**Título: A difficult airway challenge – case report**

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Resumo:

Background: Deep neck infections (DNI) present challenging airways for an anesthesiologist. Although various techniques are available to secure the airway, their success in DNI have not yet been established. A clear algorithm with multiple airway management plans is critical.1

Case report: A 72-year-old obese female, presented with a progressive submandibular swelling following dental infection. She was classified as ASA II E. The diagnosis of Ludwig’s Angina was postulated by clinical signs and the evidence of infection from parapharingeal space until the hyoid bone and she was scheduled for emergency drainage of the abscess. Difficult airway was identified during the anesthetic examination. A nasotracheal awake fiberoptic intubation was initially planned. Patient was sedated with a perfusion of remifentanil and local anaesthetic was applied to the nasal mucosa. Several attempts to negotiate the flexible tip of the fibrescope across the glottis were unsuccessful and whenever the tip contacted the mucosa a progressive edema and a blurred vision occurred. McGrath video laryngoscope was considered as plan B, although surgical team was prepared for tracheostomy. Image of the epiglottis was obtained and with bougie, tracheal intubation was possible on first attempt. Patient was kept in spontaneous ventilation until airway was secure. There were no complications during the surgical act. She remained mechanically ventilated in the intensive care unit.

Discussion: DNI are potentially lethal conditions because of their tendency to cause edema and obstruction of the airway and may arise as a consequence of airway management mishaps. Although awake fiberoptic nasotracheal intubation may be one of the preferred techniques to secure airway, it requires experience. On the other hand, video laryngoscopy technique could be also an acceptable alternative. Our case pretends to illustrate the importance of having a prepared plan B and how clinical judgment could be critical for selecting of the appropriate method for airway intervention.The choice of the safest technique to approach airway in DNI should be based on clinical signs, technical conditions available and the urgent need to preserve the patient's life. The presence of an experienced team and having a backup plan should be our focus.

References: 1.Medicine (Baltimore). 2016 Jul; 95(27): e4125.

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