

What is "hospital grade office anesthesia (HGOA)"?

With HGOA, general anesthesia is started by either an intravenous route or inhalation through a mask. After the patient is asleep, airway protection is secured by placement of an endotracheal tube (nasally if desired and using a throat pack for dental procedures). After the airway is secured, general anesthesia can be maintained by either continuous inhalation of anesthetic agent or TIVA infusion. The anesthesiologist does not rely on the patient's ability to maintain an unobstructed airway with intact reflexes. All airway reflexes, including the gag reflex are completely suppressed. With an endotracheal tube properly secured, the risk of major airway problems during the dental treatment is virtually nonexistent. For this reason, HGOA is considered safer than moderate to deep levels of IV sedation for any "shared airway" procedure, such as a tonsillectomy, oral surgery or dentistry. We provide the same standard of secured airway protection your patient would receive in the hospital for ANY shared airway procedure.

What is "total intravenous anesthesia (TIVA)"?

TIVA techniques usually employs an anesthetic infusion pump to maintain steady blood levels of propofol for precise titration of anesthetic depth. TIVA can be used to maintain all levels of anesthesia, from conscious sedation through HGOA. The TIVA sedation technique is useful for short duration adult dental treatments, and can provide the patient with the illusion of having general anesthesia, while maintaining intact airway reflexes. When compared with traditional IV sedation, TIVA sedation offers far more precise control over the anesthetic depth, with minimal chance of recall. If deeper sedation is desired, airway obstruction can be avoided in the shared airway and safely managed by placing a Flexible Laryngeal Mask Airway (LMA). Although not a completely secured airway, the LMA can provide a barrier from irrigation and debris to the posterior pharynx while maintaining a patent airway without hampering the oral cavity for the dental procedures. In addition, the LMA removes the need to "lift the chin" to relieve mechanical airway obstruction usually seen with deeper levels of sedation.

Why consider using the HGOA- "total intravenous anesthesia-GA (TIVA-GA) instead of the traditional "inhalation" general anesthesia or IV sedation?

The most common side effect of all inhalation general anesthetics (hospital style general anesthesia) is post-operative nausea and vomiting (PONV), which occurs in about 37% of patients. When TIVA-GA is used, PONV occurs in less than 1% of patients. Additionally, with TIVA-GA patients feel much less residual post-operative sedation, and tend to emerge from anesthesia quicker and smoother when compared with traditional general anesthesia or IV sedation.