

# Sudden Hypoxemia in GI Procedure Relieved by a New Oral Distal Pharyngeal Airway (DPA): Case Report

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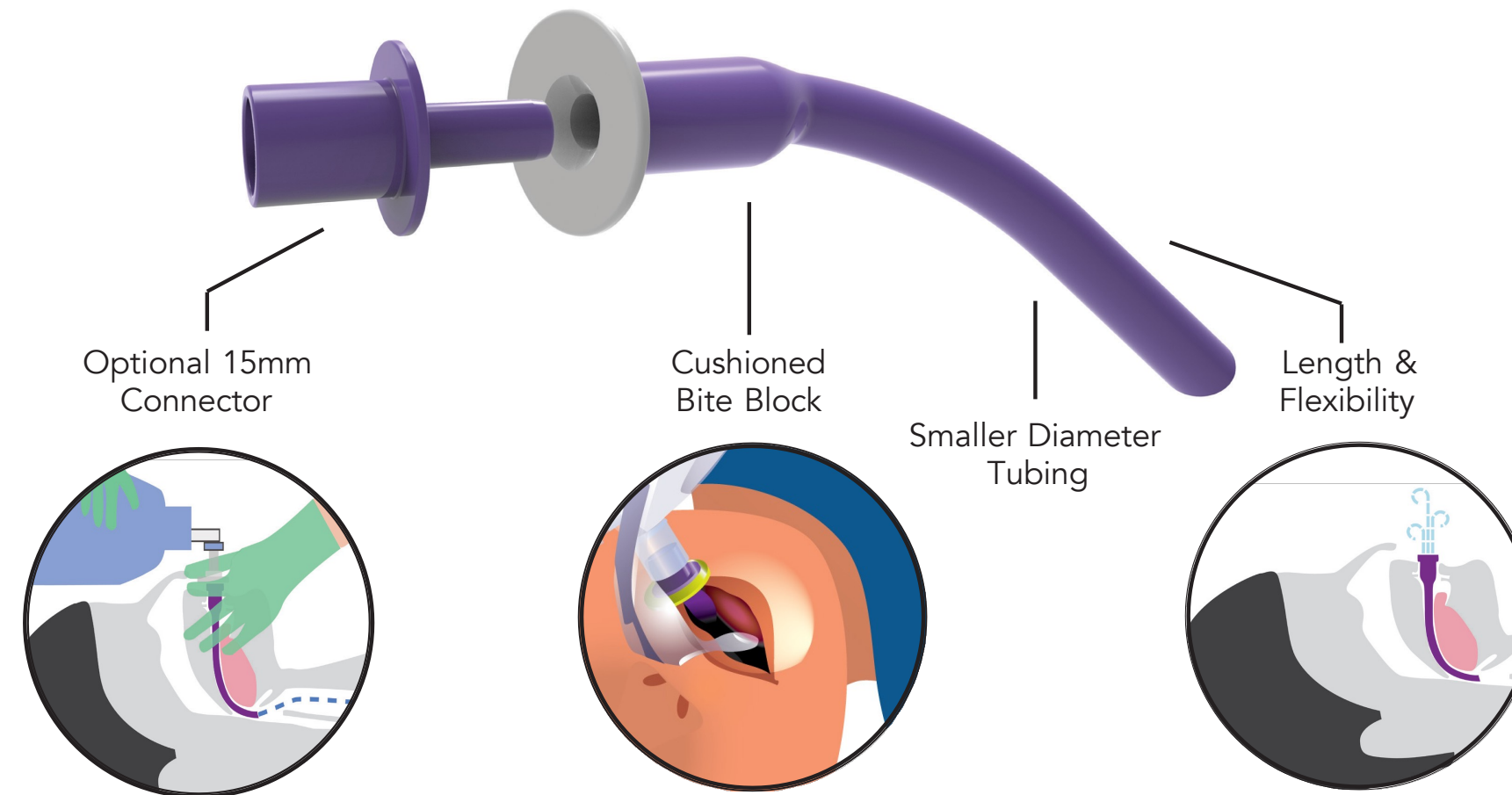
## INTRODUCTION

- Airway challenges with obstruction and hypoxemia during Gastrointestinal (GI) procedures are frequent (51%) despite oxygen use.<sup>1</sup>
- Patients who present with obesity and obstructive sleep apnea (OSA) are prone to hypoxemia<sup>2</sup> which can lead to bradycardia and cardiac arrest.<sup>3</sup>
- Based on recent closed claims, anesthesia providers involved in GI endoscopy cases have the highest malpractice claims.<sup>1</sup>
- The Distal Pharyngeal Airway (DPA) can facilitate efficient and effective airway management.

## CASE REPORT

- A 60-year-old male with a BMI of 53 and medical history of OSA, type 2 diabetes, hepatic steatosis, and hypertension presented for an EGD.
- Capnography EGD mask with 8L of oxygen and routine monitors placed. Patient positioned left lateral. Head of bed elevated 30 degree.
- Lidocaine 100 mg and propofol were titrated slowly until there was a negative verbal or gentle physical stimuli response.
- Jaw thrust assist to insert EGD scope.
- Apnea with scope insertion led to SpO<sub>2</sub> drop from 99% to 60% without amenable to vigorous jaw thrust maneuver.
- Without interrupting the procedure, the distal pharyngeal airway (DPA) was easily inserted alongside EGD bite block (Figs. 1 and 2). SpO<sub>2</sub> returned to baseline at 99% and the procedure was successfully completed. Fig 1 & 2

## Improves Ventilation and Oxygenation to Decrease Hypoxemia



- 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

## DISCUSSION

- Hypoxemia is common in upper GI endoscopy procedures, especially in older, OSA, and heavier patients.<sup>2</sup>
- Prompt identification and treatment are needed to prevent serious complications.
- DPA is a quick and convenient tool for opening upper airway obstructions without disrupting the procedure.
- DPA is a welcome addition to the anesthesiologist's toolbox and shows promise in reducing patient risk and improving outcomes.



## REFERENCES

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