General Anesthesia for Pediatric Dental Treatment

Coastal Anesthesia Consultants

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Your dentist has asked us to help take care of your child in their office. Our group specializes in the delivery of anesthesia which allows the required dental treatment to be achieved conveniently and safely with maximum patient comfort. We are pleased to be able to offer this service and wish to introduce ourselves and provide you with a brief explanation of the anesthetic techniques that we use.

Our group, Coastal Anesthesia Consultants (CAC), is comprised of Board Certified physician anesthesiologists. CAC physician members provide private practice anesthesia services in this community and have earned a reputation from both our patients and healthcare colleagues, of providing personalized care while maintaining the highest safety standards. We bring our own anesthesia equipment and medications to the dental office (or other medical offices), and are able to provide a very safe and effective anesthetic treatment for both pediatric and adult patients who would otherwise need to have their treatment in a hospital or surgery center.

Office-based anesthesia is a unique subspecialty in the field of anesthesiology. It has gained recognition among physicians as an important service to offer for the convenience of our patients and dental and medical colleagues. The State of California, the California Medical Board, and the California Board of Dental Examiners carefully regulate the qualifications of the anesthesia provider in the office setting as well as the emergency and routine equipment that must be available on site. In addition to a license to practice medicine in California, we have “General Anesthesia Permits” issued from the Board of Dental Examiners.
Financial Arrangements

Dental insurance often does not cover anesthesia services. Sometimes they will tell you that they do cover “general anesthesia for dental treatment” however they do not mean I.V. sedation/general anesthesia provided in the dental office. They are talking about anesthesia performed in a hospital or surgery center setting. Medical insurance companies may reimburse for our services but it is extremely unlikely. They usually do not cover anesthesia provided in a dental office. Therefore, we do not bill insurance companies, medical or dental. We do not get pre-authorization from the insurance company. You are responsible for paying our fee for the I.V. sedation/general anesthetic. If you would like, R.C.Mclean and Associates, Inc (an Anesthesia billing company) can fill out a formal CPT code sheet and submit it on your behalf to your insurance carrier in an attempt to have them reimburse for general anesthetic services. This paperwork is routinely submitted by doctors’ billing services and it involves assigning a performed procedure a designated (CPT) code before invoice in sent to the patient’s insurance company. There is a small additional charge (approximately $25) for this professional service and reimbursement is not guaranteed.

Safety Concerns for I.V. Sedation in the Dental Office

Prior to the day of surgery, we will spend time talking to you and your dentist about your child to make sure that the office setting will be a safe and appropriate place to provide I.V. sedation/general anesthesia for him or her. If we think that your child has a pre-existing illness that would jeopardize their safety under I.V. sedation/general anesthesia in the office, we will recommend the hospital setting as an alternative.

In concordance with the California Board of Dental Examiners, we carry all the routine emergency equipment including extra oxygen tanks, breathing equipment, emergency drugs, and a defibrillator. In essence, our
Anesthesiologists have the same type of equipment and medication that would be available within the operating room of a hospital or surgery center. The main concern with this type of anesthesia in the pediatric patient is to maintain an open airway and adequate breathing. This is routine for an anesthesiologist. We are always managing the unconscious patient and making sure their breathing and all other physiologic functions are maintained. We continually monitor the patient’s level of anesthesia, vital signs and breathing throughout the treatment, never leaving them during the procedure.

The risk of an “allergic reaction” to these sedation drugs is very remote. It has been reported in the literature with propofol but it is very rare. If your child is allergic to eggs or to soy, we would not use this particular anesthetic during sedation since there is an increase in risk of an allergic reaction to propofol in the presence of these food allergies. Similarly, if gas anesthesia is used for your child’s maintenance anesthetic, there is a very remote possibility of developing an allergic reaction known as Malignant Hyperthermia but we are equipped with Dantrolene, the antidote if this exceedingly rare condition occurs.

The risk of postoperative nausea and vomiting is a possible side effect of anesthesia. We will administer anti-nausea medications through the I.V. during the dental treatment that have no other side effects and are very effective in preventing this problem.

**Our Anesthetic Technique for the Pediatric Dental Patient**

Depending on the type of dental procedure(s) being performed, your child will be receiving either an I.V. sedation only (M.A.C.) or a general anesthetic that allows him (or her) to have minimal or no awareness of the dental procedure, maximal comfort and the highest degree of safety. These anesthetic techniques provide excellent conditions for your dentist to perform the needed dental work in one visit that might otherwise require many dental visits to complete. As mentioned above, we have an anesthetic setup in the dental office, which is very similar to that which would be present in any operating room or in any hospital site outside of the O.R. where we would be providing this same technique. We equip the treatment room with state of the art monitoring equipment, suction equipment and a
full array of A.C.L.S. (Advanced Cardiovascular Life Support) resuscitation equipment for emergencies, which includes all necessary drugs, airway equipment, and a defibrillator. You can view some of this equipment by visiting the “welcome” page of our website at: www.dental-anesthesia.com.

We will contact you directly before the scheduled dental procedure at the phone number(s) you have provided to your dentist. The purpose of this call is to obtain a brief medical history, provide pre-procedure eating and drinking instructions, to discuss the details of the anesthetic management, and to answer any other questions you may have regarding the anesthetic technique.

At the time of your scheduled appointment, we will meet you and your child in the waiting area of the dental office and address any last minute concerns. Your child will then receive a ‘pre-medication’ while still with you. The purpose of this pre-med is to allow the anesthesiologist to place an intravenous line without your child experiencing discomfort or awareness. The pre-med is usually given in the form of an intramuscular injection in the front of the leg or the upper arm. This ‘shot’ contains a small amount of midazolam, ketamine and glycopyrolate. It will feel similar to a vaccination shot that might be given by the pediatrician. Occasionally, for the older child, (more than 6 or 7 years old), we will offer the alternative of an oral pre-medication. In the very anxious or young child, the oral preparation usually does not provide adequate relaxation for I.V. placement so the intramuscular route is preferable. Another technique for the very cooperative child is to have them breathe ‘laughing gas’ (nitrous oxide) through a mask until they feel relaxed or ‘floaty’. Nitrous oxide alone will not provide enough of a sedation effect to complete the dental treatment. So the I.V. sedation is still needed. In some cases we can have a cooperative child breathe the anesthesia gas (sevoflurane) directly through a mask also, which can induce general anesthesia quickly. The IV is again started after the child is asleep and is necessary to deliver other medications and anesthetics.

The sedation effects of the pre-meds are apparent in 5–10 minutes after the intramuscular injection, or 20 minutes after the oral preparation, or 10 minutes after breathing nitrous oxide gas. At that time, your child will be sleepy and/or very ‘drunk’. He or she may not close their eyes at this point but they will have no recall of subsequent events of the visit. At this point, you will be asked to wait in the waiting room while we start the intravenous catheter painlessly and attach the necessary monitoring equipment to your
child in the treatment room. Your child will be sedated enough at this point, that he or she will not be distressed by, nor even remember, separating from you. In fact, your child will not be aware of any further events in the course of the treatment. We will remain in immediate attendance of your child throughout the dental treatment monitoring vital signs and continuing to administer the appropriate anesthetic medications on an as needed basis. Our anesthetic technique will not only include sedatives but pain medication and anti-nausea medicine as well.

At the end of the procedure, the dentist will come to you in the waiting area and explain how the treatment has proceeded. We will remain with your child until he or she is opening their eyes. Emergence from this type of sedation is gradual and your child will likely need 30 minutes after the completion of the dental treatment to wake up. You can join your child as soon as they open their eyes. One possible side effect of the sedation is some shivering but this will resolve quickly.

You may find that your child is grumpy, fussy, or not completely themselves for a few hours after the sedation. In fact, it will take at least 4 hours (or so) after you return home until your child is completely over the effects of the anesthetics. The emergence from this type of anesthesia is very gradual. Your child may complain of dizziness, and not being able to focus very clearly for the first 2 hours after you return home. These are normal side effects of the anesthesia and will gradually wear off. There are no long-term side effects of the anesthetic medications used for I.V. sedation/general anesthesia.

You will get detailed instructions about what to expect after the procedure both from the dentist, the staff, and from us. Please read the instructions provided for you below to give you an idea of what to do before the treatment and what to expect afterwards.

Instructions to follow before the Appointment

Eating and drinking:
The following eating and drinking instructions are extremely important to follow exactly as written to insure the safety of your child under anesthesia. These are standard guidelines given to any patient having anesthesia and are meant to prevent the possibility of vomiting and aspirating vomit while sedated or groggy.

On the day of your appointment, your child should not have any food or milk within 6 hours of the procedure. He or she may have water, Gatorade, apple juice, Jell-O, frozen fruit juice popsicles up to 2 hours before the time of the appointment. No liquids (including water) within 2 hours of the appointment. Therefore, for example, if your appointment is at 10:00 a.m. the last food or milk your child can have would be at 4:00 in the morning (not very practical) but he or she can have clear liquids until 8:00 a.m. If your appointment is at 1:30 p.m., your child can have food and milk until 7:30 a.m. and clear liquids until 11:30 a.m. If your child is breast-feeding, the last feeding can be 3 hours before the appointment.

**Change in health status:**

If your child has a change in health status before the appointment, for example, a cold, sore throat, cough, nausea or vomiting, or fever, please call your dentists’ office as soon as possible so that we can contact you and determine if it is safe to proceed with the anesthetic or if we need to reschedule.

**Medications:**

If your child takes any prescribed medication, please continue it on the day of the appointment. If it is an oral medication, let your child take it with a small sip of water. If it is an inhaler, have your child use it at their regular time. If your child is an insulin dependent diabetic, a pre procedure consultation with me will be arranged.

**Clothing:**

We recommend loose fitting, and easy to put on clothes for your child on the day of the dental procedure. The shirt layer closest to the skin should be
short sleeved. If your child has a favorite blanket, please bring it. Many children under the age of 6 years urinate in their pants as they are waking up from the sedation. So, please bring a ‘pull-up’ if your child is 4 years old or younger or a change of clothes.

Questions:

We will contact you one or two days before the scheduled procedure to answer any questions. If you have urgent concerns or questions that cannot wait, please contact us on our pager numbers. We will call you back as soon as we are able.

Instructions to Follow After the I.V Sedation

Eating and drinking:

Do not give your child anything to eat or drink in the car on the way home. They have a higher risk of vomiting in the car after anesthesia. As soon as you get home your child can have some clear liquids to drink. For the first hour give them only the clear liquids i.e., popsicles, water, soup, apple juice, etc. The first meal can be offered one hour or so after you get home and should consist of soft foods only, requiring minimal chewing. If your child is not hungry for the first several hours, do not force him or her to eat but do encourage plenty of fluid intake. If your child has nausea or vomiting for more than 2 hours after the procedure, please call us on at the numbers provided above.

Physical Activity:

Please do not leave your child alone for the first 4 to 5 hours after you get home. He or she could easily fall if they try to walk on their own while recovering from the effects of the anesthetic medications. It is a good idea for your child to take it easy the first day, especially avoiding activities that require balance and coordination. For example, your child should not be bicycle riding, climbing trees, playing on the jungle gym, etc. Occasionally a child will develop a bright red color in their face a few hours after the anesthetic. This is not an allergic reaction and usually occurs if the child has been overly active after the anesthesia and a bit dehydrated. It is self limited
and usually goes away in a few hours. If this occurs in your child and you have any concerns, feel free to contact us.

**Pain Control:**

If your child complains of any discomfort in their mouth when you are home, give them an appropriate dose of children’s Tylenol or Motrin. These medications are usually adequate for pain control after dental treatment.

We look forward to participating in your child’s dental treatment. Please feel free to contact us by either cell phone or email if you have any other concerns about the anesthesia procedure that we have not addressed. Thank you very much for using California Anesthesia Consultants for your anesthesia needs.

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