

# Unexpected difficulties during intubation: there is always something new and it could happen to you

## Abstract

A case report of an unexpected and unexplained difficult intubation due to limited mouth opening that did not exist preoperatively.

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## Introduction

Predicting difficult tracheal intubation is still a matter of debate among anesthesiologists, with each individual score or sign having a poor predictive value.<sup>1</sup> In the present case report we present a case of difficult tracheal intubation that could not have been predicted with any score or clinical sign used for preoperative airway assessment.

## Case report

A 39 year old woman ASA I, 75Kg was admitted for laparoscopic cholecystectomy. Preoperative assessment of airway revealed no abnormalities with a Mallampati I score with a mouth opening of at least 30mm. She referred no previous operations. After sedating the patient with intravenous midazolam 2 mg, anesthesia was induced using 200mg propofol and 50mg of rocuronium bromide and fentanyl 5µg/Kg. Mask ventilation was easy and it was performed for 90 seconds with 10L/min of oxygen and tracheal intubation was initiated. When manual pressure was applied to open the mouth, the opening decreased to about 15mm, making it impossible to insert a Machintosh 3 blade. Subsequently an Airtraq No 3 airway device was used but one attempt to intubate her was unsuccessful so an elastic gum bougie was used through the airtraq. A No 7 endotracheal tube was railroaded and the patient was successfully intubated. Immediately after intubation and 30 minutes later we measured again the mouth opening and it was still 15mm. Surgery was uneventful and anesthesia was maintained with desflurane 5% in 50% N<sub>2</sub>O. After reversing the neuromuscular blockade using 4mg/kg suggamadex, she was extubated and the mouth opening returned to the preoperative value.

## Discussion

Searching Pubmed we found case reports of limited mouth opening only associated with masticatory muscle tendonaponeurosis hyperplasia (MMTAH), a disease characterized by limited mouth opening due to contracture of the masticatory muscles as a result of tendon hyperplasia and aponeuroses.<sup>2-4</sup> in which the degree of mouth opening can markedly decrease after anesthesia induction.<sup>5</sup> During the preoperative interview of the patient she did not refer anything and her clinical examination both preoperative and postoperative did not reveal any signs of MMTAH.

## Conclusion

There is no other obvious explanation, and the message is clear: keep in mind that tracheal intubation may be unexpectedly difficult, for many reasons.

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## Conflicts of interest

The authors declare there is no conflict of interests.

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