

## Inflation of EZ-Blocker Cuff for Facilitation of Lung Isolation in a Case of Difficult Placement

Letter to  
Editor

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The most common techniques for achieving lung isolation for minimally invasive cardiac surgeries (MICS) are left sided double lumen tube (DLT) or right sided bronchial blocker placement<sup>[1,2]</sup>. DLT may be more challenging to place in certain patients and may be associated with airway trauma and bleeding. Another disadvantage of DLT is that postoperative swelling may make the exchange to a single-lumen tube at the end of the case dangerous, even with the use of airway exchange catheters. The EZ-blocker (Teleflex Life Sciences Ltd., Athlone, Ireland) (EZB), is a Y-shaped bronchial blocker with advantage of less airway injury and sore throat compared to DLT<sup>[3]</sup>.

Placement of EZBs take more time but usually easy. Sometimes, correct placement may be difficult. Here we present such a case with difficulty in correct placement in which we inflated one cuff of the EZB to facilitate in the correct placement of EZB.

A 34-year-old man was scheduled for mitral valve replacement via right thoracotomy. After induction of general anesthesia, the patient's trachea was intubated orally using an 8.5 mm ID single-lumen endotracheal tube (ETT).

For EZ-multiport adapter was connected to the ETT, and EZB with both the cuffs deflated and a fiberoptic bronchoscope were introduced through the respective ports. Under fiberoptic guidance, tracheal tube was withdrawn such that the tip was about 5 cm above the carina. EZ-blocker was then advanced, but both the cuffs entered the right main bronchus. Multiple attempts were done under fiberoptic guidance manipulating the EZB and adjusting the ETT. Despite the attempts, both the cuffs entered the right main bronchus (Figure 1).

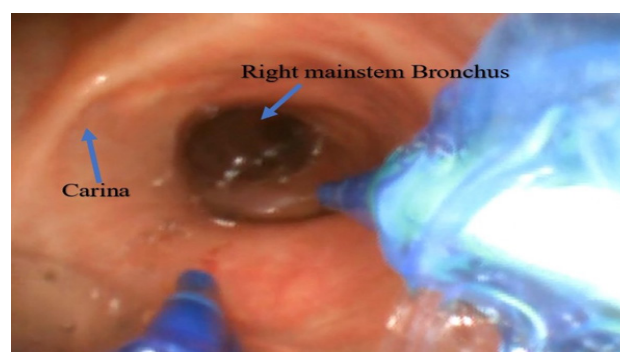


Fig. 1: Both the arms of EZ-Blocker entering the right mainstem bronchus.

Under fiberoptic visualization, one cuff was then inflated with 6 ml of air which spread the cuffs apart. This was advanced carefully under vision and it was noted that the inflated cuff entered the right mainstem bronchus and the other entered the left (Clip 1). Inflated cuff was deflated and after the bifurcation was positioned against the carina, right cuff was inflated again. Blockade of right mainstem bronchus was confirmed by auscultation and fiberoptic visualization.

One lung ventilation was done successfully during the surgery in the left lateral position. After the surgery was done uneventfully, only the EZB was removed and the patient was ventilated in the ICU without the need for the change of endotracheal tube.

The spread of extensions with inflation of one cuff allowed for correct insertion of the 2 extensions into each mainstem bronchus. This is an alternative for the correct placement of EZ-blocker when the placement is difficult. Advancement of inflated cuffs under fiberoptic visualization is mandatory in this technique which helps in prevents injury.

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## CONFLICTS OF INTEREST

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There are no conflicts of interest.

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