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# Clinical Guideline on Behavior Management

Originating Committee

Clinical Affairs Committee - Behavior Management Subcommittee

Review Council
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# Background

Behavior management is a continuum of interaction with a child/parent directed toward communication and education. Its goal is to ease fear and anxiety while promoting an understanding of the need for good dental health and the process by which it is achieved. Communication between the dentist and child is built on a dynamic process of dialogue, facial expression, and voice tone. It is through this communication that the dentist can allay fear and anxiety, teach appropriate coping mechanisms, and guide the child to be cooperative, relaxed, and self-confident in the dental setting. Some of the techniques in this document are intended to maintain communication, while others are intended to extinguish inappropriate behavior and establish communication. As such, behavior management techniques cannot be evaluated on an individual basis as to validity, but must be evaluated within the context of the child's total dental experience. Each technique must be integrated into an overall behavior management "package" individualized for each child. As a result, behavior management is as much an art form as it is a science. It is not an application of individual techniques created to "deal" with children, but rather a comprehensive, continuous methodology meant to develop and nurture the relationship between patient and doctor which ultimately builds trust and allays fear and anxiety.

Dental practitioners are expected to recognize and effectively treat childhood dental diseases that are commonplace and within the knowledge and skills they acquired as graduates of dental schools in the United States and Canada. Safe and effective treatment of these diseases often requires modifying the child's behavior. Dental practitioners are encouraged to perform behavior management consistent with their level of educational training and clinical experience. Behavior management cases that are beyond the training, experience, and expertise of individual practitioners should be referred to practitioners who can render care more appropriately.

#### Overview

Maintaining compliance of children in the dental environment demands skills of verbal guidance, expectation setting, extinction of inappropriate behavior, and reinforcement of appropriate responses. Since children exhibit a broad range of physical, intellectual, emotional, and social development and a diversity of attitudes, it is important that dentists have at their disposal a wide range of behavior management techniques to meet the needs of the individual child. Successful behavior management enables the dental practitioner to perform treatment safely and efficiently and promote in the child a positive dental attitude.

Unfortunately, various barriers may hinder the achievement of a successful outcome. Developmental delay, physical/mental disability, and acute or chronic disease all are obvious reasons for noncompliance. Reasons for noncompliance in the healthy, communicating child often are more subtle and difficult to diagnose. Major factors contributing to poor cooperation can include fears transmitted from parents, a previous unpleasant dental or medical experience, inadequate preparation for the first encounter in the dental environment, or dysfunctional parenting practices.

To alleviate these barriers, the dentist should become a teacher. The dentist's methodology should include analyzing the patient's developmental level and comprehension skills, directing a message to that level, and having a patient who is attentive to the message being delivered (ie, good communication). To safely deliver quality dental treatment and develop an educated patient, the "teacher-student" roles and relationship must be established and maintained.

The child who presents with oral/dental pathology and noncompliance tests the skills of every practitioner. A dentist treating children should have a variety of behavior management approaches and should, under most situations, be able to assess accurately the child's developmental level and dental attitudes and predict the child's reaction to the choice of treatment. However, by virtue of each practitioner's differences in training, experience, and personality, a behavior management approach for a child may vary from practitioner to practitioner.

This document contains definitions, objectives, indications, and contraindications for behavior management techniques which are deemed useful in pediatric dentistry. Each technique has been approved by the American Academy of Pediatric Dentistry (AAPD). These guidelines are

based on the prescribed use of behavior management techniques as documented in the dental literature and on the professional standards of both the academic and practicing pediatric dental community. The guidelines are reflective of the AAPD's role as an advocate for the improvement of the overall health of the child.

#### Informed consent

Regardless of the behavior management techniques utilized by the individual practitioner, all management decisions must be based on a subjective evaluation weighing benefit and risk to the child. Considerations regarding need of treatment, consequences of deferred treatment, and potential physical/emotional trauma must be entered into the decision-making equation.

Delivery of dental treatment is often a complex decision. Decisions regarding the use of behavior management techniques other than communicative management cannot be made solely by the dentist. Decisions must involve a legal guardian and, if appropriate, the child. The dentist serves as the expert about dental care (ie, the need for treatment and the techniques by which treatment can be delivered). The legal guardian shares with the practitioner the decision whether to treat or not treat and must be consulted regarding treatment strategies and potential risks. Therefore, the successful completion of diagnostic and therapeutic services is viewed as a partnership of dentist, legal guardian, and child.

Although the behavior management techniques included in this document are used frequently, parents may not be entirely familiar with them. It is important that the dentist inform the legal guardian about the nature of the technique to be used, its risks, benefits, and any alternative techniques. All questions must be answered. This is the essence of informed consent.

Communicative management, which by virtue of being basic elements of communication, requires no specific consent. All other behavior management techniques require written informed consent which must be maintained in the patient's dental record. Implied consent is applicable only in an emergent situation which necessitates use of a technique to avoid immediate injury to the patient, doctor, and/ or staff.

# Summary

- 1. Behavior management is based on scientific principles. 1-15 The proper implementation of behavior management requires an understanding of these principles. Behavior management, however, is more than pure science and requires skills in communication, empathy, coaching, and listening. As such, behavior management is a clinical art form and skill built on a foundation of science.
- The goals of behavior management are to establish communication, alleviate fear and anxiety, deliver quality dental care, build a trusting relationship between dentist and child, and promote the child's positive attitude towards oral/dental health.

3. All decisions regarding behavior management must be based on a benefit vs risk evaluation. Legal guardians share in the decision-making process regarding treatment of their children.

# Basic behavior management

#### Communicative management

Communicative management is used universally in pediatric dentistry with both the cooperative and uncooperative child. It comprises the most fundamental form of behavior management. Communicative management is the basis for establishing a relationship with the child which may allow the successful completion of dental procedures and, at the same time, help the child develop a positive attitude toward dental health. Communicative management comprises a host of communication techniques which, when integrated together, enhances the evolution of a compliant and relaxed patient. It is an ongoing subjective process rather than a singular technique and is often an extension of the personality of the dentist. Associated with this process are the specific techniques of voice control, nonverbal communication, tellshow-do, positive reinforcement, distraction, and parental presence/absence. Since these comprise the elements of usual and customary communication, they are appropriate for all patients. In addition, no specific consent or documentation is necessary prior to use.

#### Voice control

**Description:** Voice control is a controlled alteration of voice volume, tone, or pace to influence and direct the patient's behavior.

#### Objectives:

- 1. gain the patient's attention and compliance;
- 2. avert negative or avoidance behavior;
- establish appropriate adult-child roles.
   Indications: May be used with any patient.
   Contraindications: None.

#### Nonverbal communication

**Description:** Nonverbal communication is the reinforcement and guidance of behavior through appropriate contact, posture, and facial expression.

#### Objectives:

- 1. enhance the effectiveness of other communicative management techniques;
- 2. gain or maintain the patient's attention and compliance.

Indications: May be used with any patient. Contraindications: None.

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**Description:** Tell-show-do is a technique of behavior shaping used by many pediatric professionals. The technique involves verbal explanations of procedures in phrases appropriate to the developmental level of the patient (tell); demonstrations for the patient of the visual, auditory, olfactory, and tactile aspects

Tell-show-do

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of the procedure in a carefully defined, nonthreatening setting (show); and then, without deviating from the explanation and demonstration, completion of the procedure (do). The tell-show-do technique is used with communication skills (verbal and nonverbal) and positive reinforcement.

#### Objectives:

- 1. teach the patient important aspects of the dental visit and familiarize the patient with the dental setting;
- 2. shape the patient's response to procedures through desensitization and well-described expectations.

Indications: May be used with any patient.

Contraindications: None.

## Positive reinforcement

Description: In the process of establishing desirable patient behavior, it is essential to give appropriate feedback. Positive reinforcement is an effective technique to reward desired behaviors and thus strengthen the recurrence of those behaviors. Social reinforcers include positive voice modulation, facial expression, verbal praise, and appropriate physical demonstrations of affection by all members of the dental team. Nonsocial reinforcers include tokens and toys.

Objective: Reinforce desired behavior. Indications: May be useful for any patient.

Contraindications: None.

#### Distraction

**Description:** Distraction is the technique of diverting the patient's attention from what may be perceived as an unpleasant procedure.

#### Objectives:

- 1. decrease the perception of unpleasantness;
- 2. avert negative or avoidance behavior.

**Indications**: May be used with any patient.

Contraindications: None.

### Parental presence/absence

Description: This technique involves using the presence or absence of the parent to gain cooperation for treatment. A wide diversity exists in practitioner philosophy and parental attitude regarding parents' presence or absence during pediatric dental treatment. Practitioners are united in the fact that communication between dentist and child is paramount and that this communication demands focus on the part of both parties. Children's responses to their parents' presence or absence can range from very beneficial to very detrimental. It is the responsibility of each practitioner to determine the communication methods that best optimize the treatment setting recognizing his/her own skills, the abilities of the particular child, and the desires of the specific parent involved.

#### Objectives:

- 1. gain the patient's attention and compliance;
- 2. avert negative or avoidance behaviors;
- 3. establish appropriate adult-child roles;
- 4. enhance the communication environment.

Indications: May be used with any patient.

Contraindications: None.

#### Nitrous oxide/oxygen inhalation sedation

Description: Nitrous oxide/oxygen inhalation sedation is a safe and effective technique to reduce anxiety and enhance effective communication. Its onset of action is rapid, the depth of sedation is easily titrated and reversible, and recovery is rapid and complete. Additionally, nitrous oxide mediates a variable degree of analgesia, amnesia, and gag reflex reduction.

The need to diagnose and treat, as well as the safety of the patient and practitioner, should be considered before the use of nitrous oxide. The decision to use nitrous oxide must take the following factors into consideration:

- 1. alternative behavioral management modalities;
- 2. dental needs of the patient;
- 3. the affect on the quality of dental care;
- 4. patient's emotional development;
- 5. patient's physical considerations.

Written informed consent must be obtained from a legal guardian and documented in the patient's record prior to use of nitrous oxide.

The patient's record should include:

- 1. informed consent;
- 2. indication for use;
- 3. nitrous oxide dosage:
  - a. percent nitrous oxide/oxygen and/or flow rate;
  - b. duration of the procedure;
  - c. posttreatment oxygenation procedure.

#### Objectives:

- 1. reduce or eliminate anxiety;
- reduce untoward movement and reaction to dental treatment;
- 3. enhance communication and patient cooperation;
- 4. raise the pain reaction threshold;
- 5. increase tolerance for longer appointments;
- aid in treatment of the mentally/physically disabled or medically compromised patient;
- 7. reduce gagging.

#### Indications:

- 1. a fearful, anxious, or obstreperous patient;
- 2. certain mentally, physically, or medically compromised patients;
- 3. a patient whose gag reflex interferes with dental care;
- 4. a patient for whom profound local anesthesia cannot be obtained.

#### Contraindications:

- 1. may be contraindicated in some chronic obstructive pulmonary diseases;
- 2. may be contraindicated in certain patients with severe emotional disturbances or drug-related dependencies;
- 3. patients in the first trimester of pregnancy;
- may be contraindicated in patients with sickle cell disease:
- 5. patients treated with bleomysin sulfate.

# Advanced behavior management

Most children can be effectively managed using the techniques outlined in basic behavior management. These basic behavior management techniques should form the foundation for all of the management activities provided by the

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dentist. However, children occasionally present with behavioral considerations that require more advanced techniques. The advanced behavior management techniques include hand-over-mouth exercise (HOME), medical immobilization, sedation, and general anesthesia. They are extensions of the overall behavior management continuum with the intent to facilitate the goals of behavior management in the difficult patient. Appropriate diagnosis of behavior and safe and effective implementation of these techniques necessitate knowledge and experience, which is generally beyond the core knowledge students receive during predoctoral dental education. Dentists considering the use of these advanced behavior management techniques should seek additional training through a residency program, graduate program, and/ or an extensive continuing education course that involves both didactic and experiential mentored training.

#### **HOME**

Description: HOME is an accepted technique for intercepting and managing demonstrably unsuitable behavior that cannot be modified by basic behavior management techniques. Its intent is to help the hysterical/obstreperous child regain the self-control that predicts that communicative management will be effective. It has been documented in the dental literature for more than 35 years. The technique is specifically used to redirect inappropriate behavior, reframe a previous request, and reestablish effective communication. When indicated, a hand is gently placed over the child's mouth and behavioral expectations are calmly explained. Maintenance of a patent airway is mandatory. Upon the child's demonstration of self-control and more suitable behavior, the hand is removed and the child is given positive reinforcement. Communicative management techniques should then be used to alleviate the child's underlying fear and anxiety.

The need to diagnose and treat, as well as the safety of the patient, practitioner, and staff, should be considered for the use of HOME. The decision to use HOME must take into consideration:

- 1. other alternate behavioral modalities;
- 2. patient's dental needs;
- 3. the affect on the quality of dental care;
- 4. patient's emotional development;
- 5. patient's physical considerations.

Written informed consent from a legal guardian must be obtained and documented in the patient record prior to the use of HOME.

The patient's record should include:

- 1. informed consent;
- 2. indication for use.

#### Objectives:

- redirect the child's attention, enabling communication with the dentist so appropriate behavioral expectations can be explained;
- 2. extinguish excessive avoidance behavior and help the child regain self-control;

- 3. ensure the child's safety in the delivery of quality dental treatment;
- 4. reduce the need for sedation or general anesthesia.

Indications: A healthy child who is able to understand and cooperate, but who exhibits obstreperous or hysterical avoidance behaviors.

#### Contraindications:

- children who, due to age, disability, medication, or emotional immaturity are unable to verbally communicate, understand, and cooperate;
- 2. any child with an airway obstruction.

#### Medical immobilization

Description: Partial or complete immobilization of the patient sometimes is necessary to protect the patient, practitioner, and/or the dental staff from injury while providing dental care. Immobilization can be performed by the dentist, staff, or legal guardian with or without the aid of an immobilization device.

The need to diagnose, treat, and protect the safety of the patient, practitioner, and staff should be considered for the use of immobilization.

The decision to use patient immobilization should take into consideration:

- 1. other alternate behavioral modalities;
- 2. dental needs of the patient;
- 3. the effect on the quality of dental care;
- 4. patient's emotional development;
- 5. patient's physical considerations.

A dentist or dental staff performing medical immobilization with or without an immobilization device must obtain and document in the patient's record written informed consent from a legal guardian. Medical immobilization performed by a legal guardian does not require written informed consent.

Written informed consent from a legal guardian must be obtained and documented in the patient record prior to medical immobilization.

The patient's record should include:

- 1. informed consent;
- 2. type of immobilization used;
- 3. indication for immobilization;
- 4. the duration of application.

#### Objectives:

- 1. reduce or eliminate untoward movement;
- 2. protect patient and dental staff from injury;
- 3. facilitate delivery of quality dental treatment.

#### Indications:

- a patient who requires immediate diagnosis and/or limited treatment and cannot cooperate due to lack of maturity;
- a patient who requires immediate diagnosis and/or limited treatment and cannot cooperate due to mental or physical disability;
- 3. when the safety of the patient and/or practitioner would be at risk without the protective use of immobilization.

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#### Contraindications:

- 1. a cooperative patient;
- 2. a patient who cannot be immobilized safely due to associated medical conditions.

#### Sedation

Description: Sedation can be used safely and effectively with patients unable to receive dental care for reasons of age or mental, physical, or medical condition. Background information and documentation for the use of sedation is detailed in the Clinical Guideline on Elective Use of Conscious Sedation, Deep Sedation, and General Anesthesia in Pediatric Dental Patients.

The need to diagnose and treat, as well as the safety of the patient, practitioner, and staff, should be considered for the use of conscious sedation. The decision to use sedation must take into consideration:

- 1. alternative behavioral management modalities;
- 2. dental needs of the patient;
- 3. the effect on the quality of dental care;
- 4. patient's emotional development;
- 5. patient's physical considerations.

Written informed consent must be obtained from a legal guardian and documented prior to the use of sedation.

The patient's record should include:

- 1. informed consent;
- 2. indication for use.

#### Objectives:

- 1. reduce or eliminate anxiety;
- reduce untoward movement and reaction to dental treatment:
- 3. enhance communication and patient cooperation;
- 4. increase tolerance for longer appointments;
- aid in treatment of the mentally, physically, or medically compromised patient;
- 6. raise the patient's pain threshold.

#### Indications:

- 1. fearful, anxious patients for whom basic behavior management has not been successful;
- patients who cannot cooperate due to a lack of psychological or emotional maturity and/or mental, physical, or medical disability;
- 3. patients for whom the use of sedation may protect the developing psyche and/or reduce medical risk.

#### Contraindications:

- 1. the cooperative patient with minimal dental needs;
- 2. predisposing medical conditions which would make sedation inadvisable.

#### General anesthesia

Description: General anesthesia is a controlled state of unconsciousness accompanied by a loss of protective reflexes, including the ability to maintain an airway independently and respond purposefully to physical stimulation or verbal command. The use of general anesthesia sometimes is necessary to provide quality dental care for the child. Depending

on the patient, this can be done in a hospital or ambulatory setting.

The need to diagnose, treat, and protect the safety of the patient, practitioner, and staff should be considered for the use of general anesthesia. The decision to use general anesthesia should take into consideration:

- 1. alternative behavior management modalities;
- 2. patient's dental needs;
- 3. effect on the quality of dental care;
- 4. patient's emotional development;
- 5. patient's medical status.

Parental or legal guardian informed consent must be obtained and documented prior to the use of general anesthesia.

The patient's record should include:

- 1. informed consent;
- 2. indication for the use of general anesthesia.

#### Objectives:

- 1. provide safe, efficient, and effective dental care;
- 2. eliminate anxiety in dental patients;
- 3. reduce untoward movement and reaction to dental treatment;
- 4. aid in treatment of the mentally, physically, or medically compromised patient;
- 5. eliminate the child's pain response.

#### Indications:

- patients who are unable to cooperate due to a lack of psychological or emotional maturity and/or mental, physical, or medical disability;
- 2. patients for whom local anesthesia is ineffective because of acute infection, anatomic variations, or allergy;
- 3. the extremely uncooperative, fearful, anxious, or uncommunicative child or adolescent;
- 4. patient requiring significant surgical procedures;
- patients for whom the use of general anesthesia may protect the developing psyche and/or reduce medical risks:
- patients requiring immediate, comprehensive oral/dental care.

#### Contraindications:

- 1. a healthy, cooperative patient with minimal dental need;
- 2. predisposing medical conditions which would make general anesthesia inadvisable.

#### References

- 1. Levy RL, Domoto PK. Current techniques for behavior management, a survey. *Pediatr Dent.* 1979; 1:160-164.
- 2. Murphy MG, Fields HW Jr, Machen JB. Parental acceptance of pediatric dentistry behavior management techniques. *Pediatr Dent.* 1984;6:193-198.
- 3. Weinstein P, Getz T, Ratener P, Domoto P. The effect of dentists' behaviors on fear-related behaviors in children. *J Am Dent Assoc.* 1982;104:32-38.
- Galsrud PH, Feigal RJ. Child life and children's dentistry: Broadening our scope of concern. Child Health Care. 1984;12:143-147.

- Winer GA. A review and analysis of children's fearful behavior in dental settings. *Child Dev.* 1982;53: 1111-1133.
- Fields HW, Machen JB, Chambers WL, Pfefferle JC. Measuring selected disruptive behavior or the 36 to 60 month old dental patient. Part II: Quantification of observed behaviors. *Pediatr Dent*. 1981;3:257-261.
- 7. Sokol DJ, Sokol S, Sokol CK. A review of nonintrusive therapies used to deal with anxiety and pain in the dental office. *J Am Dent Assoc.* 1985;110:217-222.
- 8. Melamed BG. Assessment and management strategies for the difficult pediatric dental patient. *Anesth Prog.* 1986;33:197-200.
- 9. Melamed BG, Bennett CG, Jerrell G, Rose SL, Bush JP, Hill C, et al. Dentists' behavior management as it affects compliance and fear in pediatric patients. *J Am Dent Assoc.* 1983;106:324–330.
- 10. Levitas TC. HOME-hand-over-mouth exercise. *J Dent Child.* 1974;41:178-182.
- 11. Bowers LT. The legality of using hand-over-mouth exercise for management of child behavior. *J Dent Child*. 1982;49:257-262.

- 12. Fenton SJ et al. ADH Ad Hoc Committee report: The use of restraints in the delivery of dental care for the handicapped: Legal, ethical, and medical considerations. *Spec Care Dentist.* 1987;7:253-256.
- 13. American Academy of Pediatric Dentistry. Guidelines for the elective use of conscious sedation, deep sedation, and general anesthesia in pediatric patients. *Pediatr Dent.* 1985;12:334-337.
- 14. Hagan PP, Hagan JP, Fields HW Jr, Machen JB. The legal status of informed consent for behavior management techniques in pediatric dentistry. *Pediatr Dent*. 1984;6:204-208.
- 15. Berry RM. Legal considerations in the administration of conscious sedation, deep sedation, and general anesthesia in dentistry. *Anesth Prog.* 1986;33:201-202.
- American Academy of Pediatric Dentistry. Clinical guideline on elective use of conscious sedation, deep sedation, and general anesthesia in pediatric dental patients. *Pediatr Dent*. 2003;25(7):75-81.

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