

Novel Airway Reverses Hypoxia in GI Procedure: A Case Report

NEW SOLUTION: DISTAL PHARYNGEAL AIRWAY (DPA)

ROXANNE MCMURRAY, DNP, APRN, CRNA

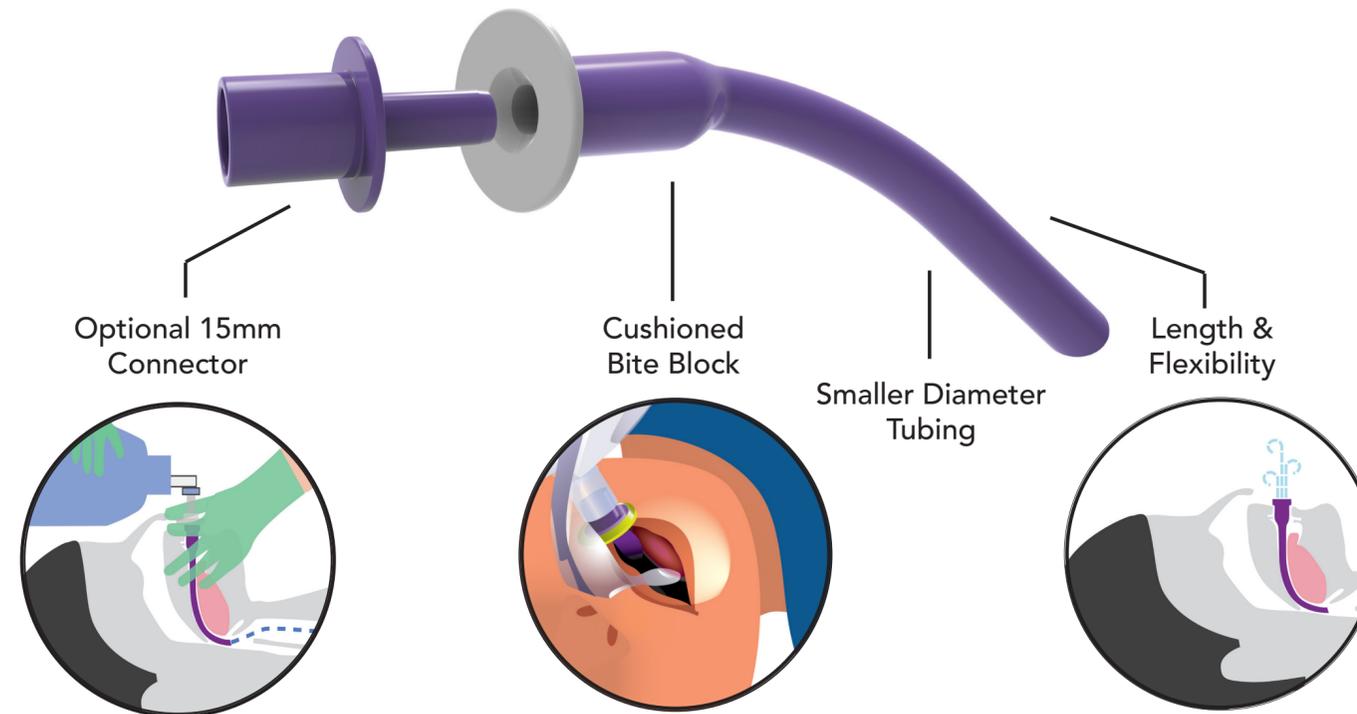
INTRODUCTION

- Gastrointestinal (GI) endoscopy centers frequently face safety challenges.¹ GI is a fast-paced and high-volume work environment.
- Anesthesia providers target deep sedation for esophagogastroduodenoscopy (EGD) procedures to suppress the reflexes upon scope insertion.
- Patients who present with obesity and obstructive sleep apnea (OSA) are prone to hypoxemia.²
- The presence of obesity, OSA, deep sedation, and a large EGD scope in the patient's upper airway increases obstruction risk,³ which can lead to hypoxemia and cardiac arrest.^{4,5}
- Based on recent closed claims, anesthesia providers involved in GI endoscopy cases have the highest malpractice claims.⁶

CASE REPORT

- A 62-year-old male with a BMI of 45 and medical history of OSA and hypertension presented for an EGD.
- Capnography EGD mask with 10L of oxygen and routine monitors placed. Patient positioned left lateral. Head of bed elevated 45 degrees.
- Lidocaine 100 mg and propofol titrated slowly until negative response to name and slight chin lift.
- EtCO₂ waveform contiguous until EGD scope insertion. Oxygen saturation dropped to 83%.
- Without interrupting the procedure, the distal pharyngeal airway (DPA) was easily inserted alongside EGD bite block (Figs. 1 and 2). SpO₂ returned to baseline at 98% and the procedure was successfully completed.

Open Redundant Pharyngeal Tissue and Decrease Hypoxia



- Allows intraoral ventilation by removing variables for difficult mask ventilation especially in obese, edentulous, or bearded patients
- Connects to an anesthesia circuit or manual resuscitator
- Provides apneic oxygenation during intubation
- Increases oral protection
- Allows placement options - between the molars
- Keeps airway open, reducing need for chin lift/jaw thrust
- Helps decrease fire risk by limiting oxygen diffusion around the surgical field
- Avoids adverse effects of placing airways nasally



Fig. 1



Fig. 2

DISCUSSION

- Hypoxemia is common in upper GI endoscopy procedures.²
- DPAs can quickly open upper airway obstruction to mitigate hypoxia risk.
- DPAs can enhance patient safety and help attain the goal of "zero tolerance for hypoxemia during upper endoscopies."³



For more information

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