

A clinical comparison of the disposable Ambu AuraOnce™ and the LMA Unique™

Gertrud Andersen, MD¹, David Tran-Van, MD², Yann Hervé, MD², Jette D. Brandt, CRNA¹

¹ Herlev University Hospital, Herlev, Denmark

² Hôpital d'Instruction des Armées Robert Picqué, Bordeaux, France

Introduction and aim of study

The Ambu AuraOnce (formerly called the Ambu laryngeal mask) is a disposable supraglottic airway device. In this randomised, single-blind, multi-centre study its performance was compared with the LMA Unique.

Methods

65 adult patients scheduled for an i.v. anaesthesia without muscle relaxants were included. After induction of anaesthesia a size 3 to 5 Ambu AuraOnce (group 1) or LMA Unique (group 2) was inserted in accordance with the manufacturer's recommendations.

Insertion success rate and time, peak airway pressure, oropharyngeal leak pressure, fiberoptic view as well as per and postoperative (sore throat, dysphonia or dysphagia) side effects were recorded.

Results

Five patients were excluded, leaving 30 patients in each group. First insertion success rates (76.6 vs. 86.7%) and insertion time in first attempt (32.9 ± 9.4 sec vs. 34.1 ± 11.7 sec) were comparable in the two groups.

Oropharyngeal leak pressure

	AuraOnce mean(SD)	LMA-U mean(SD)	p value
Airway pressure before test (cm H ₂ O)	15. (2.7)	14.5 (3.4)	0.485
Airway leak pressure (cm H ₂ O)	21.8 (4.3)	18.7(4.7)	0.011
Difference (cm H ₂ O)	6.8 (5.4)	4.20 (3.8)	0.036

Fiberoptic placement

Fiberoptic view	AuraOnce		LMA-U	
	n	%	n	%
VC not seen	1	3.3	2	6.7
VC and anterior part of E	16	53.3	12	40
VC and posterior part of E	9	30	12	40
Only VC	4	13.3	4	13.3

VC: Vocal cords E: Epiglottis (p=0.643)

There was no difference regarding per and postoperative side effects.

Conclusion

The Ambu AuraOnce™ and LMA Unique™ are equal in performance regarding handling and side effects. A higher oropharyngeal leak pressure in the Ambu AuraOnce™ group suggests a better airway sealing.

Ambu A/S, Denmark has sponsored the investigation.



Ambu AuraOnce™



LMA Unique™