

Goudra bite block for upper gastrointestinal endoscopy

Sir,

We describe a novel bite block for use with upper gastrointestinal (GI) endoscopy with either conscious sedation or propofol sedation.^[1]

As illustrated in Figure 1, the bite block has a central opening covered with a self-sealing silicone diaphragm [Figure 2] for introduction of an endoscope thru another 10 mm opening. Suction catheter can be passed thru one of the smaller 15 mm opening whereas the other 15 mm port connects to an anesthetic breathing circuit [Figure 2]. A flexible airway can be inserted after sedating (to suppress pharyngeal reflexes) thru the central aperture, followed by replacement of the silicone seal. The seal can withstand positive pressures up to 30 cm H₂O. However, the airway can be assembled and inserted with the bite block after topicalization. An inflatable cuff surrounding the device allows creation of an airtight seal.

The single use bite may be used during administration of intravenous conscious sedation using midazolam and fentanyl or propofol sedation. It will allow end-tidal carbon dioxide monitoring.

The dose-limiting factor for the gastroenterologist administered sedation in patients undergoing upper GI endoscopy is the fear of hypoventilation and apnea that can lead to fall in oxygen saturation.^[2] By allowing administration of 100% oxygen and positive pressure ventilation when necessary, this bite blocks can possibly allow administration of deeper sedation without fear of hypoxemia and reduce the need for an anesthesiologist (to administer propofol), although higher doses of sedatives are likely to lead to longer recovery times, unlike propofol.

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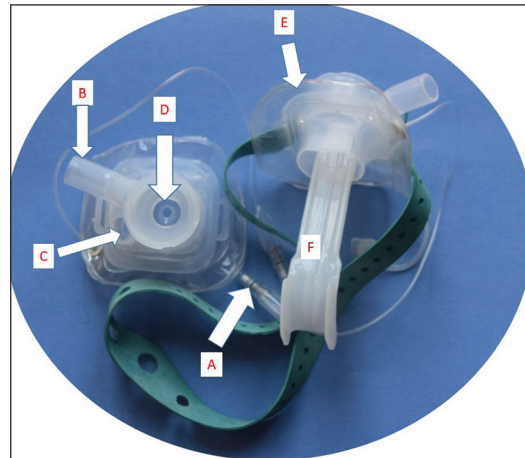


Figure 1: The bite block (a) inflation port (b) 15 mm port for connecting to portable breathing system or suction (c) oxygenation or suction port (closed when not in use to create air-tight seal) (d) wide snap-type groove for insertion of soft flexible airway (e) cuff for creating airtight seal (f) airway inserted and in place



Figure 2: Self-sealing diaphragm with the endoscope *in situ*

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