDS : Difficult airway, thyroid swelling, thyroidectomy

INTRODUCTION

Appropriate airway management is an essential part of anaethesiologist's role. Securing airway, intubation and extubation requires skillful management and timely decision to reduce morbidity and mortality. Patients with large neck swelling pose airway challenges to anesthetist as there is decreased neck movements, decreased mouth opening, tracheal deviation and compression.

Case Report

A 50 years old female patient weighing 50kg presented with swelling 10 x 8 cms in front of neck since 20 years diagnosed as diffuse goitre with nodular hyperplasia and posted for subtotal thyroidectomy. USG neck revealed enlarged bilateral lobes of thyroid gland, right lobe 10x3.5x8cms and left lobe 6x2.5x4cms. Patient was on T.Thyroxine 125mcg OD since 20yrs and was known hypertensive and diabetic on regular medications. On examination patient had no pressure symptoms, no difficulty in supine position, no changes in voice.

Anaesthetic Management

Pre-op examination and investigations including thyroid functions done and were with in normal limits. ENT consultation was done- normal IDL. A difficult airway anticipated and equipment necessary were kept ready.18G IV cannula was secured. All ASA standard monitors were attached. Patient pre-oxygenated via facemask and premedicated with inj. glycopyrrolate 0.2mg and midazolam 1mg, inj fentanyl 100mcg and induced with inj propofol 100mg, followed by inj succinylcholine 75mg for intubation. In first attempt of direct laryngoscopy, larynx was visualized, deviated to left. Itubated with armored ETT 6.5mm cuffed, after slight right side external manipulation of larynx and fixed after confirmation of b/l air entry. Maintained on O2 + N2O + IPPV + inj atracurium + isofluorane. Intra-op course uneventful. Patient was reversed and extubated following leak test and observed for signs of stridor and respiratory obstruction. Patient shifted to post-op ward and post-op analgesia given.

DISCUSSION

Management of patient with goiter depends on size, vascularity, compression on surrounding organs and sub-sternal extension. This requires careful preanesthetic assessment of patient with symptoms and control of disease, blood investigations and imaging studies. Proper preop airway assessment, preparation, timely decision and skillful management reduces the morbidity and mortality in difficult airway cases.

Conflict Of Interest

The authors declare that they have no conflicts of interest.

Acknowledgements

The authors declare that they have no competing interest.

CONCLUSION

Meticulous planning for managing difficult airway and perioperative care in planned extubation after confirming the absence of airway compromise is of prime importance. Difficult airway algorithms and experience of anesthesiologist plays a major role in management and outcome of procedure. The early identification of all probable outcomes and prompt mobilization of resources allowed a favorable outcome in this case

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