

Oxygenating Bite Block

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Technology description

Introduction

Cardiologists, anesthesiologists, and gastroenterologists often use bite blocks to protect a patient's teeth and to facilitate scoping during sedated diagnostic procedures, such as an esophagogastroduodenoscopy (EGD) and a trans-esophageal echocardiography (TEE). These procedures are performed using intravenous sedation and require supplemental oxygenation. Current methods to oxygenate a patient during sedation, such as using a nasal cannula or a cut mask in addition to a bite block, can result in increased dead space ventilation and inefficient oxygen supplementation. As patients receiving EGD or TEE are typically quite sick, they need oxygen delivery that is as efficient as possible. Thus, a need exists for an oxygenating bite block that reduces a patient' s airway dead space.

Technology Description

Dr. Nathaniel Parker, an anesthesiologist with over 13 years of experience, has developed an improved bite block that can provide oxygenation in the retropharyngeal space (e.g., closer to the glottic opening), reducing airway dead space. This device would have an insertion method similar to those of currently available bite blocks.

Application area

• Provide patient oxygenation during sedated diagnostic optical procedures

Advantages

- Improve patient oxygenation efficacy by decreasing dead space in the retropharyngeal area
- Combines two devices into one
- o Increases procedure efficiency
- o Decreases material costs

Institution

Cedars-Sinai Medical Center

Inventors

Nathaniel Parker

