Management of Anxious and Special-Needs Patients: THERE’S ALWAYS A WAY
by Harvey Levy, DMD, MAGD, LLSR

With excitement and eager anticipation you set out to join your loving relatives for a festive holiday meal at their place. You have been driving for quite a while and can almost smell the familiar food when you encounter a total standstill on the highway. You spot an exit and drive off to a secondary road, but after a few minutes you see a tree totally blocking your way. You assess your options, and decide to take an even more indirect route. Eventually you make it to your destination, albeit via a more circuitous, time consuming and less traveled path. But you made it, and the trip feels all the more worthwhile for the travails, obstacles and threats to the completion of your journey.

Management of anxious patients similarly starts out on the main highway. Due to circumstances over which you have little control, you are often forced to try another approach. So you veer off and try a different modality that looks promising but that does not quite allow you to complete your treatment plan. You pull one more rabbit out of your hat and voilà, you’ve finally treated your patient successfully.

ANXIOUS PATIENTS

Anxiety by definition is “worry gone out of control”. It is irrational and illogical, but frighteningly real to the patient. You, the dentist, don’t have to understand it. In fact, unless you’ve experienced it, you cannot understand it. Try describing the color blue to a congenitally blind person and you will appreciate the impossibility of understanding a patient’s situational anxiety.

Now magnify that anxiety, compounding it with the kind of fear felt by young children who can’t yet understand. Or with the fear felt by Alzheimer’s patients who can no longer understand. Or with the fear of mentally challenged patients who never understood. Or even worse, with the fear felt within the isolated misunderstood world of autistic patients. Not all anxious people are special-needs patients, but all special-needs patients are anxious.

How do we gain their cooperation, in order to provide them with the dental treatment they need? The answer is… there is always a way. Always.

For the most extreme case — that of the patient who cannot be seen at a dental office due to high medical risk, paradoxical reactions to medications, or extreme adverse behavior — success can be assured in a hospital or surgical center operating room (OR). For other cases along the spectrum, there are many alternative roads.

Some dentists try behavior modification, which often includes multiple orientation and familiarization visits. But who has the patience, and who will pay for these multiple “let’s get familiar” visits? Assuredly, not the insurance companies.

Some dentists have limited success with hypnosis or acupuncture, which works for a small number of patients. The majority of our anxious and special needs patients are refractory to these methods, forcing us to try a different avenue.

PRESCRIPTION DRUGS FOR ORAL CONSCIOUS SEDATION

Let’s start by relaxing the patient with a little medicine. Some dentists will prescribe a p.o. or enteral relaxant, sedative or hypnotic (“conscious sedative”) the night before to ensure a restful sleep, supplemented by more medication 30-60 minutes before the appointment. If that dose doesn’t relax the patient sufficiently, he or she may be given a little more while in the chair, or rescheduled to return another day with a higher dose or a different family of drugs (if a built-up resistance or tolerance to the initial choice is noted).

A variety of drugs are available for use as anxiolytics or conscious sedatives in the treatment of nervous dental patients. A brief selection of these drugs, and the most common adult dosage range, appears in Table 1. A thorough review of the patient’s medical history, current medication list and a familiarity with these agents will allow for safe and effective use.

NITROUS OXIDE

Another safe option for relaxing the anxious patient is to use nitrous oxide. Make sure that the patient has not eaten for six hours prior to the appointment time, to prevent regurgitation and life-threatening aspiration into the lungs.
CONSCIOUS SEDATIVES IN CONJUNCTION WITH NITROUS OXIDE

A conscious sedative in conjunction with nitrous oxide works most of the time. If that combination fails to allow completion of the dental procedure, then other options need to be considered. You can supplement the drugs already ingested with more conscious sedatives during that same session. If that is not an option or if that alternative fails, the next step is to reschedule the patient and escalate the prescribed conscious sedative to a higher dose or stronger sedative, plus employ nitrous oxide.

Note that the continuum of sedation, from light to moderate to deep, is not dependent on dosage as much as on the patient’s response. You may think you’re delivering a small dose, but a hyper-responder may manifest signs or symptoms of a deeper level of sedation. I strongly encourage dentists to consider obtaining the additional training and certification mentioned in the “Moderate Sedation” section below.

In our practice, this protocol for sedation has been successful in 97% of our 30,000 documented cases over the past 30 years. Patients are relaxed enough to be wrapped, propped, radiographed, and treated to completion.

WRAPS

To prevent patients’ self-injurious behavior such as bringing hands to their mouth while we have sharp instruments or drills in the area, we mindfully restrain their hands using Rainbow Wraps [Fig. 1].

Applying the wrap requires three easy steps. We place the wrap onto the operatory chair before the patient is seated [Fig. 2]. We then seat the patient and gently secure the wrists with Velcro [Fig. 3]. Often, we also wrap the legs with stronger Velcro [Fig. 4] to prevent sudden kicking.

After the patient is snugly wrapped, the head is immobilized. Commercial head restraints are available, but we prefer to have the head be gently held by caregivers or staff. Thus, jerky head movement is restricted in all six possible directions.

MOUTH PROPS

To open the mouth, we start with a small and simple Open Wide™ foam mouth rest, which we insert horizontally then rotate vertically. After that, we often switch to a Molt ratchet-type mouth prop [Fig. 5].

What if the patient will not open? There’s always a way. Actually we have two techniques to convince the patient to open the mouth, with a 99% success rate. The first is to pinch the nose while hovering around the lips with the Open Wide™ mouth rest. As soon as the patient opens the lips to take a breath, we slide in the Open Wide™ mouth rest horizontally, then rotate vertically.

The second technique to get the patient to open the mouth is to use your finger or knuckle to push 45 degrees down against the chin, to activate acupuncture point Conception 24. The patient opens the mandible to avoid the momentary discomfort, just long enough for you to insert the Open Wide™ mouth rest.

Once the Open Wide™ mouth prop is in the vertical position, you can easily insert a larger ratchet prop as described above.

Note that once the ratchet mouth prop is in place, someone MUST keep one finger on the hinge at all times to prevent the patient’s tongue from dislodging it from the mouth.

Do all of your dental work on the side of the mouth opposite the ratchet. Once that side is completed, do NOT remove the ratchet prop. Instead, close the gears of the ratchet, and rotate it 180 degrees within the mouth until it reaches the other side. Then, reopen the gears to the same maximum you used on the initial side. Place a finger on the hinge, and do your dentistry on the second side. If you forget to keep the prop in the mouth when you switch sides, you will have to lure or convince the patient to open all over again.

A new prop that we have been using more recently with impressive results is the Isolite™. Isolite™, its basic unit, serves as an effective mouth prop, tongue retractor, cheek retractor, and saliva ejector. The newer units also have a built-in light source that totally illuminates the areas of the mouth [Fig. 6].

The Isolite™ is so effective that the dental assistant does not need to retract, suction, or adjust the lights. It’s like having an extra dental assistant for the cost of a disposable plastic cheek retractor and saliva ejector.

ACCESSIBILITY

An office needs to be able to accommodate large wheelchairs and gurneys. The U.S. Department of Justice specifies the requirements
that your dental office should follow, including a low height check-out counter, per the Americans with Disabilities Act of 1990.

In addition to the wraps and props, there are some tools and equipment that we find indispensable to our success in treating anxious and special-needs patients.

One is the DentalEZ Airglide™ operatory chair [Fig. 7 and 8]. A simple switch on the chair itself turns the heavy immovable operatory chair into a hovercraft. Its half-inch cushion of forced air allows us to move the chair with literally one finger to anywhere in the operatory, or even out of the operatory altogether. This maneuverability enables patients to remain in the comfort of their familiar or motorized wheelchairs, or even their gurneys.

Headrests make our work easier. When wheelchairs don’t have a headrest we clip one on. Our very favorite headrest, however, is the chest of a family member, caregiver, or dental assistant, as shown in Figure 9.

**RADIOGRAPHS**

For radiographs we love the 8½-lb Nomad™ or the 5½-lb Nomad Pro™, portable, hand-held, cordless x-ray units that resemble a speed-detecting radar gun [Figure 10].

We bring the Nomads™ into our office waiting room, into vans in the parking lot, into nursing and private homes, and into the hospital and other institutions. Its built-in collimator shield eliminates the need for the operator to wear a lead apron.

When your window of opportunity to work with a patient is small, any gain in speed is welcome. The DEXIS™ x-ray system enables us to expose, digitally process and immediately view images. Thus, a retake or additional images can be done within seconds of discovery or diagnosis. Coupling the Nomad™ with the DEXIS™ systems, the operator is still in the room while exposing, viewing and retaking radiographs until satisfactory images are obtained.

What if you don’t have an assistant, a functioning computer, or electric power? The side road in this case is Ergonom-X™ self-developing film in conjunction with a Nomad™ hand-held x-ray unit [Fig. 11 and 12]. For about one dollar, you have a complete film and darkroom enclosed within a packet the size of a pair of size 2 dental films. The developer and fixer are inside the tiny packet. The x-ray is exposed as always, and has no tin foil to create a herringbone pattern from reverse placement.

After standard film exposure, the packet is withdrawn from the mouth, squeezed until the self-contained fluid comes in contact with the exposed film, then manually massaged for 60-90 seconds. The x-ray film is then removed from the packet, and rinsed with water. Within two minutes of exposure, you have an excellent quality processed film. It is not digital, but the film can be scanned and archived.

**Part 2 of this article, which will appear next issue, will discuss parenteral sedation and the care of patients in the operating room setting.**

For copies or comments, please contact Dr. Harvey Levy at DrHLLevy@gmail.com or visit DrHLLevyAssoc.com

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References:
1. Physicians’ Desk Reference 2011, and PDR.net, for information on specific drugs.
2. Lexi Comp Dental Reference Library, 16th edition, for information on specific drugs.

**About the Author**

Dr. Harvey Levy is a general dentist from Frederick, Maryland who has earned Mastership and two Life Long Service Recognitions in the AGD, eight fellowships and four diplomate certifications. He has published numerous articles and offered seminars and participation workshops all over the country. His work with anxious and special-needs patients earned him the 1986 AGD Humanitarian Award, the ADA Access to Care Award and the honor of being a 2002 Winter Olympic Torch runner.

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