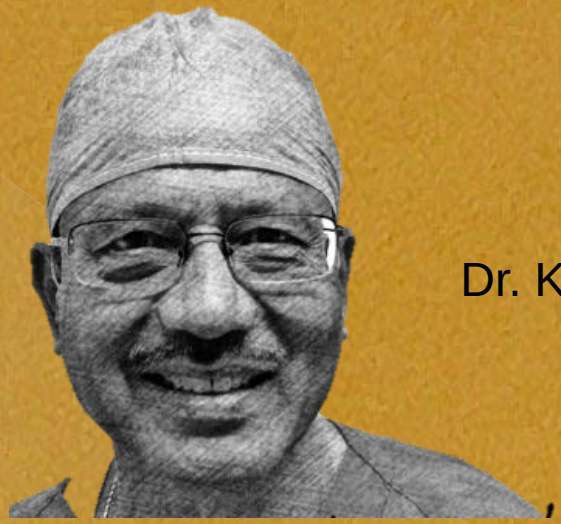
Baska Mask

Una nueva máscara laríngea



Dr. Kanag Baska

Dr Roberto García Aguado (MD)

Servicio de Anestesia, Reanimación y Tratamiento del Dolor
Consorcio Hospital General Universitario Valencia

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Valencia 26 de Noviembre de 2013

British Journal of Anaesthesia 106 (2): 266–71 (2011)
Advance Access publication 4 December 2010 · doi:10.1093/bja/aeq339

BJA

RESPIRATION AND THE AIRWAY

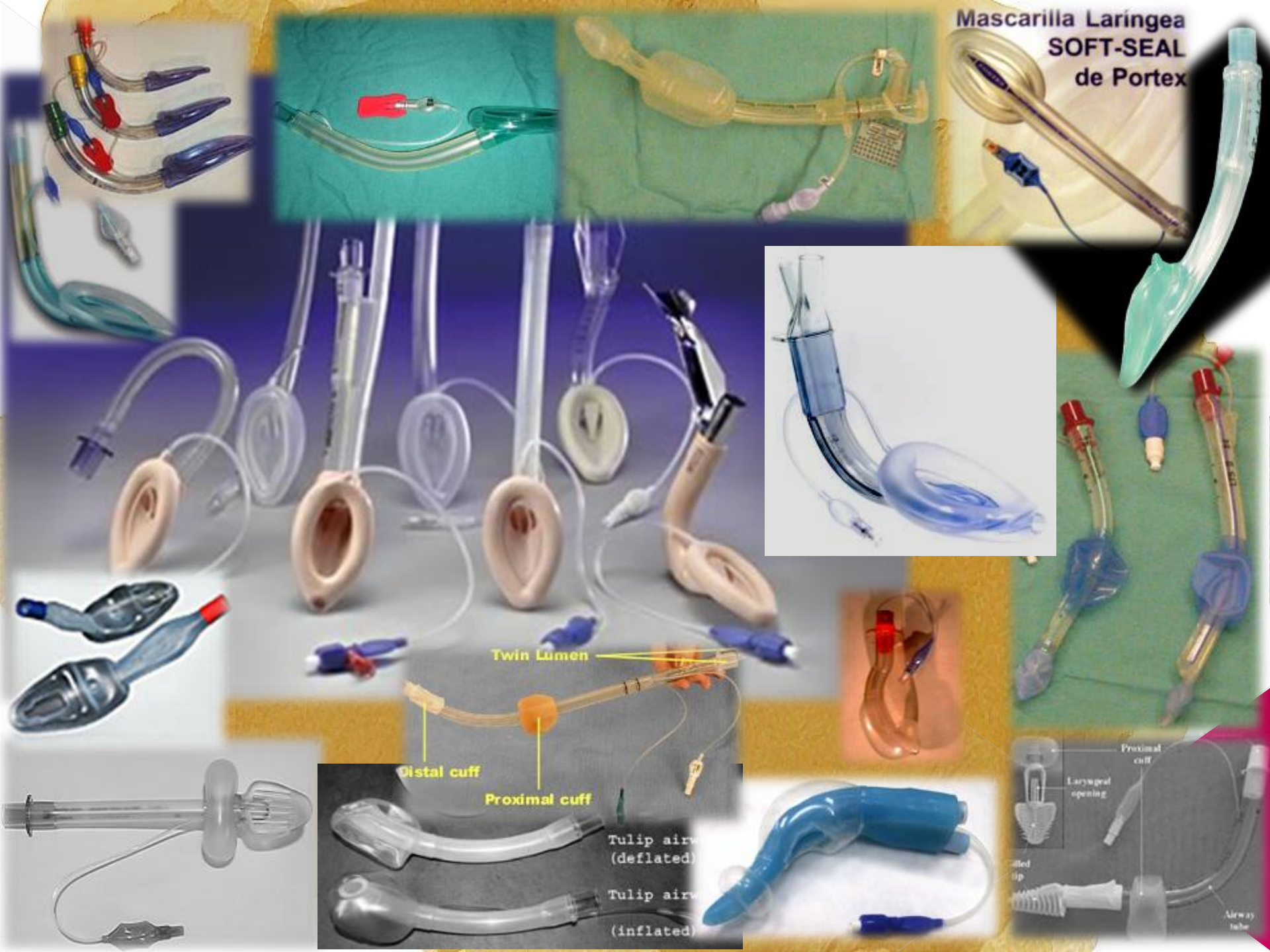
National census of airway management techniques used for anaesthesia in the UK: first phase of the Fourth National Audit Project at the Royal College of Anaesthetists

N. M. Woodall* and T. M. Cook

Norfolk and Norwich Hospital, Norwich, UK and Royal United Hospital, Bath, UK

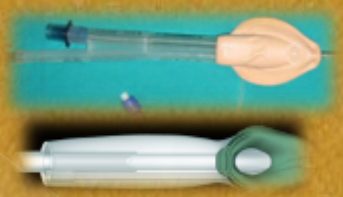
* Corresponding author. E-mail: woodall@neat-course.org.uk, nicholas.woodall@nnuh.nhs.uk

Results. Data were received from all 309 hospitals. The number of general anaesthetics reported in the 2 weeks was 114 904 giving an estimate of 2.9 million annually. Eighty-nine per cent of returns were reported by the LR to be 'accurate' or 'a close estimate' (an error of <10%). The primary airway management device for general anaesthesia was a supraglottic airway in 64 623 (56.2%), a tracheal tube in 44 114 (38.4%), and a facemask in 6167 (5.3%).


Mascarilla Laríngea
SOFT-SEAL
de Portex
Twin Lumen
Distal cuff
Proximal cuff
Tulip airw
(deflated)
Tulip airw
(inflated)
Proximal
cuff
Laryngeal
opening

Nuevos DEG o 2ª generación

- 5 para separar el tracto respiratorio y digestivo
  - **MLP**
  - **I-gel**
  - **MLSupreme**
  - **Tubo laríngeo (LTS II) y la version desechable (LTS-D**



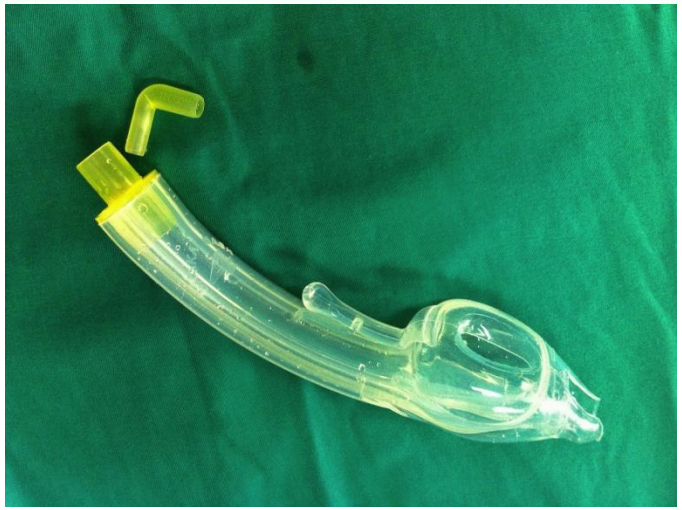
- **1 el SLIPA para actuar como reservorio**

A Proposed Classification and Scoring System for Supraglottic Sealing Airways: A Brief Review

Donald M. Miller, MB, ChB, FFA (SA), PhD

Department of Anaesthetics, Guy's, King's and St. Thomas' School of Medicine, King's College, London

The Baska Mask



The 3rd Generation Supraglottic Device

Rashid M Khan
Sr. Consultant
National Trauma Centre
Muscat
Sultanate of Oman

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CONSORCI
HOSPITAL GENERAL
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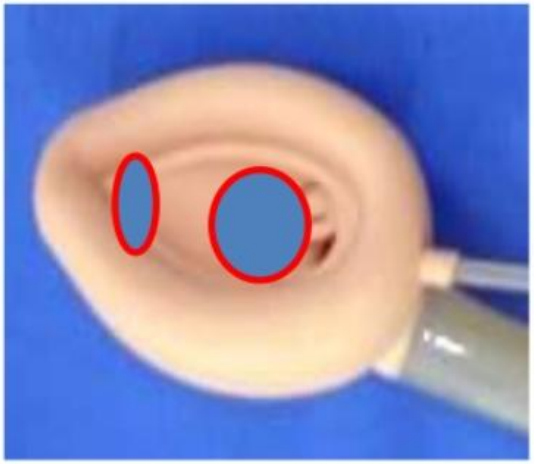
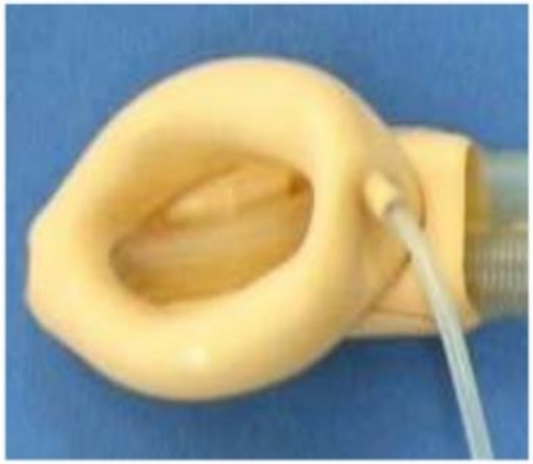
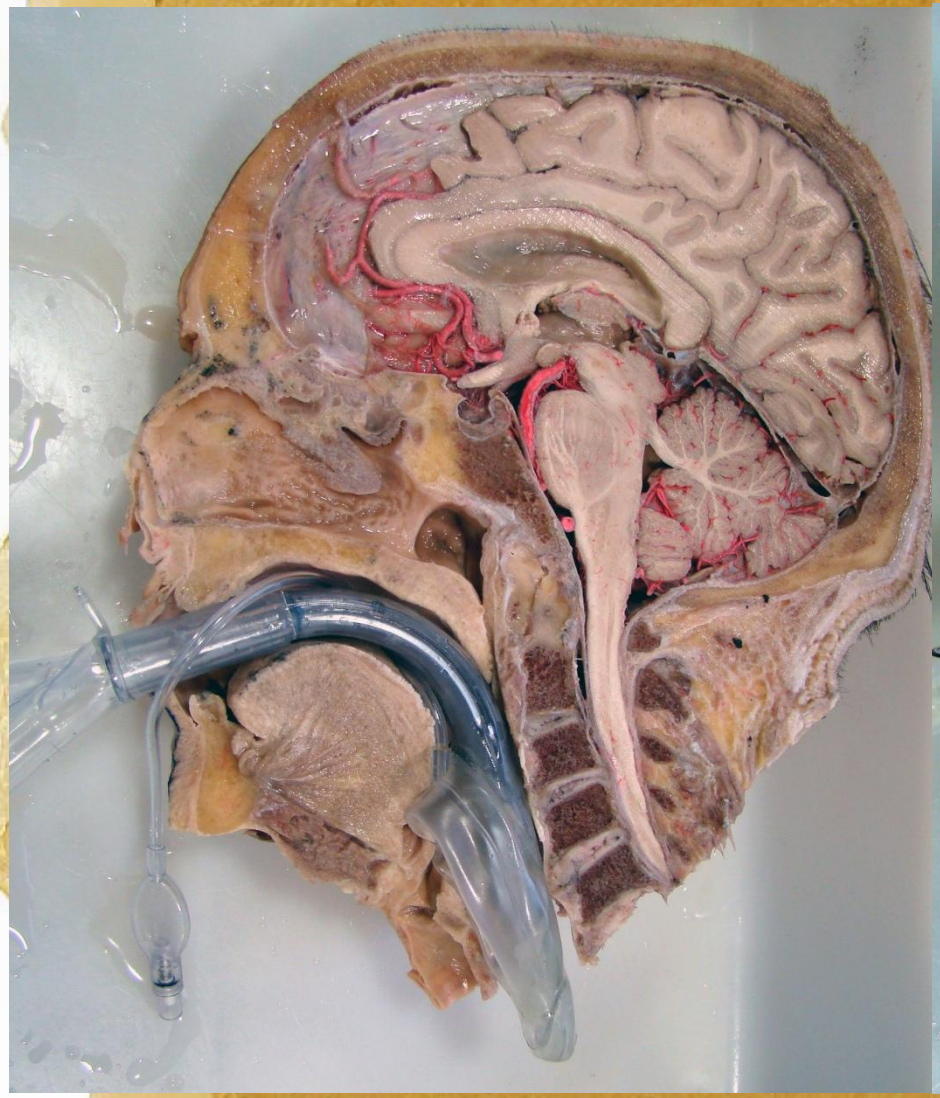
VALÈNCIA

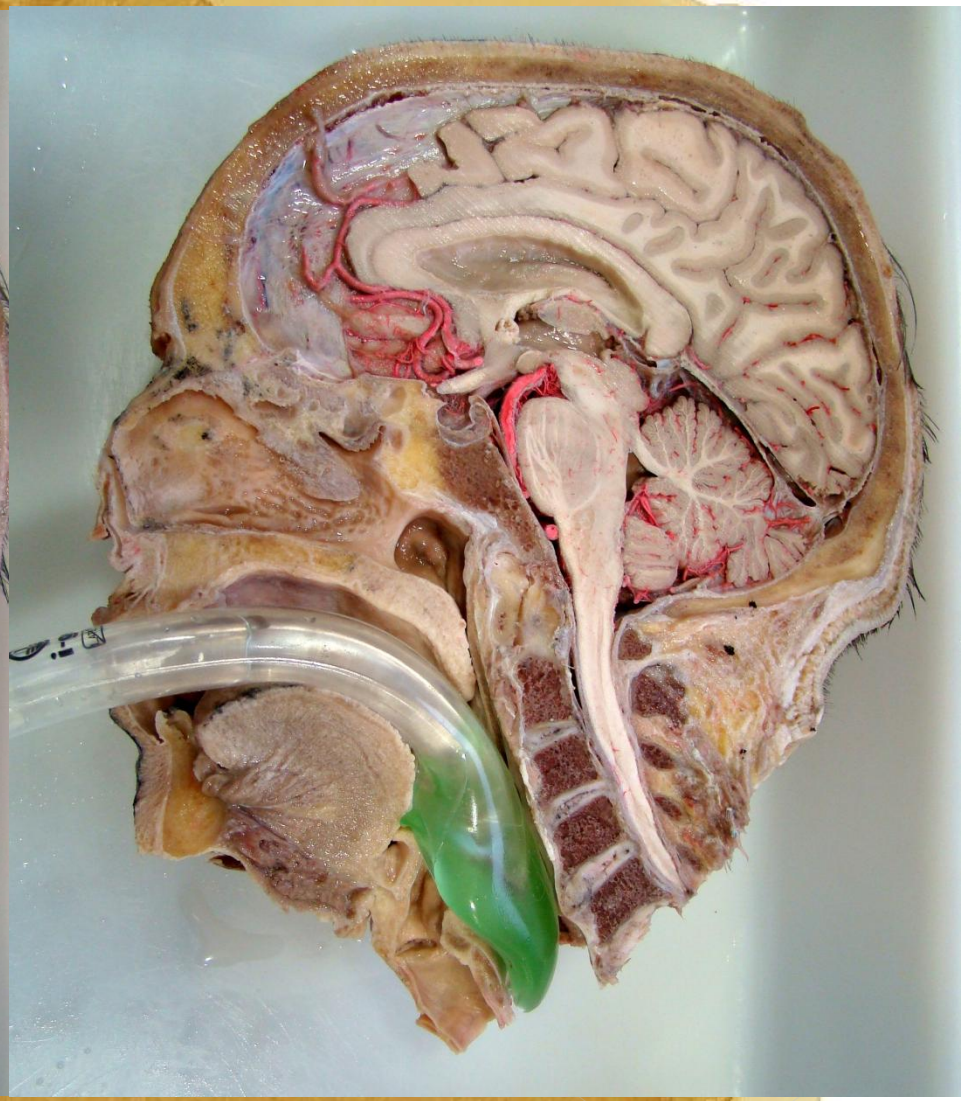
Limitation No 1

The bowl of the LMA/ Proseal/ Fastrach/ Air Q is large and in 6-8% of patients it may incorporate the esophageal as well as glottic opening predisposing to aspiration of regurgitated material.









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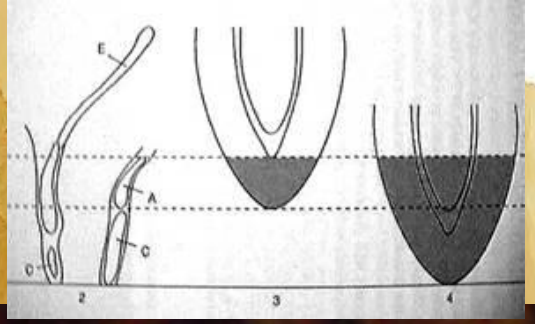
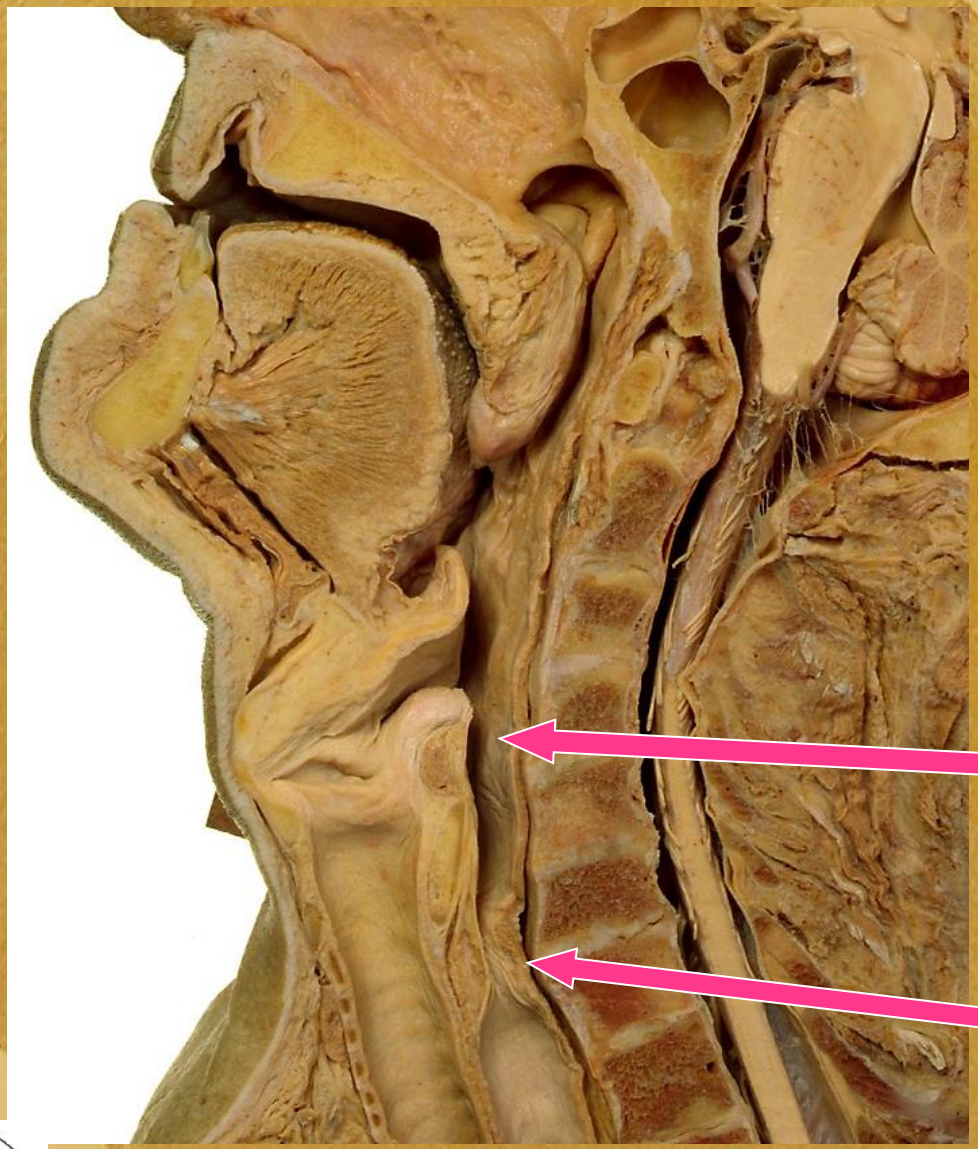
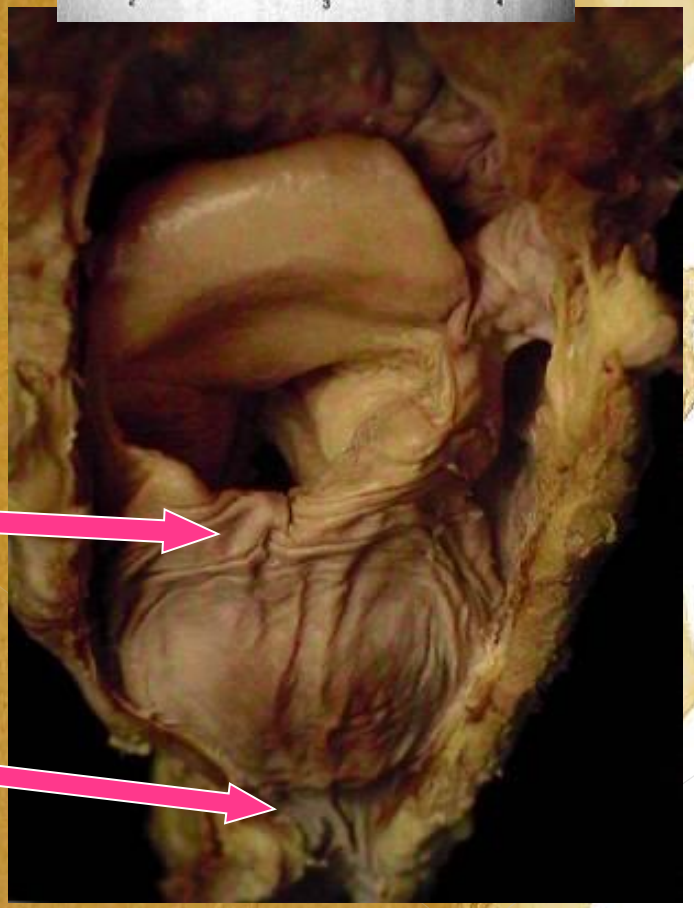
Valencia 26 de Noviembre de 2013







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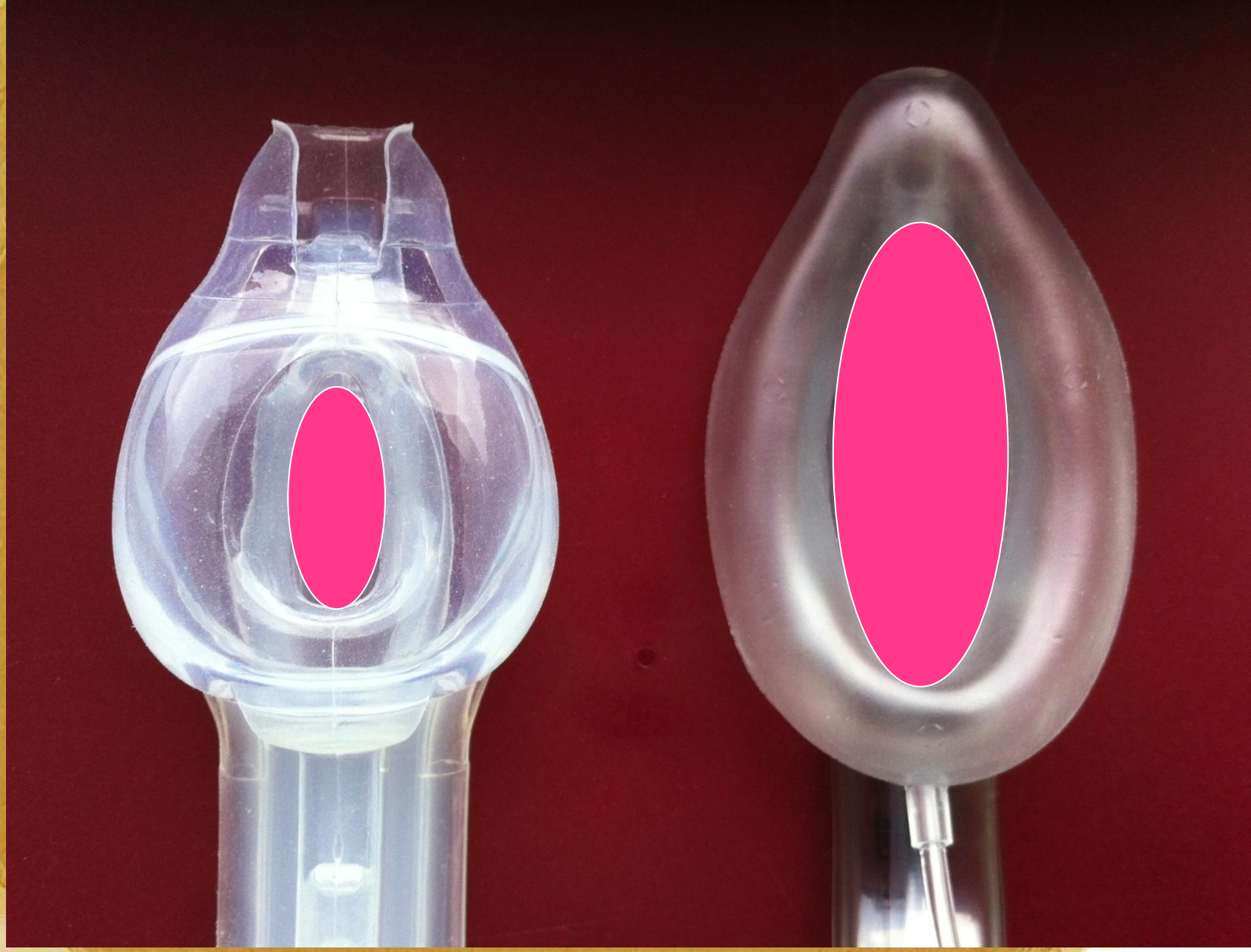
Valencia 26 de Noviembre de 2013



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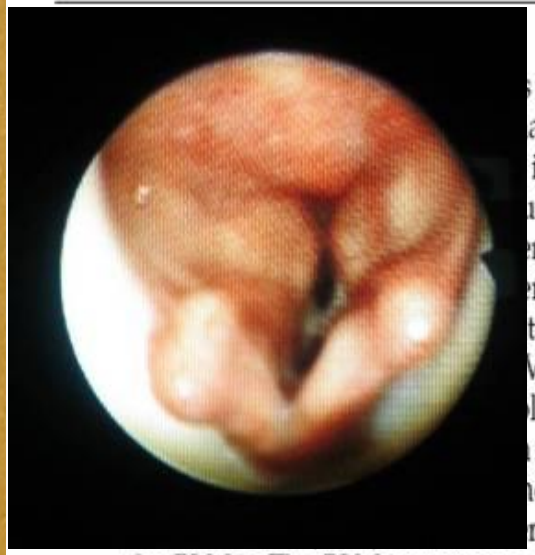
Valencia 26 de Noviembre de 2013

Maximum Minute Ventilation Test for the ProSeal™ Laryngeal Mask Airway

Michael S. Stix, MD, PhD, and Cornelius J. O'Connor Jr., MD

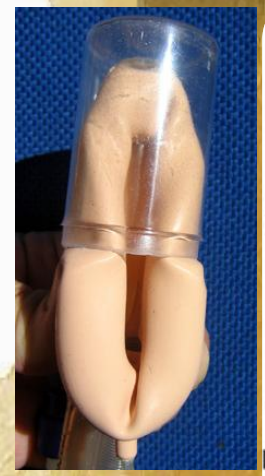
Department of Anesthesiology, Lahey Clinic, Burlington, Massachusetts



s of the ProSeal™ la-
at it can cause upper
is correctly inserted
sed a hyperventila-
ntilation test (MMV
r airway obstruction
t was briefly hyper-
V value equal to 4 ×
lume). MMV values
and men over 6 mo.
in 17 of 317 pa-
re due to insertion of
the PLMA. The PLMA was removed in seven of 317 (2.2%) patients. The most common cause of upper airway obstruction due to the PLMA was laryngeal obstruction. This refers to compression of supraglottic and glottic structures with resulting narrowing and compromise of the airway. A second, much less common, form of airway obstruction was bilateral cuff infolding with or without downfolding of the epiglottis. Finally, we discuss the margin of safety for minute ventilation, defined as the excess of the MMV over and above basal minute ventilation requirements for the patient. With critical MMV, the margin of safety is drastically reduced or nonexistent.

(Anesth Analg 2002;95:1782–7)

Liew EC, Alsaleem AS, Joffe AM. Vocal cord view may be obscured by overinflation of the Proseal-LMATM. Anaesthesia 2009;64:578-9



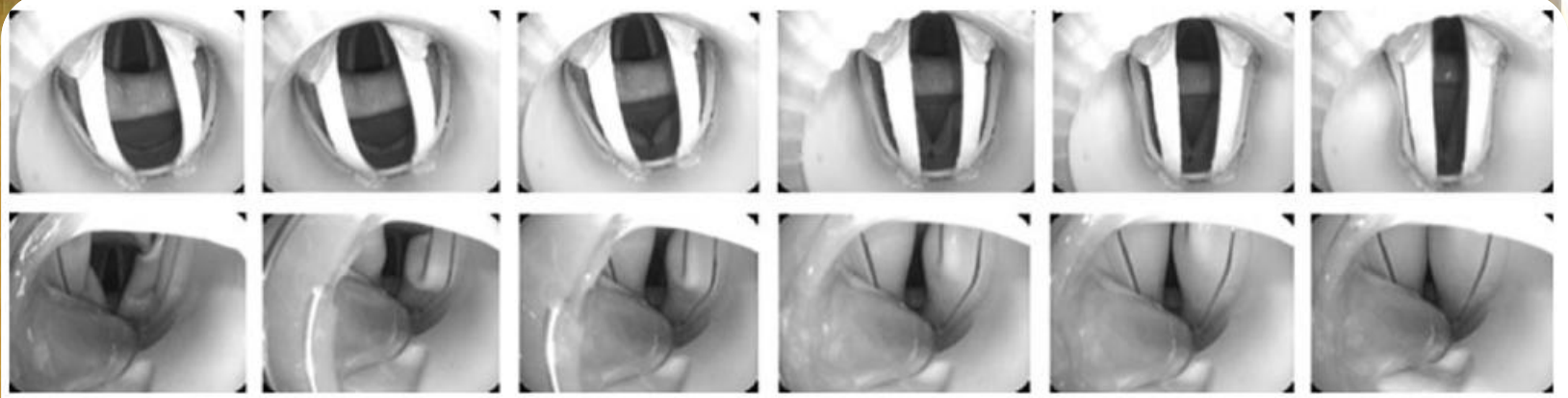
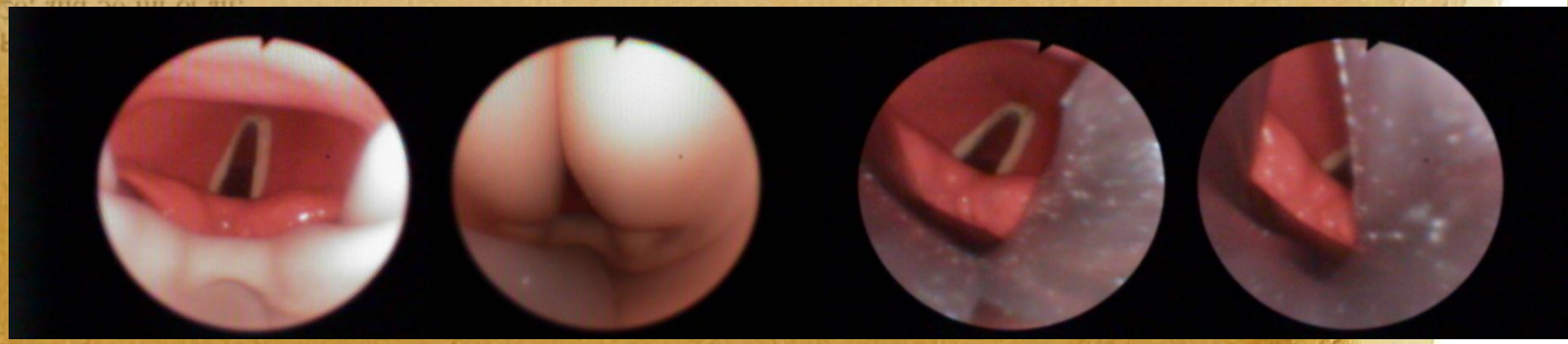


Figure 3 From left to right, the LMA-Classic™ (top) and the LMA-Proseal™ (bottom) at insertion and cuff volumes of 5, 10, 15, 20, and 30 ml of air.



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Valencia 26 de Noviembre de 2013

¡ Nuevos conceptos ¡

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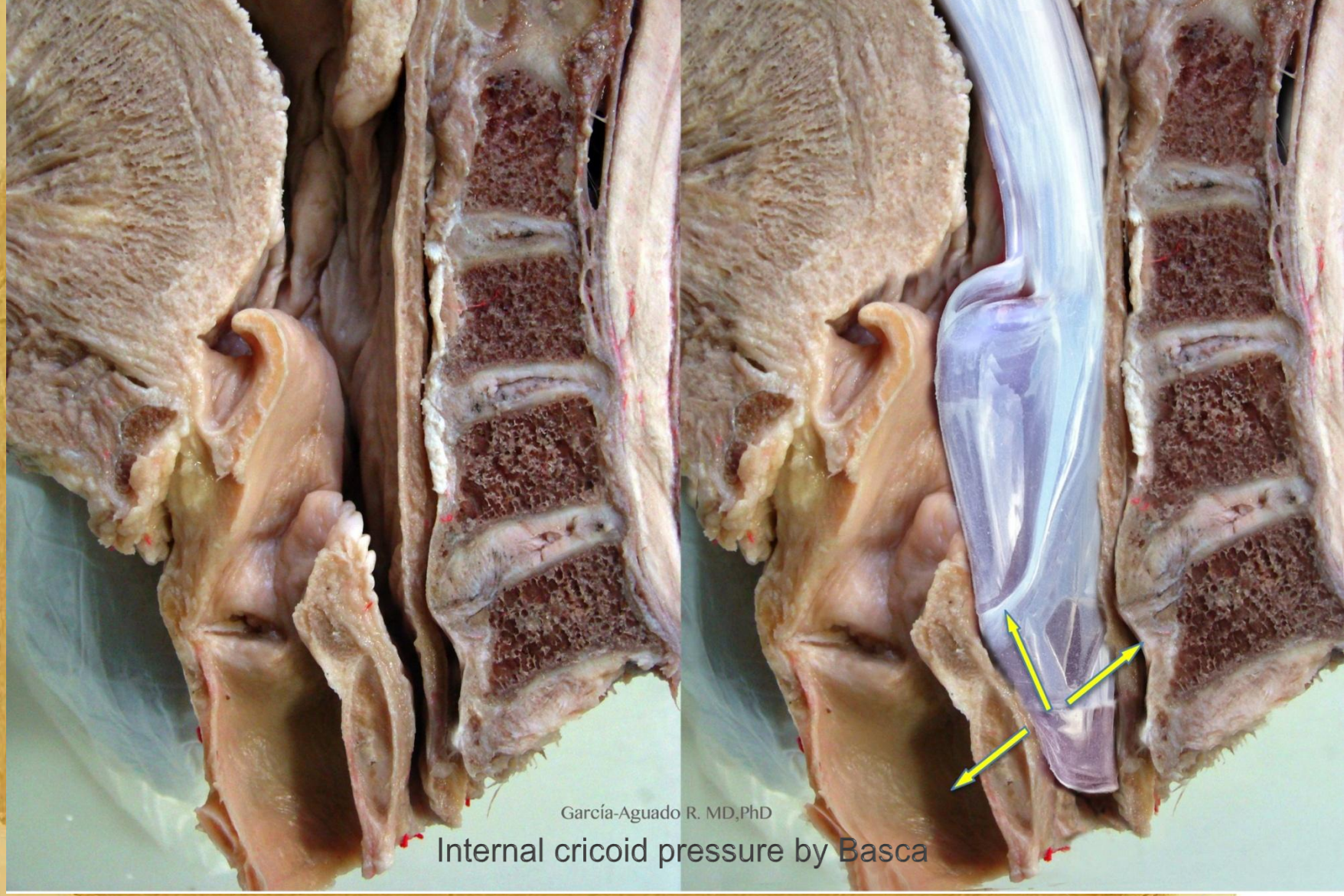

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Valencia 26 de Noviembre de 2013

¡ Nuevos conceptos ¡

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Valencia 26 de Noviembre de 2013

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 October 2010 (14.10.2010)

PCT

(10) International Publication Number
WO 2010/115232 A1

(51) International Patent Classification:
A61M 16/00 (2006.01)

(21) International Application Number:
PCT/AU2010/000341

(22) International Filing Date:
25 March 2010 (25.03.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2009901521 8 April 2009 (08.04.2009) AU
2009901895 30 April 2009 (30.04.2009) AU

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(74) Agent: **CULLENS PATENT AND TRADE MARKS ATTORNEYS**; Level 32, 239 George Street, Brisbane, Queensland 4001 (AU).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Published:
— *with international search report (Art. 21(3))*

WO 2010/115232 A1

(54) Title: IMPROVEMENTS TO A LARYNGEAL MASK

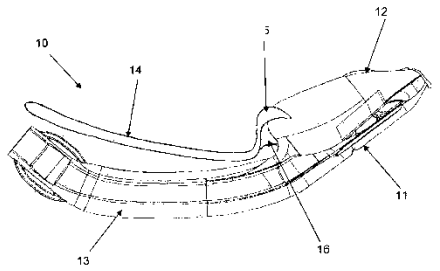

FIG 1

(57) Abstract: A device for maintaining an airway in a patient, the device comprising: a mask having a peripheral portion that forms a seal with the larynx when the mask is positioned in the laryngo pharynx to thereby prevent ingress of extraneous fluids into the larynx; an airway tube connected to or formed with the mask for passing gas to the larynx when the mask is properly inserted into the laryngo pharynx; and deformation means located on the mask, wherein the application of force to the deformation means causes elastic deformation of the device, thereby facilitating insertion of the device into the patient.

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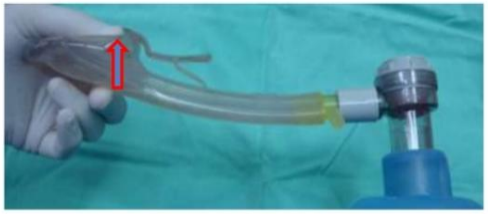
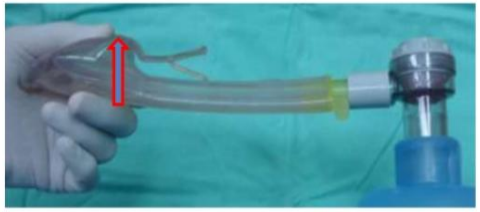
Valencia 26 de Noviembre de 2013

are not applied to the airway. As the force with which the soft, flexible portion is pushed into contact with the tissues surrounding the laryngeal opening is increased by pressurised ventilation gases in the airway tube, the seal achieved by the soft, flexible portion with the tissues surrounding the laryngeal opening is also improved. Thus, the strength or effectiveness of the soft, flexible portion in achieving a seal with the tissues surrounding the laryngeal opening is proportional to the pressure of the ventilation gases supplied to the airway tube. This is in direct contrast to existing laryngeal mask airway devices in which the strength of the seal formed with the time. Indeed, in presently available laryngeal masks that include an inflatable cuff to achieve a seal, when the airway pressure is increased during IPPV, the increase in the airway pressure pushes the anterior pharyngeal wall away from the already inflated and fixed peripheral cuff of the mask, which leaves a gap between the mask and the pharyngeal wall. As a result, gas can escape between the fixed inflated cuff and the pharyngeal wall.





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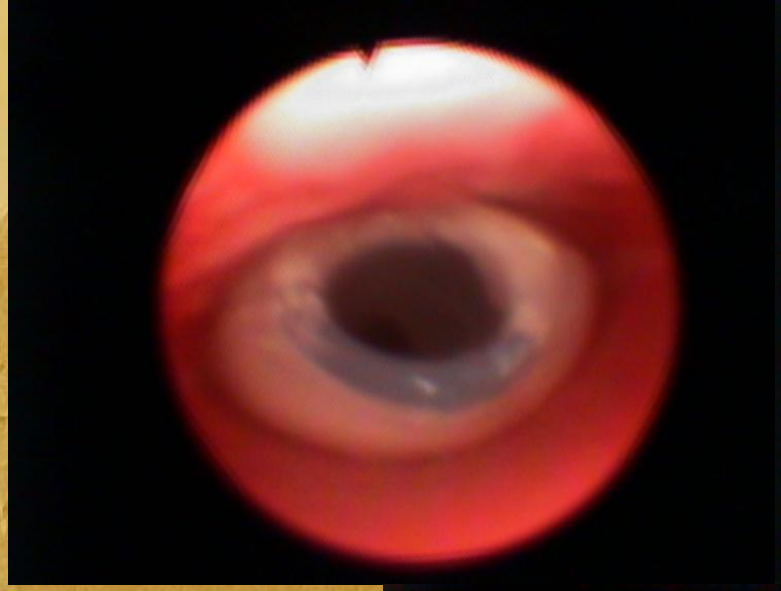
Valencia 26 de Noviembre de 2013



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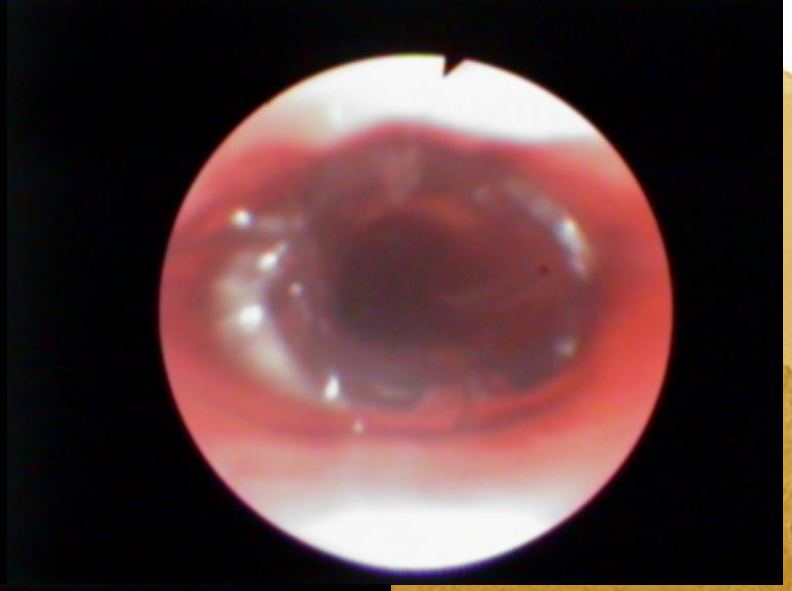
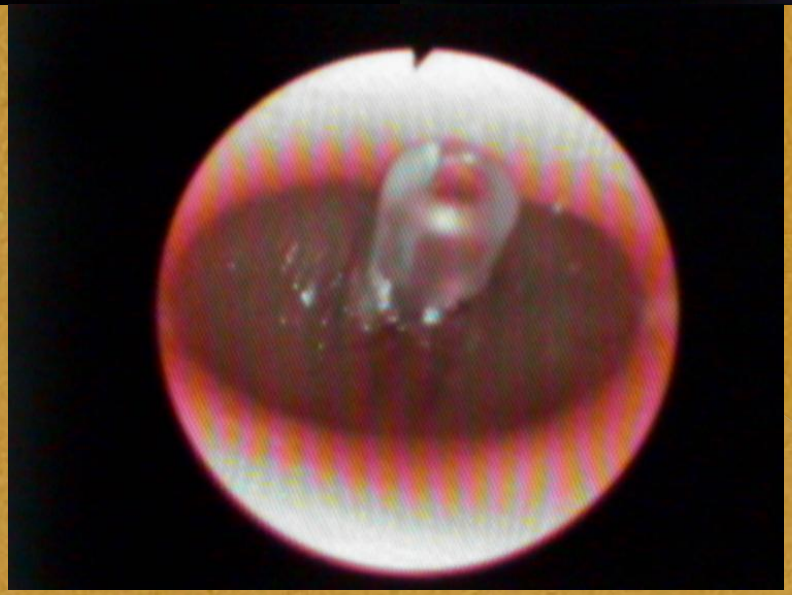
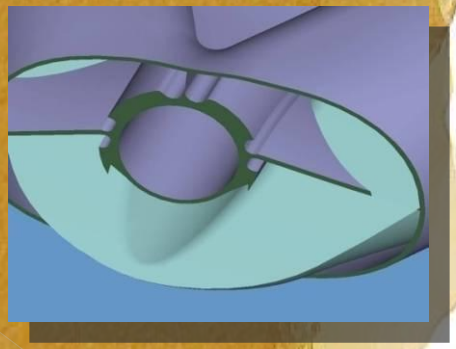


16.F/16.F



14.F/ 12.F



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Valencia 26 de Noviembre de 2013

2 x 18.F

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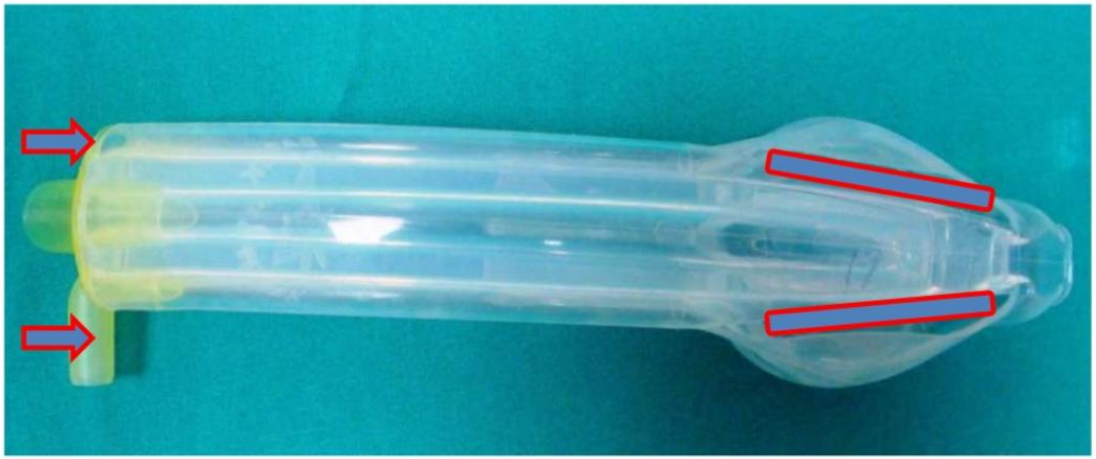
Dos drenajes

- Cuando aspiramos a través de un puerto gástrico único, puede obstruirse con la pared
- Baska Mask con el segundo drenaje lo evita al equilibrar las presiones



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Valencia 26 de Noviembre de 2013

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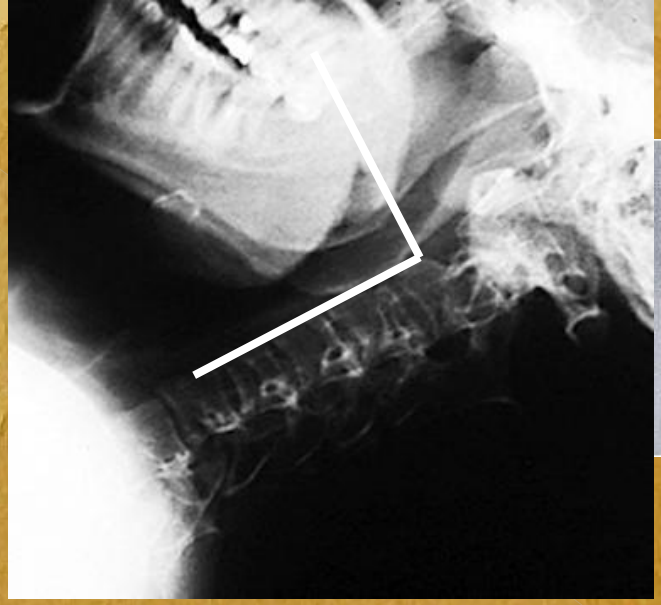

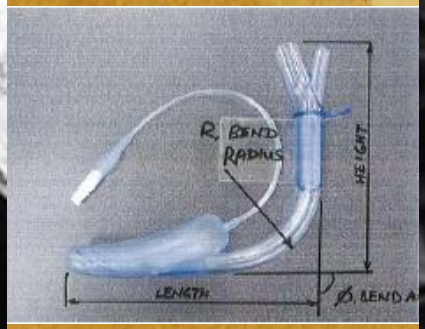

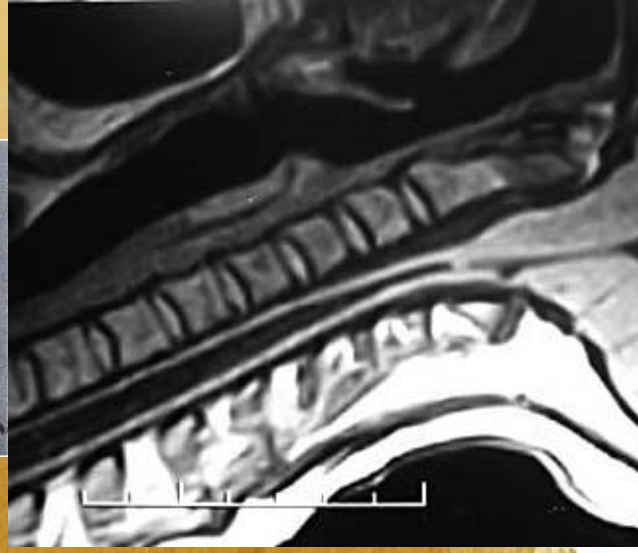

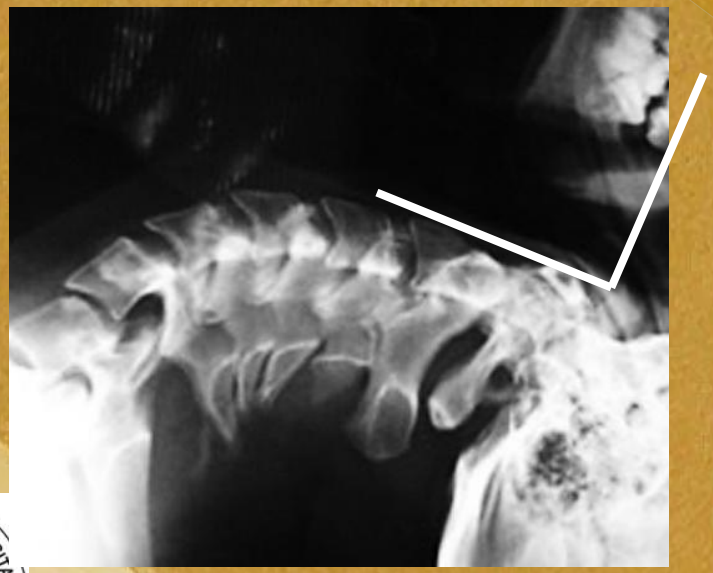

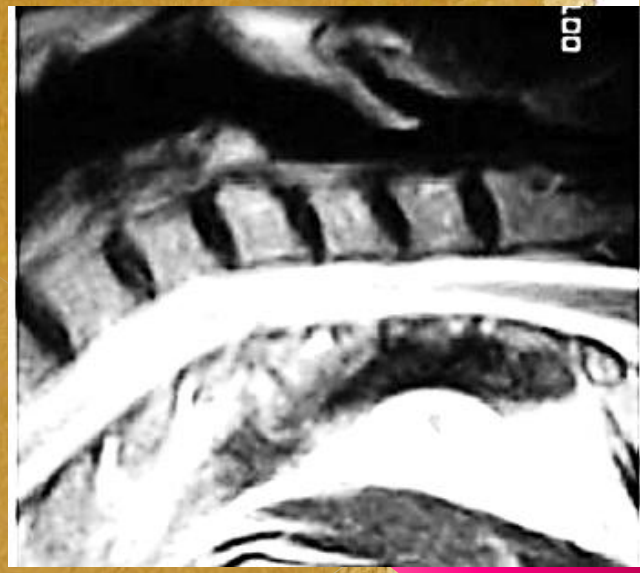

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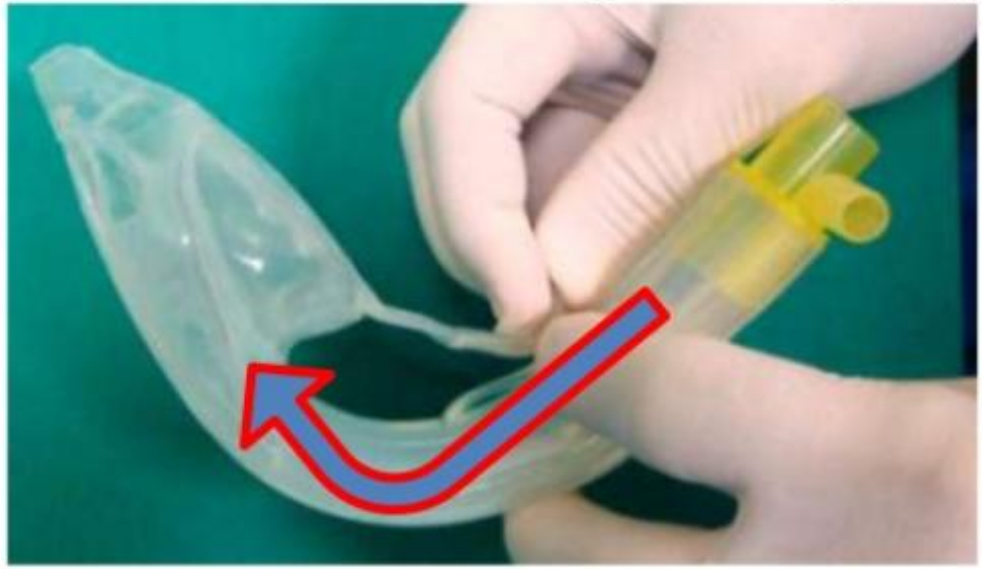
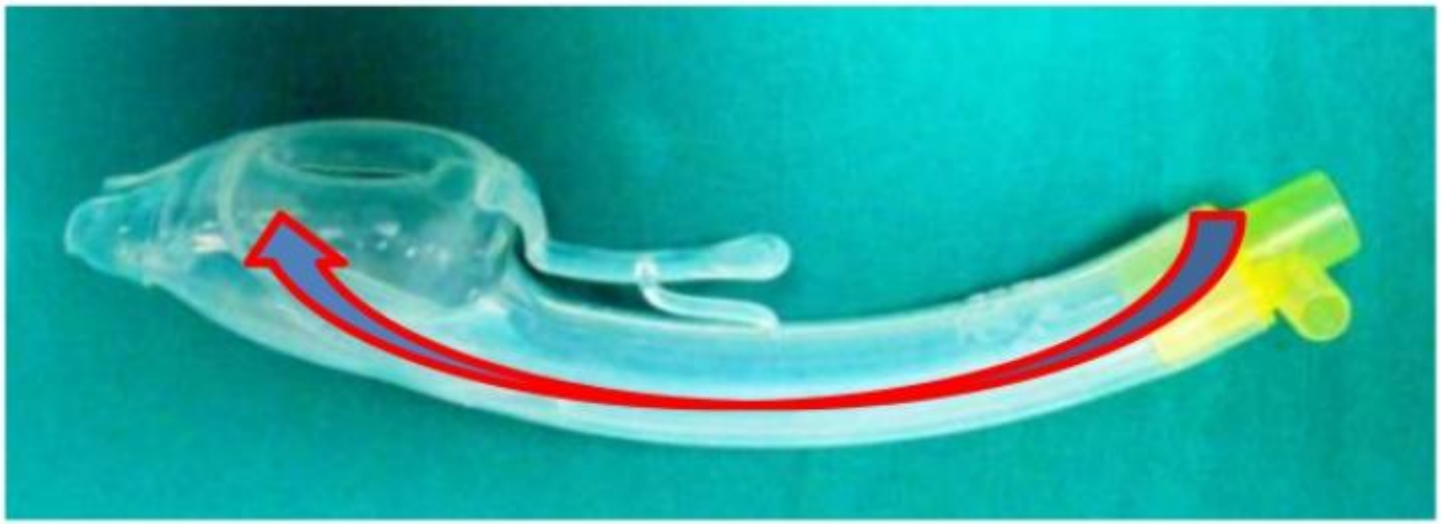
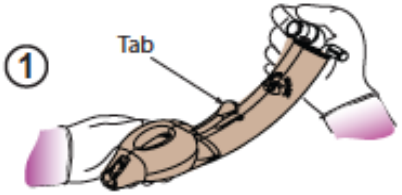
Valencia 26 de Noviembre de 2013





INSTRUCCIONES DE USO



① Para asegurar la integridad de la mascarilla, con las manos enguantadas, tape la apertura del conector de la vía aérea al final del dispositivo con un dedo, sostenga la cabeza de la mascarilla con la otra mano y coloque un dedo sobre la apertura de la vía aérea para su sellado. Aplique presión durante 5 segundos para confirmar que no haya fuga en el dispositivo.

⚠ **No utilizar si se detecta fuga** ⚠

② **Lubricar abundantemente toda la mascarilla con lubricante soluble en agua. – Esta es la clave para una inserción y colocación exitosa.**

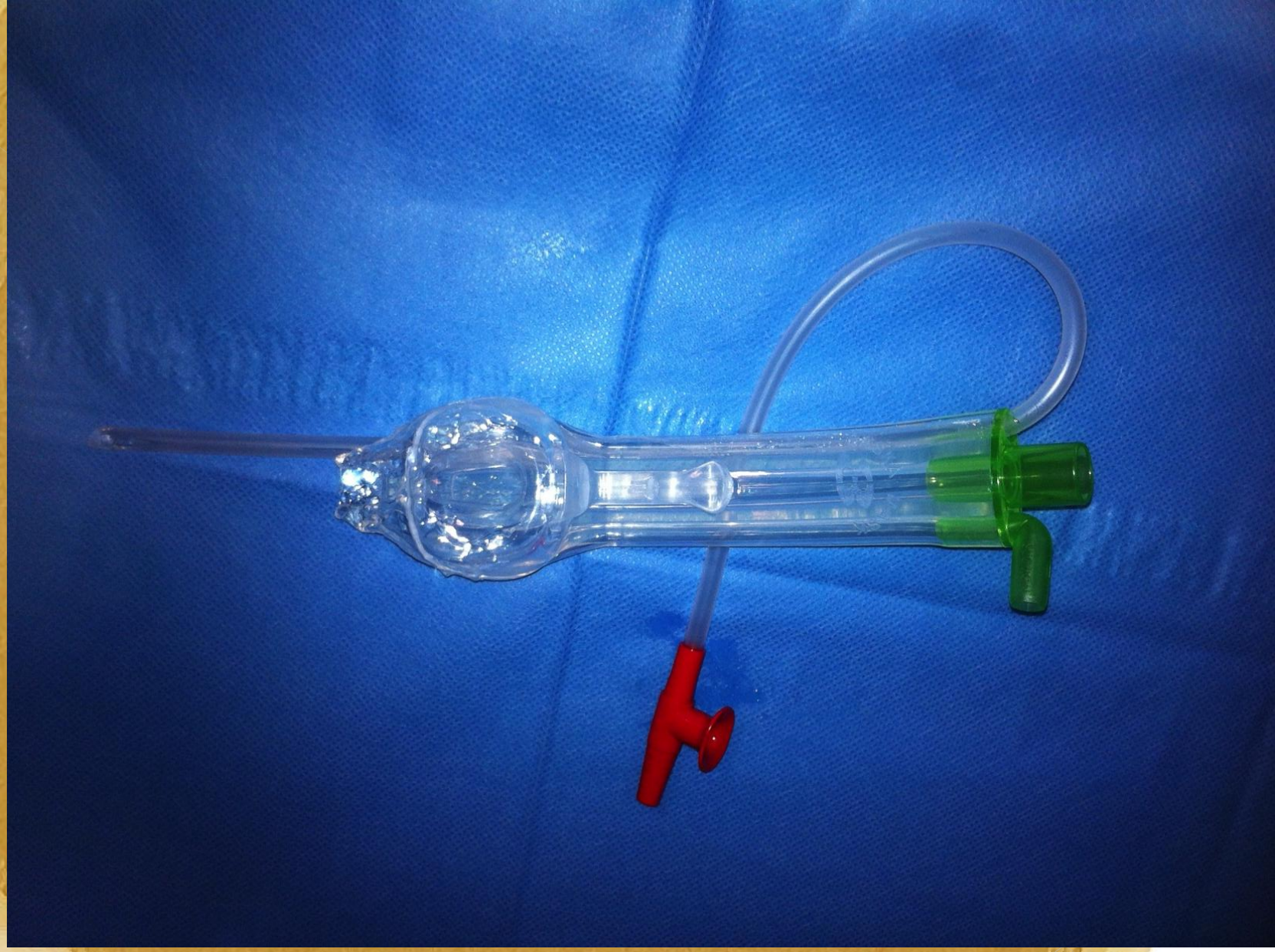
③ Con la cabeza y cuello en posición neutral y la boca abierta, comprima la parte proximal más firme de la mascarilla entre el pulgar y dos dedos y empuje la mascarilla más allá de los dientes frontales hacia el paladar duro, evitando la lengua.

④ Si es necesario, tire de la lengüeta suavemente para ayudar a sortear la curva palato-faríngea. Soltar la pestaña tan pronto como la punta de la máscara haya pasado la curvatura palato- faríngea.

⑤ Asegúrese de que la mascarilla haya avanzado lo suficiente hasta notar la resistencia. En esta posición, la punta de la mascarilla se acopla en la parte superior del extremo del esófago. Compruebe que la vía aérea este despejada – por observación si el paciente está respirando espontáneamente, o por suave ventilación si el paciente está apneico. Puede ser necesario retirar la mascarilla muy lentamente, 3-5 mm durante un tiempo hasta que obtenga una vía aérea despejada. En este punto, fije la mascarilla en posición.

⑥ Si se prevé una regurgitación o existe un alto riesgo, la succión debería de estar conectada al puerto de succión del dispositivo antes de la inserción y dejarlo funcionando continuamente hasta que la mascarilla este colocado correctamente. La succión debería de estar funcionando de forma continua durante la retirada del dispositivo al final del procedimiento. Durante el procedimiento la succión puede ser aplicada intermitentemente según sea necesario para eliminar cualquier líquido o secreciones.
El mantenimiento de aspiración continua durante todo el procedimiento no es recomendable ya que podría predisponer de dolor post-operatorio de garganta debido a la acción de secado del flujo de aire.

⑦ La de toma de aire debe permanecer abierta en todo momento.



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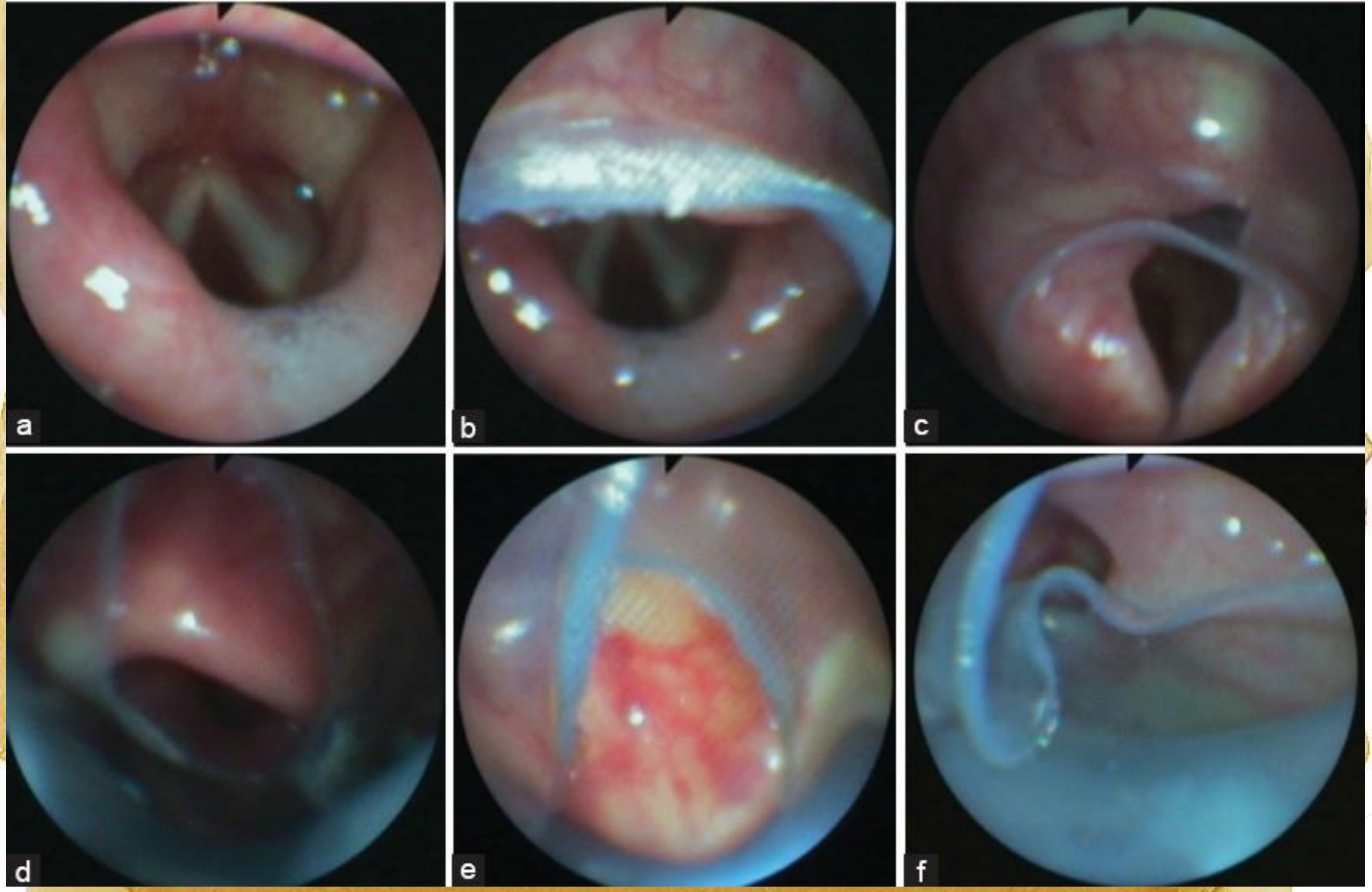
Valencia 26 de Noviembre de 2013



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Valencia 26 de Noviembre de 2013

Original Article

The Baska Mask®—A new concept in Self-sealing membrane cuff extraglottic airway devices, using a sump and two gastric drains: A critical evaluation

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ABSTRACT

Background: In this study, we evaluated the performance of the Baska Mask®, a new extraglottic airway device (EAD) for use in anesthesia in adult patients undergoing a variety of surgical interventions.
Materials and Methods: The self-recoiling membrane distally open cuff silicone mask consists of an anatomically curved airway tube with: (1) a bite block over the full length of the airway; (2) a self-sealing membranous variable-pressure cuff which adjusts to the contours of the mouth and pharynx; (3) a large sump cavity with two aspiratable gastric drain tubes; together with a number of special features such as (4) a tab for manually curving the mask to ease insertion; and (5) a suction elbow integral to one port with a second port acting as a free air flow access. The cuff of the Baska Mask® is not an inflatable balloon, but a membrane which inflates on every breath during intermittent positive pressure ventilation (IPPV) to achieve a superior seal when opposed to the larynx. An increase in IPPV pressure increases the oropharyngeal seal. With existing extraglottic airway devices, an increase in IPPV merely increases the leak.
Results: Fifty patients with American Society of Anesthesiologists (ASA) physical status I–III were enrolled. We evaluated the "first attempt" and "overall insertion" success rates, insertion time, ease of insertion and removal of the device, oropharyngeal leak pressure, and anatomical position at fiberoptic view. The "first attempt" success rate was high (88%) and "overall insertion" success rates was considered "easy" to "very easy" by the operators in 92% of patients. Removal of the device was considered easy in all cases. The oropharyngeal leak pressure was above 30 cm H_2O in all patients and the maximum of 40 cm H_2O was achieved in 82% of the patients. In two patients, no adequate capnogram was obtained, so a smaller size mask was inserted with correction to adequate function. At fiberoptic evaluation of the anatomical position of the masks, the vocal cords could be seen, except in six patients (12%), where only the epiglottis could be visualized.
Conclusion: The new EAD Baska Mask® has many novel features which should improve safety when used in both spontaneously breathing and IPPV anesthesia.

Key words: *Baska mask, extraglottic airway device, fiberoptic, inflatable cuff on intermittent positive pressure ventilation, insertion, oropharyngeal leak pressure, self-recoiling cuff, supraglottic airways, uninflatable (non-balloon type) cuff*

SARTD-CHGUV Sesión de Formación Continuada
Valencia 26 de Noviembre de 2013

Anaesthesia. 2013 Oct;68(10):1026-32. doi: 10.1111/anae.12356. Epub 2013 Jul 16.

Comparison of the Baska(®) mask with the single-use laryngeal mask airway in low-risk female patients undergoing ambulatory surgery.

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Department of Anaesthesia, Galway University Hospitals and National University of Ireland, Galway, Ireland.

Abstract

We compared the Baska(®) mask with the single-use classic laryngeal mask airway (cLMA) in 150 females at low risk for difficult tracheal intubation in a randomised, controlled clinical trial. We found that median (IQR [range]) seal pressure was significantly higher with the Baska mask compared with the cLMA (40 (34-40 [16-40]) vs 22 (18-25 [14-40]) cmH2O, respectively, $p < 0.001$), indicating a better seal. In contrast, the first time success rate for insertion of the Baska mask was lower than that seen with the cLMA (52/71 (73%) vs 77/99 (98%), respectively, $p < 0.001$). There were no differences in overall device insertion success rates (78/79 (99%) vs 68/71 (96%), respectively, $p = 0.54$). The Baska mask proved more difficult to insert, requiring more insertion attempts, taking longer to insert and had higher median (IQR [range]) insertion difficulty scores (1.6 (0.8-2.2 [0.1-5.6]) vs 0.5 (0.3-1.4 [0.1-4.0]), respectively, $p < 0.001$). There was also an increased rate of minor blood staining of the Baska mask after removal, but there were no differences in other complication rates, such as laryngospasm, or in the severity of throat discomfort. In conclusion, in clinical situations where the seal with the glottic aperture takes priority over ease of insertion, the Baska mask may provide a useful alternative to the cLMA.

PMID: 23855898 [Pul

Anaesthesia. 2012 Jun;67(6):640-5. doi: 10.1111/j.1365-2044.2012.07140.x.

An observational study of the Baska® mask: a novel supraglottic airway.

Alexiev V, Salim A, Kevin LG, Laffey JG.

Department of Anaesthesia and Intensive Care Medicine, Galway University Hospitals, Ireland.

Abstract

The Baska mask is a novel supraglottic airway device. We conducted an initial observational study to assess this device in 30 low-risk female patients. All Baska masks were inserted by a single investigator. The overall success rate for device insertion was 96.7% (95% CI 82.8-99.9%), while the success rate for the first insertion attempt was 76.7% (95% CI 57.7-90.1%). The device was easy to insert, with a mean (SD) difficulty score of 0.9 (1.6) on a 10-cm scale. The mean (SD) airway leak pressure was 35.7 (13.3) cmH(2) O. The incidence of throat pain, dysphonia and dysphagia was low. We conclude that the Baska mask demonstrates a level of utility as an alternative supraglottic airway that is worthy of further clinical study.

PMID: 22563956 [PubMed - indexed for MEDLINE]

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Valencia 26 de Noviembre de 2013

MLSupreme – mayor razón del diametro inflado/desinflado

Diámetro Inflado

Diámetro desinflado

Mayor facilidad de inserción

Dispositivo	Inflado/ desinflado
Classic LMA #4	1.47
LMA ProSeal #4	1.81
LMA Supreme #4	2.4

Determination of the Optimal Approach to Select the Best Size of BASKA Mask to Use in Male Patients

Show Dates, Status, Enrollment

Brief Summary

Official Title: "Determination of the Optimal Approach to Select the Best Size of BASKA Mask to Use in Male Patients"

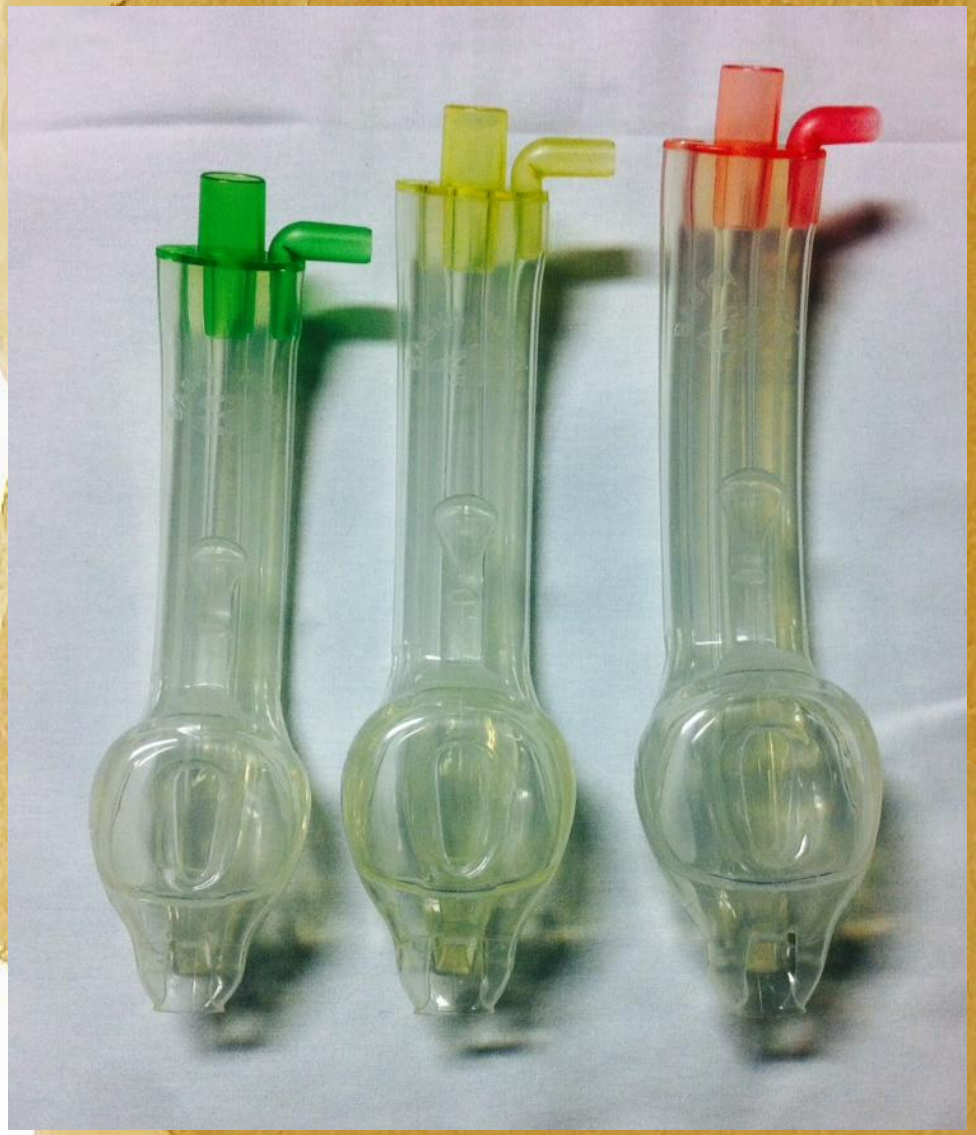
Skip to Participation Criteria

The investigators group has performed a number of studies on novel airway devices, including an observational study on the performance of a new supraglottic airway named Baska mask. In this new study the investigators wish to determine which criteria best predict the correct size of the Baska mask to be used in male patients

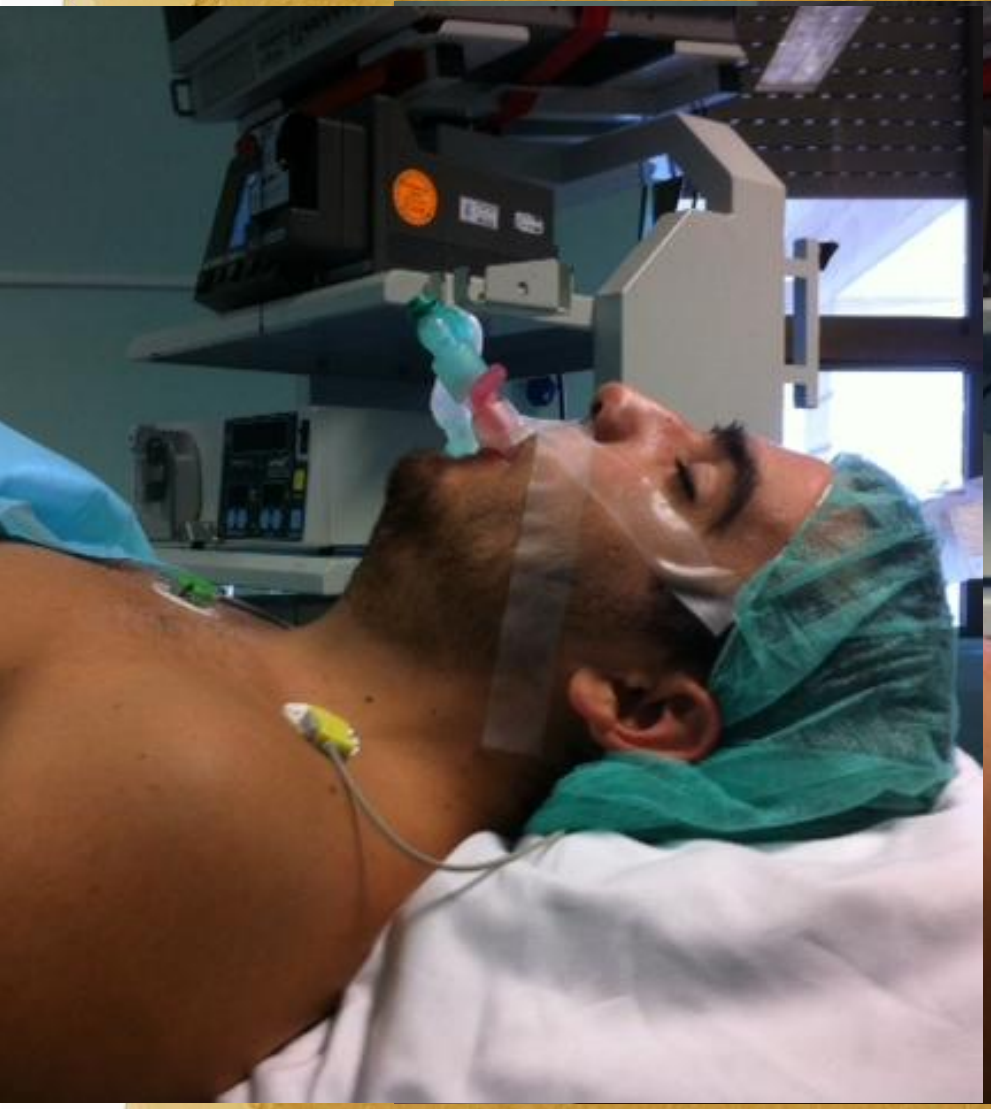
- Study Type: Interventional
- Study Design: Endpoint Classification: Safety/Efficacy Study, Intervention Model: Single Group Assignment, Masking: Open Label, Primary Purpose: Treatment
- Study Primary Completion Date: June 2012

Detailed Clinical Trial Description

Our observational study of the performance of the Baska mask suggests that this novel supraglottic airway has promise as an alternative to the current standard device, the laryngeal mask airway (LMA). Our results indicate that while the manufacturer weight criteria work reasonably well in females this may not be the case in males. The investigators wish to determine how well the manufacturer recommended sizing criteria for the Baska mask work in males



Size	Suggested weight range	Color coded connectors
3	30-50 kg	Green
4	50-70 kg	Yellow
5	70-100 kg	Red
6	>100 kg	Blue



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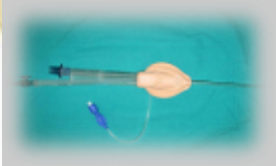
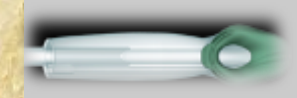
Valencia 26 de Noviembre de 2013

DEG	P Sello	Eficacia	Facilidad	Drenaje	Un solo uso	
	++++	++++	+++	++++	+	16*
	+++	+++	++++	+++	+++	16*
	+++	+++	++++	+	+++	14
	+++	+	++	+++	+++	12*
	+++++	++	+++	+++++	+++	18*

* *Posibilidad de inserción guiada*

- Baska Mask es un DEG con mejoras conceptuales
- Tiene la mayor Presión de sellado
- Tiene la mayor capacidad de drenaje
- Es más difícil de posicionar
- Necesitamos mas experiencia