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Quelling the Anxiety: Strategies for Treating Patients with Anxiety Disorders

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Does public speaking make you nervous? When driving in heavy traffic, does your heart speed up? Picture a situation that makes you feel uncomfortable or uneasy. Do you feel flushed, have sweaty palms, or a rapid heart beat? A yes to any of these questions suggests you have experienced the feelings of anxiety. Who hasn't? For some however, anxiety becomes more than just a fleeting feeling. Anxiety disorders are the most common psychiatric problems affecting the general population today.¹

Anxiety is defined as emotional pain, a feeling that all is not well, and/or a feeling of impending disaster. Anxiety may be unattached to a clearly identifiable cause or stimulus. These psychological conflicts or feelings give rise to physiologic changes that create clinical manifestations.²

The clue to understanding anxiety disorders lies in the autonomic nervous system, which regulates the activities of smooth muscle, cardiac muscle, and glands, operating without conscious control.³ The autonomic nervous system is divided into two branches: the sympathetic autonomic nervous system (SANS) and the parasympathetic autonomic nervous system (PANS). The sympathetic division is activated during times of stress and is commonly referred to as "fight or flight." It involves energy expenditure. The parasympathetic division is related to conservation of the body processes.⁴ Digestion and intestinal mobility are greatly influenced by the PANS division. The physiologic components of anxiety disorders are mediated by the autonomic nervous system. The two main hormones associated with SANS are epinephrine and norepinephrine.⁵ Epinephrine increases blood pressure by increasing heart rate and constricting the blood vessels. Some common symptoms resulting from the over secretion of the autonomic nervous system are increased heart rate, sweating, dilated pupils, and muscle tension.

Suggested follow-up questions for patients who experience anxiety disorders.
- Are you currently seeing a therapist?
- Are you currently receiving treatment or have you previously been treated for an anxiety disorder?
- When and what was the length of treatment?
- What prescription medications are you currently taking?
- Who prescribed the medication?
- Have you noticed any side effects from the medication(s)?
- Are you taking any herbal supplements?

Common anxiety disorders include phobias, panic disorders, generalized anxiety disorders, post-traumatic stress disorders, and obsessive-compulsive disorders (Table 1). The most common is generalized anxiety disorder. Women are twice as likely as men to experience panic disorders, agoraphobia (without panic disorder), and generalized anxiety disorder.¹

IDENTIFYING PATIENTS

Dental hygienists can play a key role in obtaining information from patients regarding their mental illness, current drug regimen, and the possible oral side effects of medications. Medical history forms should include a question such as, “Have you ever been treated for an anxiety disorder?” A broad question like this can facilitate a dialogue between the hygienist and patient. If the patient indicates a positive response, follow-up questions are necessary to obtain more detailed information. See sidebar above for examples. When discussing medical history with patients, confidentiality must be assured and the clinician should ask all questions in a nonjudgmental manner. Accurate information is critical to providing optimal patient care and is best obtained when the patient feels comfortable with the provider. The dental hygienist should discuss oral implications of any anti-anxiety medications the patient may be taking.

Studies indicate that 10%-20% of the US population experience moderate to high levels of dental anxiety.⁵ This fear prohibits regular dental visits, resulting in poor oral health. Patients with dental anxiety often do not complete treatment due to the anticipated fear.⁶ This anxiety may require additional appointment time in order to help the patient feel comfortable enough to carry out the anticipated procedure.⁶

MANAGING THE ANXIOUS DENTAL PATIENT

Historically, anxious patients have been managed by a pharmacological approach aimed at treating the over secretion from the sympathetic nervous system. Pretreatment diazepam or nitrous oxide sedation are commonly used to help manage anxiety. Diazepam, an anti-anxiety drug produces central nervous system (CNS) depression and is considered a minor tranquilizer from the benzodiazepine classification of drugs. The pharmacologic effects of the benzodiazepines are: 1) behavioral—anxiety reduction (low dose), drowsiness and sleep (higher doses); 2) anticonvulsant effects—increase the seizure threshold; and 3) muscle relaxation—skeletal muscle relaxation. Some adverse reactions of benzodiazepines include fatigue, muscle weakness, and ataxia. These effects are more likely to occur in the elderly population. Cases of physical dependence and tolerance of benzodiazepines have been documented.⁴

Nitrous oxide produces conscious sedation and is effective as an anti-anxiety agent. Administration of nitrous oxide has become a primary part of dental office anxiety reduction protocols. The advantages of nitrous oxide include rapid onset, easy administration, rapid recovery, and it is acceptable for children. Pharmacologically, it provides CNS sedation. The best indicator of the degree of sedation is the patient's ability to respond to questions. The patient should be able to answer questions correctly, but may do so in a slower manner. Nitrous oxide may produce analgesia. However, this is variable. Nitrous oxide is contraindicated in patients with chronic obstructive pulmonary disease, respiratory obstruction, emotional instability, severe anemia, and those in the first trimester of pregnancy.⁴

New research suggests that behavioral management techniques can reduce anxiety, thus increasing the likelihood of patient compliance without the side effects of medication.⁷ Behavioral approaches may include the following relaxation techniques: diaphragmatic breathing, paced respiration, Bensonian relaxation response, Wolpe technique, and guided imagery. Diaphragmatic breathing and paced respiration are practiced by taking deep slow breathes in rhythmic pattern.⁸ The Bensonian technique uses the repetition of a word or phrase while adopting a passive attitude.⁶ The process of systematically tensing and relaxing muscles to produce overall body relaxation is the basis of the Wolpe technique.⁹ Guided imagery uses the imagination in developing an image of a pleasant experience, focusing on the experience to bring about relaxation.⁶

SUCCESSFUL APPOINTMENTS

When treating patients with anxiety disorders, the dental hygienist should focus on explaining the procedures that will be performed at the appointment. An explanation of the visit may in itself reduce some of the patient's anxiety. It is essential that the patient experience a pain-free appointment. Limiting pain, honest communication regarding treatment, introducing new procedures slowly, and allowing the patient the opportunity to take breaks when necessary are some of the steps a dental hygienist can take when providing care to an anxious individual.

Nitrous oxide and topical and/or local anesthesia will assist with pain control and help ensure a positive experience for the patient. Special needs patients, such as those with anxiety disorders, are best scheduled in the morning so their anticipation of the appointment does not build throughout the day, escalating their anxiety. Patients with anxiety disorders now have a variety of approaches including education, pharmaceuticals, and natural alternatives to assist them in anxiety reduction during dental treatment and in daily life.²¹⁰ See next page for a table on the indication and contraindications of diazepam and nitrous oxide.
Pharmacologic agents—indications and contraindications.

<table>
<thead>
<tr>
<th>Pharmacologic Agent</th>
<th>Indications</th>
<th>Contraindications</th>
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<tbody>
<tr>
<td>Diazepam</td>
<td>Management of anxiety disorders or short-term relief of symptoms of anxiety</td>
<td>Contraindicated with hypersensitivity to benzodiazepines, psychoses, shock, pregnancy, lactation, acute narrow-angle glaucoma, coma, acute alcoholic intoxication, use cautiously with elderly or debilitated patients, impaired liver or kidney function</td>
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<tr>
<td>Nitrous Oxide</td>
<td>Provides anxiety relief, increase acceptance of dental procedures</td>
<td>Respiratory obstruction, Chronic Obstructive Pulmonary Disease, pregnancy, emotional instability and history or chronic abuse of nitrous oxide, \textsuperscript{5,9,10}</td>
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REFERENCES