Anesthesia and Sedation for Dentistry

Physicians have been performing diagnostic and surgical procedures using some form of sedation for many years. Many minor procedures involving the knee, wrist, nose, ears and feet are often preformed while the patient is comfortably sedated. Such care not only makes the patient more comfortable but can also provide protection to the patient should the stress associated with the procedure cause undesirable physiological symptoms like an increase in heart rate or blood pressure.

If the dental procedure has the potential to make the patient uncomfortable, there are several anesthesia and sedation options available that can make the dental procedure more comfortable. A number of factors will be considered, including the patient's overall health, the nature of the procedure, and the patient's anxiety level before deciding which option is most appropriate for the situation.

Local Anesthesia

Local anesthesia is the medication used to numb the area in which dental treatment is to take place. A gel form of the medication can be placed on the surface of the mucosa to numb it prior to delivery of the local anesthetic. The local anesthetic will take several minutes to completely numb the area to be treated and will last a couple of hours following the appointment.

Nitrous Oxide (Laughing Gas)

Nitrous oxide is an inhaled gas that is delivered through a small mask that fits over the nose. It is mixed with oxygen and helps patients relax during their treatment. The gas's effect appear quickly and end quickly once the gas delivery is stopped. For this reason, patients are usually able to resume their regular daily activity, including driving, following their appointment. Nitrous oxide is considered a light form of sedation and some patients will not respond to its effects. Local anesthesia must be used in combination with nitrous oxide to prevent the patient from feeling pain.

Oral Sedation

Oral sedatives are administered in either liquid or pill form and are drugs similar to Valium®. The medication may be prescribed to take the night before the appointment to obtain a restful night sleep or within an hour of the appointment. These medications are frequently combined with nitrous oxide and offer a deeper level of sedation than nitrous oxide alone. Because they take time to absorb into the system, oral sedatives cannot be adjusted once they are given and therefore their dosages must be kept conservative to prevent the patient from becoming over sedated. Patients receiving oral sedation must have a responsible adult accompany them and drive them home following their appointment.
**Intravenous (IV) Sedation**

Intravenous (IV) sedation delivers the sedative medicine directly into the blood stream and produces its sedative effects within minutes. The level of sedation is deeper and more safely adjusted than either nitrous oxide or oral sedation. IV sedation usually has profound amnesic effects and the patient will likely not remember having the treatment completed. Like other types of sedation, the patient must have a responsible adult accompany them and drive them home following their appointment.

**General Anesthesia**

Unlike oral and IV sedation, in which the patient retains some level of responsiveness, general anesthesia renders the patient completely asleep and totally unaware of their dental procedure. General anesthesia is frequently used when the patient cannot cooperate at all as in patients with developmental disabilities or other special health care needs. When general anesthesia is used a board certified anesthesiologist is present to administer the medication and monitor the patient during the procedure. Like the other types of sedation, patients receiving general anesthesia must have a responsible adult accompany them to drive them home. More information on our anesthesiology team can be found at: