Successful Treatment of the Pediatric Patient with Oral Sedation and Hypnosis: A Case Report

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Even after 26 years of general practice, the advice I was given on the first day of my residency remains true today. One of my mentors, Dr. Charles Pillar, told me to “manage children backwards.” The same holds true for the apprehensive adult and special-needs patient. No matter how you decorate the reception area or operatory, the dental patient has been to the pediatrician or another health care provider and has certain expectations. My best patients are those without a previous dental experience.

Nicholas is the perfect pediatric patient. He initially presented to me when he was 5 years old with multiple carious teeth requiring extensive dentistry (Figure 1 and 2). He had never been to the dentist and I had treated his grandmother and mother with intravenous sedation. Four years earlier, I had also treated his older brother at Stony Brook University Medical Center, under general anesthesia. His mother brought Nicholas to me for dental treatment under general anesthesia so he wouldn’t be traumatized and have a permanent fear of the dentist. After reviewing the risks and cost of general anesthesia, I decided to use oral sedation to reduce his awareness and recall of the visit. The goal with oral sedation is amnesia, not cooperation. If the patient cooperates, that’s great — but we strive for amnesia so they don’t remember, or care about, the treatment.

Sedation

I prefer to use Chlora Hydrate to sedate children under the age of 8 and behavioral management for children between ages 8 and 14. I always work backwards. Whenever possible, I medicate my young pediatric patients and set a goal of restoring half a mouth, obtaining X-rays and completing my exam. If I attempted to treat the child with local anesthesia or with local anesthesia and nitrous oxide first, my options would be limited to treatment with restraint or deferring treatment if the child didn’t cooperate. If I restrained the child without oral sedation, that child...
would remember the visit and the next session would be more difficult. When nothing is accomplished, the child has learned how to beat the system and will be more difficult to treat, with very limited options. All my pediatric patients, apprehensive teens and phobic adults are sedated first and, only after successful treatment visits, are weaned off the medications.

Choral Hydrate 50mg/kg is administered as a single dose up to a maximum of 1000mg. Choral Hydrate is a flavored liquid and the goal is a sedated child, not a cooperative child. The parent or guardian is always present in the room and given the responsibility of restraining the hands and upper body. Half the children willingly take the medication and the other half need to be bribed or forced to take the Choral Hydrate syrup. Nicholas weighed 20kg, swallowed the 1000mg of Choral Hydrate and then a half hour later was sedated for two quadrants of local anesthesia with mild restraint. I performed a pulpotomy on tooth T, his lower right deciduous second molar and restored the teeth with posterior composites. Nicholas returned a week later for a follow-up visit and there were no dental complications. He also had no recall of the treatment. He returned three weeks later to restore the other side. He quickly swallowed his medication and, once successfully sedated a half hour later, allowed us to complete the remaining dentistry on the other side.

The challenge with many children is getting them to take the medication. Once the medication is administered, half will cooperate. Children who move their head are restrained by their parent or guardian and my team. Local anesthesia is injected, the planned dentistry is completed, and the patient is allowed to recover until the local anesthesia has worn off. All the children, once medicated, have very little (if any) recall of the event.

There are other medications available to sedate the pediatric patient and I've probably used them all. Midazolam is available orally and is the most popular with anesthesiologists and pediatric dentists. It is reversible and short acting. Half the patients still won't swallow it and it often wears off before the dental treatment is completed. I'm not aware of any oral sedative that predictably converts an uncooperative child into a cooperative patient. With this case, we had a textbook perfect sedation and treatment result.

**Hypnosis**

Unfortunately, most fearful or apprehensive patients are not regular dental patients. Nicholas fell through the cracks and finally returned five years later in pain at 4:30 p.m. Tooth K had abscessed and required an extraction (Figures 3 and 4). He was 10 years old, more mature and cooperative, and, with a positive previous dental experience, he was willing to listen to me.
While waiting in the reception area, I initiated a hypnotic process. Hypnosis is the art of communication, and through words I described an action or scenario to achieve a specific result. In the reception area, I asked Nicholas to give me his hand. He reached out and I held his hand in mine. I told him that all he would feel is a sense of pressure just like squeezing your hand in a handshake. Still in the reception area, I explained to Nicholas that I would paint a gel above his tooth and that it would have a cherry flavor. After several minutes, I then would take my fingernail and press it against the gum above the tooth. At the same time I explained the procedure to Nicholas, I took my fingernail and pushed it against the back of his hand. I asked Nicholas to repeat what I had just explained and we were ready to proceed with treatment.

Once inside the operatory, I started the induction process. Induction is the hypnotic step of getting the subject to close their eyes. This simple process starts with asking permission to cover the eyes with damp gauze. I asked Nicholas to close his eyes and to keep them closed until I told him to open them. After his eyes were covered and closed, I painted the cherry-flavored topical in the buccal fold and onto the interproximal papillas. After several minutes, I asked for permission to look inside his mouth. Once permission was granted, I placed my mirror inside the cheek and announced that on the count of three, I would press my fingernail against his gum. I counted to three, and on three I slowly infiltrated approximately two-thirds of a carpule of local anesthetic. I asked for permission to check his gums again and on the count of three proceeded to place local anesthetic into all interproximal papillas. Once numb, I grabbed his hand and applied gentle pressure while telling him that this sensation is what he would feel while I removed his tooth. The extraction was uneventful.

When he was brought out to the reception area, his mother asked if he got a shot and he responded, “No, Dr. Marc used his fingernail.” Nicholas returned for a follow up appointment a week later and agreed to have the other abscessed teeth removed the same way. Nicholas and his family have not returned for regular preventive care because of financial and family issues, but not due to fear of the dentist.
This case demonstrates the successful treatment of a child over five years of age. I medicate young children under eight, and those older are managed with short simple hypnotic scripts and local anesthesia. Let this case be a guide to patient management. Remember there is no substitute for personal experience. After 26 years in general practice, I’ve learned that every patient can be a challenge. For successful treatment, you also have to manage the parent or guardian as well.

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Dr. Gottlieb will be presenting during the 2011 Florida National Dental Convention (FNDC2011), which will be held June 9-11, 2011 in Orlando. To register for Dr. Gottlieb’s course, or any of the other 115 continuing-education courses at FNDC2011, visit www.floridadentalconvention.com.

References
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