

# The video laryngoscopy in patient vigil. clinical case

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## Case report

Patient 29 years of age presents with thermal burns on face, neck, thorax and anterior abdomen evolution. Without 48 hours of personal or family medical history.

Normal vital signs PA 120-70, FC 75 LPM, FR 14.

Laboratory basal normal entry, Rx. Normal front chest. No further studies are required. EGC normal cardiovascular examination without risk factors for aspiration.

## Physical exam

Height 175 cm, weight 70 kilos.

Located in floor burns of the mouth, circular neck and anterior chest and abdomen. (SCQT = 7%). Depth: "A" superficial Type "B" intermediate ranking Benaim. Gravity Group: Group II Moderate<sup>1</sup> (Figure 1). Rest of the normal physical examination.



**Figure 1** Physical examination.

**Review of the air:** Presence of beard, difficulty opening the mouth (pain), floor of the mouth inflamed, anterior and lateral surface of the neck that prevents compromised flexo-extension movements, light gold inflammatory changes in pharyngeal tissues, no dysphagia, hoarseness or dysphonia, no additional predictors of difficulty are recorded.

## Strategy air:

- First plan: gold tracheal intubation vigil, spontaneous ventilation.
- Second plan: support of ventilation / oxygenation supraglottic second-generation device. ® ProSeal (LMA), Supreme ® (AML), I Gel ® (Intersurgical).

- Third plan: support of ventilation / oxygenation simple facial mask, gold pharyngeal device, unlocking maneuver optimization, optimal neuromuscular relaxation, two operators, consider alternative supraglottic device. Fourth plan, if necessary glottal device is below.

**Clinical intervention:** Patient enters the operating room, served fast (6 hours for solids, clear liquids two hours) for scheduled toilette surfaces committed by burns surgery under general anesthesia. It is proposed and informal strategy, the patient agrees to cooperate, instructions specific. In room provide pre intravenous anesthesia is placed with sun physiological maintenance and Midazolam 0.04 mg / kilo IV, supplementary O<sub>2</sub> inspired fraction of 50% as indicated mask.

In operating room in semi-sitting position is monitored with pulse oximetry, ECG monitor two derivatives and noninvasive blood pressure, supplemental oxygen is maintained with nasal cannula. Prior administration of atropine IV, topical anesthesia begins with 2% lidocaine spray for 20 minutes (Figure 2) IV sedation with remifentanyl in volumetric pump, progressive dose up to clinical status Ramsay 3 2% topical lidocaine administered with spray technique as you go with AML MADgic® 600 device under direct vision with videolarigoscopiaGlidescope®AVL System.<sup>2</sup> A first level of instillation in the pharyngeal portion of the tongue and glosso epiglottic fossa (Figure 3) and a second level of the glottic inlet (Figure 4). Finally with the sedated patient, partner, ventilating spontaneously videolarigoscopia gold and tracheal intubation is performed under topical anesthesia smoothly on the first attempt (Figure 5 & 6). Capnograms consecutive normal morphology and EDNTidal CO<sub>2</sub> of 37 mmHg were recorded. No periods of desaturation arterial durante the procedure or hemodynamic variations in excess of 20% of baseline records were recorded.

As in all cases maintain our existing alternatives or backup plans and strategies adopted Difficult Airway Society UK (DAS) 4 plans, where only have as primary objective tracheal intubation gold in the

first plan or Plan “A”, being the remaining Plan “B”, “C” and “D” special actions oriented to sustain the successful oxygenation of the patient.<sup>3</sup>



**Figure 2** Topical anesthesia begins with 2% lidocaine spray for 20 minutes.



**Figure 3** A first level of instillation in the pharyngeal portion of the tongue and glosso epiglottic fossa.



**Figure 4** Second level of the glottic inlet.

## Discussion

He discussed the vigil with spontaneous ventilation approach versus anesthetized with abolition of ventilation and intubation tracheal gold, or a supraglottic device second generation. He chose the

first option mentioned. The vigil approach to conservation ventilation remains a technique that generates well instrumented conditions and levels of security that are essential for the successful treatment of difficult airway advance.



**Figure 5 & 6** Videolaringoscopia gold and tracheal intubation.

Classically, the approach to the patient high anticipated risk, is performed vigil in spontaneous ventilation and a broncofibroscopico, this technique being the gold standard, however the emergence of new devices have encouraged doctors to try different options to this classic. Trachway®<sup>4</sup> and Videolaringoscopia<sup>5</sup> they have been shown to be successful options.

The decision of which device is to be used depends on the patient's characteristics, experience, skill and clinical judgment of the operator and institutional availability. Guide propose control action of these situations are a videolaringoscopia and publications refer to the videolaringoscopia is useful.<sup>6</sup> It is essential to maintain a level of information for the patient so that accepts the proposed technique, is shown calm and cooperative. It should be comfortable and liveable for patient and operator. In this sense the pharmacological management

charge and topical anesthesia such an important role as the device that is selected to intubate. The conservation of spontaneous ventilation and defence reflexes of the airway are two elements that have to take into account.

## Conclusion

The videolaryngoscopy is presented as an interesting option for addressing the patient's airway vigil in spontaneous ventilation and adds to the range of options and techniques available to control complex situations.

Clinical experience and judgment of the operator are essential for successful treatment. Operated from a strategy (set of plans) is another interesting recognized to enhance the safety and efficacy of these patients tool.

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## Conflicts of interest

The authors declare no conflict of interest.

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