Cases requiring care during intubation for tracheal perforation: Larynx cancer patients who underwent radiotherapy

Ozkan Onal, Emine Aslanlar, Cagdal Elsurer, Aysun Ozdemirkan and Jale Bengi Celik
Selcuk University, Turkey

Aim: The aim of this report was to suggest that the possibility of tracheal perforation risk associated with radio necrosis should be considered in the intubation of larynx ca patients who underwent radiotherapy and care should be taken during intubation procedure.

Case: A 52 year old male patient diagnosed with larynx cancer who refused to undergo operation received chemotherapy and radiotherapy. Four months after treatment, trachoestomy was planned due to difficulty in respiration. Patient had cachectic appearance and at the onset of operation, saturation was 82, blood pressure, 140/80, and pulse 110. In addition, patients had anaerobic smell. In anesthesia induction, 2mg/kg propofol, 0.6mg/kg rhocuronium and 1.5mcg/kg fentanyl were administered. With masked ventilation, saturation value was increased from 82 to 98 and suspension blade was placed. In endoscopic examination, it was observed that in subglottic region, right side of treachea was necrotic. While necrotic areas were being cleaned, 100% O₂ 18 lt/min. flow insufflation prevented desaturation of the patient. During skin incision for tracheostomy, intubation was conducted carefully in accompaniment to endoscopy. At the level of 2nd and 3rd rings of trachea, necrotic areas at the right lateral were excised and cannula was placed. Patients was awakened without any problems and transferred to recovery unit.

Discussion: Radiotherapy has been used in the therapy of larynx carcinoma for over 70 years. One of the most common complications of this method, used in the treatment of head and neck neoplasms is radionecrosis, which may emerge in a large time period ranging from 1 year to 50 years. In the literature, this period was reported as respectively 44 and 50 years in two cases defined as delayed type complications while in the present case, it was four months. Another complication of radiotherapy is that it leads to fibrosis where it has been administered. When its administered to the neck, movement restriction develops due to widespread fibrosis and adhesions. In these patients, direct laryngocopy and airway opening is usually difficult. In patients with larynx ca, while it is easy to predict difficult airway caused by fibrosis due to radiotherapy, it may be more difficult to predict the risk of tracheal perforations, which is a complication associated with fibrosis.

Conclusion: In patients with larynx ca, who underwent radiotherapy, intubation should be carried out carefully. Necrotic areas developing due to radiotherapy may lead to tracheal perforation during intubation. And tracheal rupture may be added to already present difficult airway problem.

Biography
Ozkan Onal has completed his medical education at Gazi University Medical Faculty and he was specialized in anesthesiology in Hacettepe University Medical Faculty. He has more than 15 publications in reputed journals in the field of anesthesia.

drozkanonal@gmail.com

Ozkan Onal et al,
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