

# The use of the CTrach Laryngeal Mask Airway™ in Pediatric Patients

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**Introduction:** Recent studies have described the successful use of the CTrach laryngeal mask airway (LMA) in adult patients and in unanticipated difficult intubation scenarios.<sup>1,2</sup> Currently, the producers of the CTrach LMA, LMA North America, provide it in three sizes 3, 4 and 5. We describe the used of the CTrach LMA in pediatric patients, as an alternative way of intubation.

**Description:** Our patients were eight children, ages 11 to 17 years old, mallampati score 1 to 2, thyromental distance 6 cm, average BMI 22.6 scheduled to undergo elective surgery. After pre-medication with oral midazolam, the patients were taken to the operating room where inhalation induction and placement of a peripheral IV followed. Glycopyrrolate, fentanyl and rocuronium were administered. Three minutes after the administration of the muscle relaxant, placement of the CTrach LMA took place. Once successful ventilation was achieved, the screen of the CTrach LMA was attached. In all our patients, ventilation and oxygenation was possible during visualization of the vocal cords. It is important to mention that we used a CTrach sponge swab lens cleaner to improve our intubation success.<sup>3</sup> In every case, a reinforced endotracheal tube or a parker endotracheal tube was placed without complications. The time required for the placement of the CTrach LMA was approximately 10 to 15 seconds and the time required for intubation after CTrach LMA placement was between 1 minute 41 seconds and 2 minutes 30 seconds. No blood was seen over the endotracheal tube after extubation and none of our patients reported sore throat postoperatively.

**Discussion:** This new airway device is proving to be a safe and effective alternative to conventional laryngoscopy since ventilation, oxygenation and intubation was successfully achieved in all our patients. Although we did not have the possibility to use the CTrach LMA in the unsuspected difficult airway scenario, the ability to achieve ventilation during vocal cord visualization makes this airway device unique and could be useful in the management of pediatric patients with congenital airway anomalies. In addition, the CTrach LMA decreases the need of neck extension during intubation. This may prove especially useful in children with trisomy 21, at risk for unstable cervical spine and difficult ventilation

due to macroglossia. We believe that the development of smaller size CTrach LMAs must be undertaken to further evaluate this airway device in children weighing less than 30 kg.

**References:**

1. [Liu EH](#), [Goy RW](#), [Chen FG](#). The LMA CTrach, a new laryngeal mask airway for endotracheal intubation under vision: evaluation in 100 patients. *Br J Anaesth* 2006 Mar; 96(3):396-400.
2. [Liu EH](#), [Goy RW](#). The LMA CTrach for unanticipated difficult intubation. *Anaesthesia*. 2006 Oct; 61(10):1015.
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