

Contribution Of Tomographic Imaging In Expected Difficult Intubation

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Abstract

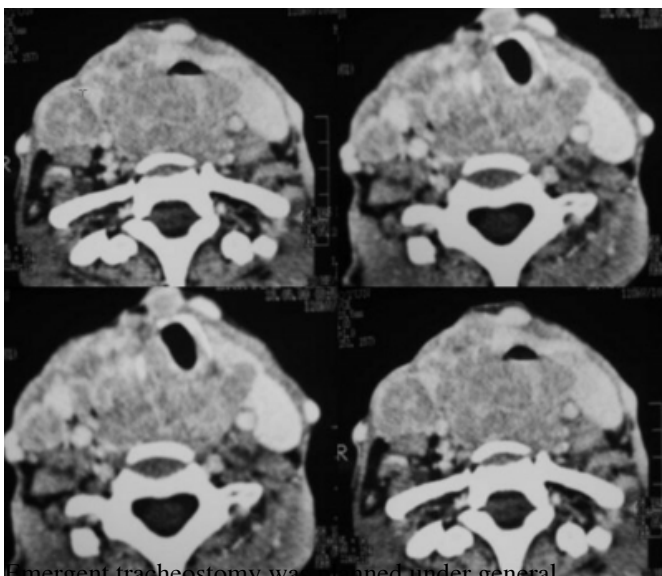
INTRODUCTION

The problems in airway management (inadequate ventilation, difficult intubation) are commonly responsible for the poor outcomes of anesthesia. Repeated multiple translaryngeal endotracheal attempts under direct imaging may lead to acute edema and make ventilation impossible.

CASE REPORT

A 68 year-old woman who was operated 3 times for a goitre was admitted to our hospital because of progressive dyspnea and hoarseness for one month. During the physical examination orthopnea, tachypnea and a stage IV palpable mass was detected in the thyroid locus. Her periferal O₂ saturation was 90 %. Computerized Tomography (CT) showed a mass extending from the pirforme sinus to the mediastinum, invading the trachea and thereby narrowing the airway excessively.

Figure 1



Emergent tracheostomy was planned under general anesthesia. After preoxygenation, manuel ventilation was

tested with 50 µgr fentanyl + 75 mg propofol. Laryngoscopy was performed with 50 µgr fentanyl + 100 mg propofol without using a muscle relaxant and preserving superficial respiration. As predicted from the CT we observed the anatomical impairment, invasion and paralysis of chorda vocalis. At the chorda vocalis level the stylet was with drawned from the No. 20 spiral wired tube which was then moved forward by fonation control. Intubation was checked and ventilation was successful. Bleeding and pneumothorax did not develop.

DISCUSSION

Indifficult intubation cases caused by mass impression, tracheal shift, tracheomalacia, and recurrent laryngeal nerve paralysis with chorda vocalis invasion can often be determined with CT. In such cases, careful induction and spontaneous ventilation can often facilitate successful intubation.

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References

1. Mallampati SR. Airway management. In:Barash PG, Cullen BF, Stoelting RK (ed): Clinical Anesthesia. Lippincolt-Raver, Philadelphia 1997;573-23
2. Benumorf JL, Scheller MS. The importance of transtracheal jet ventilation in the management of the difficult airway. Anesthesiology. 1989;71:769
3. Chartes P. What future is there for predicting difficult intubation. Editorial II Br.J.Anaesth. 1996;77:309

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