**BASKA LARYNGEAL MASK IN ANAESTHETIC TRANSFEMORAL AORTIC VALVE IMPLANT**

## Alos L, Marqués I, García-Aguado R.

Anaesthetic, Reanimation and Pain Treatment Service University of Valencia General Hospital

# INTRODUCTION

The Transfemoral Transcatheter Aortic Valve Implant (TAVI) is a minimally-invasive cardiac surgery procedure for patients who are highly vulnerable to conventional surgery. General Anaesthetic (GA) provides optimum conditions for performing the technique and allows for the Transoesophageal Echocardiogram (TOE) to be used intraoperatively as a guide for the procedure and as a heart monitor.

We propose carrying out an intravenous GA technique based on propofol and remifentanil, without neuromuscular blocking, and with Controlled Mechanical Ventilation (CMV) through the "BASKA MASK" Laryngeal Mask (LM) in order to enable the patient to recover quickly ("FAST TRACK") without giving up the advantages of using the intraoperative TOE.

(Table 1).

## CLINICAL CASE

**TABLE 1. PURPOSE OF THE TOE DURING THE TAVI**

84-year-old woman, programmed for TAVI due to severe symptomatic aortic stenosis. Euroscore 15%. Anaesthetic induction and maintenance with propofol (1-2mg/kg y 5 mg/ kg/h) and remifentanil (0,015 mg /kg/h). CMV after placing LM "BASKA" no. 4. Checking of ventilation parameters and capnography. Insertion of TOE probe which passed to the oesophagus without interfering with the CMV. The handling of the TOE probe at different stages of the procedure did not affect the CMV at any time.

Pre-IMPLANT

IMPLANT

Post-IMPLANT

Assessment of valve morphology and degree of regurgitation.

Measurement of aortic ring and selection of prosthetic size. Biventricular function. Segmentation motility VI

Mitral and tricuspid valve function.

Valvuloplasty guide, and positioning and freeing of prosthetic element.

PROSTHETIC ASSESSMENT: position, orientation, area, gradient, degree, and localisation of potential regurgitation.

MITRAL VALVULAR FUNCTION AND POST-IMPLANT BIVENTRICULAR FUNCTION

# DISCUSSION

1. Anaesthetic alternatives for TAVI according to centres:
   * Local anaesthetic and deep sedation (TOE cannot be used)
   * GA with IOT (TOE can be used)
2. Usefulness of TOE in TAVI: (Table 1)
3. Design characteristics of "BASKA" LM: (Table 2)

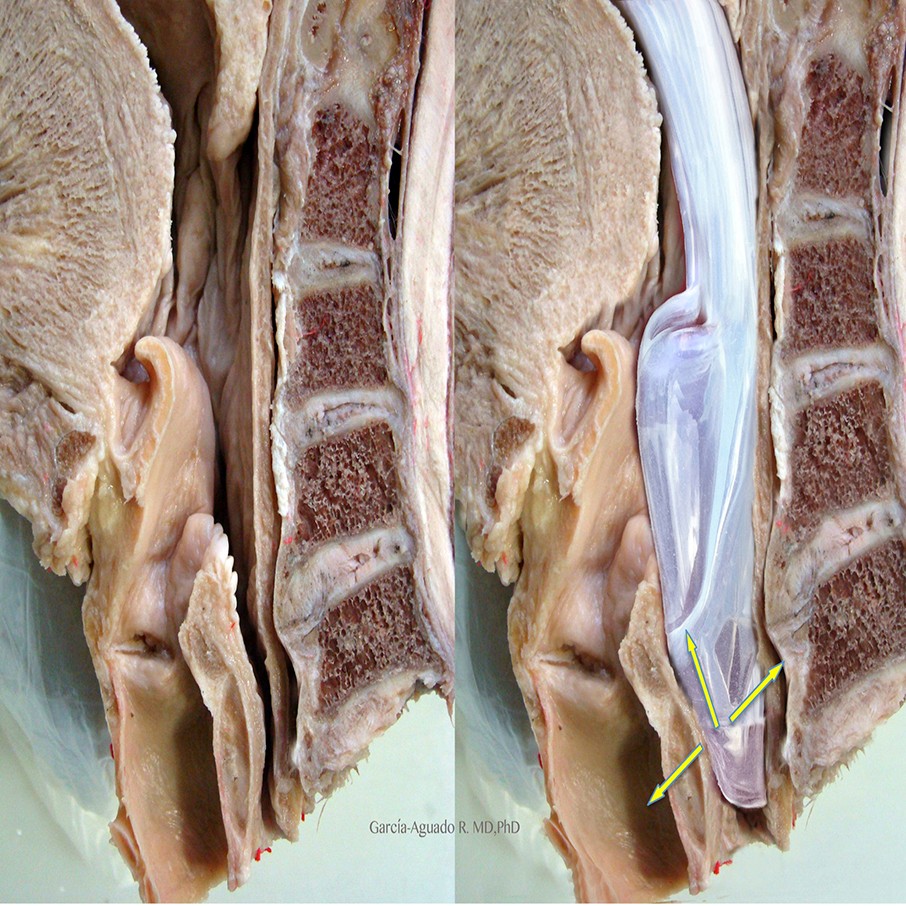
## CONCLUSIONS

The anaesthetic technique described provides optimum intraoperative conditions, identical to conventional GA, with the advantage of being less invasive, thus allowing for a rapid anaesthetic recuperation without giving up the TOE during the procedure.

Thanks to its design and characteristics, the "BASKA" LM guarantees CVM, avoiding BNM and IOT.

**TABLE 2. CHARACTERISTICS OF THE "BASKA MASK" LARYNGEAL MASK**

1. Seal pressure above 30 cm H2O. 4. Lack of balloon
2. Increase of seal pressure in VPPI. 5. Disposable
3. Gastric drainage with 2 lateral channels



**BIBLIOGRAPHY**

1. Anaesthetic Management of Transcatheter Aortic Valve Implantation. Renno D. Covello et Al. Current Opinion in Anaesthesiology 2011, 24:417 – 425.
2. Combinación de Mascarilla Laringea y Ecocardiografia Transesofágica Intraoperatoria en Anestesia Para Cierre Percutáneo Transcatéter de un Foramen Oval Permeable. J.I.Marqués et Al. Rev Esp Anestesiol Reanim 2011; 58: 254 – 263
3. An Observational Study Of The Baska Mask: A Novel Supraglotic Airway. Alexiev V. et Al. Anaesthesia 2012; 67(6): 640 – 5

|  |  |  |
| --- | --- | --- |
| Registered in Australia No. 19 963 291 946 | Project Manager: C:\Documents and Settings\Administrator\Local Settings\Temp\SolidDocuments\SolidCapture\captureclip21.png  Melissa Angus   Date: 17, April 2014 | Level 1  1 Queens Road  Melbourne  Victoria 3004  Tel: 1300 666 522 |
| **I, Melissa Angus, certify that the translation of the “Baska IFU” was performed by a qualified and accredited Spanish translator, Laura Sánchez and is a true and accurate representation of the original document.** | | |