

## IMAGEM EM ANESTESIOLOGIA

# Pilot Balloon Repair: An Intraoperative Challenge

## Reparação do Pilot Balloon: Um Desafio no Intra-Operatório

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### Afiliação

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Airway Extubation; Equipment Safety; Intubation, Intratracheal; Monitoring, Intraoperative

### Palavras-chave

Extubação; Intubação Intratraqueal; Monitorização Intraoperatória; Segurança de Equipamento

An ASA IV, full-stomach 76-year-old patient, diagnosed with a subdural haematoma, was under TIVA for burr hole drainage.<sup>1</sup> While removing the surgical drapes, the neurosurgeon accidentally tore the pilot balloon<sup>2</sup> at the end of the procedure. As air leakage became audible, ventilation issues ensued, preventing the delivery of the preset tidal volume (~7 mL/kg), leading to hypercapnia (maxEtCO<sub>2</sub>=46 mmHg) and hypoxia (minSpO<sub>2</sub> 93%). Using the standard vein catheterisation technique, a 20 G intravenous catheter was inserted into the remaining pilot line. After removing the needle, a 10 mL syringe was attached, and the cuff was successfully refilled with air. The emergence was uneventful, and the patient was extubated at the end of the procedure. There are several options to deal with a torn pilot balloon before a patient is ready for extubation.<sup>3</sup> This rescue procedure prevented further airway manoeuvres maintaining a secure airway and contributing to the ventilatory and hemodynamic stability of this neurosurgical patient.



**Figure 1.** 20-gauge intravenous cannula inserted into the cut end of the pilot balloon allowing cuff refill

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