



A COMPARISON OF FELINE AIRWAY MANAGEMENT DURING ANESTHESIA WITH AN ENDO-TRACHEAL TUBE OR THE V-GEL LARYNGEAL MASK

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Airway management is an important aspect during general anesthesia, however classical endo-tracheal intubation in cats incidentally has severe adverse effects⁽¹⁾. Recently a new form of feline airway management has been introduced, i.e. the feline laryngeal mask airway; V-gel.

In theory the V-gel is easier to use and leads to less upper airway discomfort in cats after anesthesia compared to the endo-tracheal tube. This study investigated whether these theoretical benefits really apply to the clinical use of the V-gel.

A prospective randomized blinded study design was used. 19 cats were scheduled for elective surgery. After induction the animals were 'intubated' with either a cuffed endo-tracheal tube or a V-gel. During the maintenance phase leakage of isoflurane from the airway of the cat was measured with a dedicated gas analyzer. During recovery the respiratory pattern, the occurrence of stridor, dyspnea and coughing was scored for all cats. In addition the cat owners filled out a questionnaire relating to upper airway discomfort of the cat during the first 24 hours post anesthesia.

Preliminary data show that

- 1) creating a secure airway is faster with the V-gel compared to the endo-tracheal tube,
- 2) there is no difference in leaking of isoflurane between the two airway devices,
- 3) Upper airway recovery scores are better in the V-gel group,
- 4) upper airway discomfort during the first 24 hours post anesthesia is less in the V-gel group.

In conclusion the V-gel provides a safe and practical alternative to the classic cuffed endo-tracheal tube and might provide better outcomes for the patient with respect to upper airway discomfort.

References:

1. Brodbelt D. Feline anesthetic deaths in veterinary practice. *Top Companion Anim Med* 2010;25(4):189-94.