Clinical Guideline on Behavior ~~Management~~Guidance for the Pediatric Dental Patient

Originating Committee
Clinical Affairs Committee – Behavior Management Subcommittee
Review Council
Council on Clinical Affairs – Committee on Behavior Guidance
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Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that, in providing oral health care for infants, children, adolescents, and persons with special health care needs, a continuum of both nonpharmacological and pharmacological behavior guidance techniques may be used by dental health care providers. The various behavior guidance techniques used must be tailored to the individual patient and practitioner. Promoting a positive dental attitude, safety, and quality of care are of the utmost importance. This guideline is intended to educate health care providers, parents, and other interested parties about many behavior guidance techniques used in contemporary pediatric dentistry. It will not attempt to duplicate information found in greater detail in the AAPD Clinical Guideline on Appropriate Use of Nitrous Oxide for Pediatric Dental Patients and the Clinical Guideline on the Elective use of Minimal, Moderate, and Deep Sedation and General Anesthesia for Pediatric Dental Patients.[1,2]

Methods

This guideline reflects a review of current dental and medical literature related to behavior guidance of the pediatric patient. MEDLINE searches were done using the terms "behavior management in children", "child behavior and dentistry", "child personality and test", "child preschool personality and test", "patient cooperation", "dentists and personality", "dentist-patient relations", "patient assessment", "child and dental anxiety", "child preschool and dental anxiety", "restraint", "Joint Commission on Accreditation of Healthcare Organizations", "American Academy of Pediatrics", "treatment deferral", "treatment planning", "hand over mouth", "behavior management in dentistry", and "aversive techniques". Every effort was made to base this guideline on evidence-based literature; however, some recommendations are based on best clinical practice and expert opinion.

Background

Overview

Behavior ~~management~~ guidance is a continuum of interaction ~~with a child/parent~~ involving the health care provider(dentist), the patient, and the 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~~ guidance 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~~ guidance approach individualized for each child. As a result, behavior ~~management~~ guidance 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 method~~ology~~ 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 during dental education ~~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~~ Dentists are encouraged to ~~perform~~utilize behavior ~~management~~ guidance techniques consistent with their level of ~~educational training~~ professional education and clinical experience. Behavior ~~management~~ guidance cases that are beyond the training, experience, and expertise of individual practitioners should be referred to practitioners who can render care more appropriately.

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~~ guidance techniques to meet the needs of the individual child. Successful behavior ~~management~~ guidance enables the ~~dental practitioner~~ dentist to perform quality treatment safely and efficiently and promote ~~in the child~~ a positive dental attitude in the child.

Unfortunately, various barriers may hinder the achievement of a successful outcome. Developmental delay, physical/mental disability, and acute or chronic disease all are ~~obvious~~ potential 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.[3-5]

To alleviate these barriers, the dentist should become a teacher. The dentist's method~~ology~~ should include ~~analyzing~~ assessing 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 safely 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 who treats~~ing~~ children should have a variety of behavior ~~management~~ guidance 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~~ guidance approach for a child may vary ~~from practitioner to practitioner~~ among practitioners.

This document contains definitions, objectives, indications, and contraindications for behavior ~~management~~ guidance techniques ~~which are deemed~~ useful in pediatric dentistry. ~~Each technique has been approved by the American Academy of Pediatric Dentistry (AAPD).~~ ~~These~~ This guideline~~s are~~ is based on the prescribed use of behavior ~~management~~ guidance techniques as documented in the dental literature and on the professional standards of both the academic and practicing pediatric dental community. The guideline~~s are~~ is reflective of the AAPD's role as an advocate for the improvement of the overall health of the child.

Deferred Treatment

Dental disease usually is not life threatening and the type and timing of dental treatment can be deferred in certain circumstances. When a child's behavior prevents routine delivery of oral health care using communicative guidance techniques, the dentist must consider the urgency of dental need when determining a plan of treatment. Rapidly advancing disease, trauma, pain, or infection usually dictate prompt treatment. However, deferral of some or all treatment or selection of therapeutic interventions [eg, alternative restorative technique (ART), fluoride varnish, antibiotics for infection control], until the child is able to cooperate may be appropriate when based on an individual assessment of the risks and benefits of that option. The dentist must explain the risks and benefits of deferred or alternative treatments clearly, and informed consent must be obtained from the parent.

Treatment deferral also should be considered in cases when treatment is in progress and the patient's behavior becomes hysterical or uncontrollable. In these cases, the dentist should halt the procedure as soon as possible, discuss the situation with the patient/parent, and either select another approach for treatment or defer treatment based on the dental needs of the patient. If the decision is made to defer treatment, the practitioner should complete immediately necessary steps to bring the procedure to a safe conclusion before ending the appointment.

Caries risk should be re-evaluated when treatment options are compromised due to child behavior. The AAPD has developed a caries-risk assessment tool (CAT) [6] that provides a means of classifying caries risk at a point in time and can be applied periodically to assess changes in an individual's risk status. An individualized preventive program, including appropriate parent education

and a dental recall schedule, should be recommended after evaluation of the patient's caries risk, oral health needs, and abilities. Topical fluorides (eg, brush-on gels, fluoride varnish, professional application during prophylaxis) may be indicated[7]. ART may be useful as both preventive and therapeutic approaches [8,9].

Informed consent

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

~~Delivery of dental treatment is often a complex decision~~. Decisions regarding the use of behavior ~~management~~ guidance techniques other than communicative management cannot be made solely by the dentist. ~~Decisions~~ They must involve a ~~legal guardian~~ parent and, if appropriate, the child. The dentist serves as the expert about dental care (ie, the ~~need for treatment and the techniques~~ timing, treatment, and techniques by which treatment can be delivered). The ~~legal guardian~~ parent 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~~ parent, and child.

~~Although the behavior management guidance 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~~ parent about the nature of the technique to be used, its risks~~,~~ and benefits, and any professionally recognized or evidenced-based 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~~ guidance techniques require informed consent which must ~~be maintained in the patient's dental record~~ be consistent with the AAPD Clinical Guideline on Informed Consent and applicable state laws.[10] ~~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~~. In the event of an unanticipated reaction to dental treatment, it is incumbent upon the practitioner to protect the patient and staff from harm. Following immediate intervention to assure safety, if techniques must be altered to continue delivery of care, the dentist must have informed consent for the alternative methods.

Dental Team Behavior

The pediatric dental staff can play an important role in behavior guidance. The scheduling coordinator or receptionist will have the first encounter with a prospective parent, usually through a telephone conversation. The information given to the parent prior to the appointment will help set expectations for

the first visit. The use of the internet and customized web pages also are excellent ways of introducing parents/patients to one's office. Through communication with the parent, the child and parent may be better prepared for the first visit, and questions may be answered that may help to allay fears. The receptionist also is usually the first dental team member that the child meets. The way the child is welcomed to the office may help guide future patient behavior.

The communicative skills of the clinical staff members are very important, especially in techniques such as tell-show-do. The clinical staff is an extension of the dentist in terms of using communicative behavior guidance techniques. The dental team should work together in communicating with parents and patients. A child's future attitude toward dentistry may be determined by a series of successful experiences in a pleasant dental environment. All dental team members are encouraged to expand their skills and knowledge in behavior guidance techniques by reading dental literature, observing video presentations, or attending continuing education courses.

Summary

1. Behavior ~~management~~ guidance is based on scientific principles.~~1-15~~ The proper implementation of behavior ~~management~~ guidance requires an understanding of these principles. Behavior ~~management~~ guidance, however, is more than pure science and requires skills in communication, empathy, coaching, and listening. As such, behavior ~~management~~ guidance is a clinical art form and skill built on a foundation of science.
2. The goals of behavior ~~management~~ guidance 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 and oral health care.
3. The urgency of the child's dental needs must be considered when planning treatment. Deferral or modification of treatment sometimes may be appropriate until routine care can be provided using communicative guidance techniques.
4. All decisions regarding behavior guidance must be based on a benefit vs risk evaluation. Parents share in the decision-making process regarding treatment of their children.
5. The dental staff must be trained carefully to support the doctor's efforts and properly welcome the patient and parent into a child-friendly environment that will facilitate behavior guidance and a positive dental visit.

Basic behavior ~~management~~ guidance

Communication and Communicative ~~Management~~Guidance

Communication is the imparting or interchange of thoughts, opinions, or information. This interchange may be accomplished by a number of means but, in the dental setting, it is affected primarily through speech, tone of voice, facial expression, and body language. The four "essential ingredients" of successful

communication are: 1) the sender; 2) the message, including the facial expression and body language of the sender; 3) the context or setting in which the message is sent, and 4) the receiver [11]. In order for successful communication to take place, all 4 elements must be present and consistent. Without that consistency, there may be a poor "fit" between the intended message and what is understood.

Communicating with children poses special challenges for the dentist and the dental team. A child's cognitive development will dictate the level and amount of information interchange that can take place with an adult. It is impossible for a child to perceive an idea for which he has no conceptual framework. It is important for the dentist to have a basic concept of the cognitive development of children so that, through appropriate vocabulary, messages can be sent that are consistent with the receiver's intellectual development. It is unrealistic to expect a child dental patient to adopt the dentist's frame of reference.

The importance of the context in which messages are delivered cannot be overstated. The dental office may be made "child friendly" by the use of themes in its decoration, age appropriate toys and games in the reception room or treatment areas, and smaller scale furniture. However, the operatory may contain distractions for children which may be anxiety-producing (e.g., hearing another child cry), and may interfere with communication. Dentists and other members of the dental team may find it advantageous to provide certain information (eg, post-operative instructions, preventive counseling) in an area away from the dental operatory, where many items may distract the child. Communication also is impaired when the sender's expression and body language are not consistent with the intended message. The dentist whose body language conveys uncertainty, anxiety, or urgency cannot effectively communicate confidence in his/her clinical skills. The 3 "essential communications" imparted to child patients through primarily non-verbal means are:

- "I see you as an individual and will respond to your needs as such;"
- "I am thoroughly knowledgeable and highly skilled;"
- "I am able to help you and will do nothing to hurt you needlessly[12]."

It is possible to communicate with the child patient briefly at the start of a dental appointment to establish rapport and trust. However, once the dental procedure has begun, the dentist's ability to control and shape behavior becomes paramount, and information sharing becomes secondary. The two-way interchange of information gives way to one-way manipulation of behavior through commands. This type of interaction is called "requests and promises" [13]. When action must take place to reach a goal (eg, completion of the dental procedure), the dentist assumes the role of the requestor. Requests elicit promises from the patient, which, in turn, establish a commitment to cooperate. The dentist may have to frame the request in a number of ways in order to make the request effective. Reframing a previously-given request in an assertive voice, for example, with appropriate facial expression and body language, is the basis for the technique of voice control. While voice control is classified as one of the means of communicative guidance, it may be considered by some parents to be aversive in nature.

Communicative management and appropriate use of commands are ~~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~~ In addition to establishing a relationship with the child ~~which may allow~~ and allowing for the successful completion of dental procedures ~~and~~, ~~at the same time~~ these techniques may help the child develop a positive attitude toward ~~dental~~ oral health. Communicative management comprises a host of techniques ~~which~~ that, when integrated together, enhances the evolution of a ~~compliant and relaxed~~ cooperative patient. Rather than being a collection of singular techniques, ~~It~~ communicative management is an ongoing subjective process ~~rather than a singular technique and is often~~ that becomes an extension of the personality of the dentist. Associated with this process are the specific techniques of voice control, nonverbal communication, tell-show-do, positive reinforcement, distraction, and parental presence/absence. The dentist should consider the cognitive development of the patient, as well as the presence of other communication deficits (eg, hearing disorder), when choosing specific communicative management techniques. ~~Since these comprise the~~ For the majority of patients, these techniques are considered elements of usual and customary communication~~, they are appropriate for all patients. In addition,~~ and as such, no specific consent or documentation is necessary prior to use.

Dentist Behavior

Few healthcare providers have conscious insight into how they communicate. The health professional may be inattentive to communication style, but patients/parents are very attentive to it.[14] The communicative behavior of dentists is a major factor in patient satisfaction.[15,16] The dentist should recognize that not all parents may express their desire for involvement.[17] Dentist behaviors reported to correlate with low parent satisfaction include rushing through appointments, not taking time to explain procedures, barring parents from the examination room, and generally being impatient.[18] Relationship/communication problems have been demonstrated to play a prominent role in initiating malpractice actions. Even where no error occurred, perceived lack of caring and/or collaboration was associated with litigation.[19,20]

Studies of efficacy of various dentist behaviors in management of uncooperative patients are equivocal. Dentist behaviors of vocalization, direction, empathy, persuasion, giving the patient a feeling of control, and operant conditioning have been reported as efficacious responses to uncooperative patient behaviors.[21-23]

Patient Assessment

The response of a child patient to the demands of dental treatment is complex and determined by many factors. Multiple studies have demonstrated that a minority of children with uncooperative behavior have dental fears and that not all fearful children are dental behavior management problems.~~ (PA1-3).~~[3-5] Child age/cognitive level,[5,24-27] temperament/personality characteristics,[3,4,,28-30] anxiety and fear,[4,5,31]

reaction to strangers,[32] previous dental experiences,[5,25,33] and maternal dental anxiety[33-35] influence a child's reaction to the dental setting.

The dentist should include an evaluation of the child's cooperative potential as part of treatment planning. Information can be gathered by observation of and interacting with the child and by questioning the child's parent. Ideal assessment methods are valid, allow for limited cognitive and language skills, and are easy to use in a clinical setting. Assessment tools that have demonstrated some efficacy in the pediatric dental setting, along with a brief description of their purpose, are listed in Appendix 1.[36-43] No single assessment method or tool is completely accurate in predicting a child patient's behavior for dental treatment, but dentist awareness of the multiple influences on child behavior may aid in treatment planning for the pediatric patient.

Parental presence/absence

Description: ~~This technique involves using the~~ The presence or absence of the parent sometimes can be used to gain cooperation for treatment. A wide diversity exists in practitioner philosophy and parental attitude regarding parents' presence or absence during pediatric dental treatment. Parenting styles in America have been evolving in recent decades.~~.~~[44] Practitioners are faced with challenges from an increasing number of children who many times are ill-equipped with the coping skills and self-discipline necessary to deal with new experiences in the dental office. Frequently, parental expectations for the child's behavior are unrealistic, while those for the dentist to guide their behavior are great.[45] Practitioners agree that good communication is important among the dentist, patient, and parent. Practitioners also are united in the fact that effective communication between the dentist and the child is paramount and ~~that this communication demands~~ requires 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 and support 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 improve compliance;
2. avert negative or avoidance behaviors;
3. establish appropriate ~~adult~~dentist-child roles;
4. enhance effective ~~the~~ communication ~~environment~~ among the dentist, child, and parent.
5. minimize anxiety and achieve a positive dental experience.

Indications: May be used with any patient.

Contraindications: ~~None.~~ Parents who are unwilling or unable to extend effective support (when asked).

Tell-show-do

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 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.

Voice control

Description: Voice control is a controlled alteration of voice volume, tone, or pace to influence and direct the patient's behavior. Parents unfamiliar with this technique may benefit from an explanation to prevent misunderstanding.

Objectives:

1. gain the patient's attention and compliance;
2. avert negative or avoidance behavior;
3. establish appropriate adult-child roles.

Indications: May be used with any patient.

Contraindications: ~~None~~. Patients who are hearing impaired.

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.

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. Giving the patient a short break during a stressful procedure can be an effective use of distraction prior to considering more advanced behavior guidance techniques.

Objectives:

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

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~~ effects easily are ~~easily~~ titrated and reversible, and recovery is rapid and complete. Additionally, nitrous oxide/oxygen inhalation 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/oxygen analgesia/anxiolysis. Detailed information concerning the indications, contraindications, and additional clinical considerations may be found in the Clinical Guideline on Appropriate Use of Nitrous Oxide for Pediatric Dental Patient (pages xxxx) [1] . ~~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 affecteffect 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;~~

~~2. 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;~~

~~6. 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;~~

~~4. may be contraindicated in patients with sickle cell disease;~~

~~5. patients treated with bleomysin sulfate;.~~

Advanced behavior guidance~~management~~

Most children can be ~~effectively~~ managed effectively using the techniques outlined in basic behavior ~~management~~ guidance. These basic behavior ~~management~~ guidance techniques should form the foundation for all of the management activities provided by the dentist. However, children occasionally present with behavioral considerations that require more advanced techniques. The advanced behavior ~~management~~ guidance techniques include hand-over-mouth ~~exercise~~ (HOM~~E~~), ~~medical immobilization~~ protective stabilization, sedation, and general anesthesia. They are extensions of the overall behavior ~~management~~ guidance continuum with the intent to facilitate the goals of ~~behavior management~~ communication, cooperation, and delivery of quality oral health care in the difficult patient. Appropriate diagnosis of behavior and safe and effective implementation of these techniques necessitate knowledge and experience that~~, which~~ is generally beyond the core knowledge students receive during predoctoral dental education. Dentists considering the use of these advanced behavior ~~management~~ guidance techniques should seek additional training through a residency program, a graduate program, and/or an

extensive continuing education course that involves both didactic and experiential mentored training.

~~*HOME*~~ *Hand Over Mouth (HOM)*

Description: ~~HOME is an accepted~~ Hand over mouth is a technique for intercepting and managing demonstrably ~~unsuitable~~ uncooperative behavior that cannot be modified by basic behavior ~~management~~ guidance 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~~ HOM is ~~specifically~~ used to redirect inappropriate behavior, reframe a previous request and reestablish effective communication. When indicated, ~~a~~ the dentist's hand is ~~gently~~ placed gently over the child's mouth and behavioral expectations are ~~calmly~~ explained calmly. 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 guidance ~~management~~ techniques then 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 HOM~~E~~. The decision to use HOM~~E~~ must take into consideration:

1. other alternate behavioral modalities;
2. patient's dental needs;
3. the ~~affect~~effect on the quality of dental care;
4. patient's emotional development;
5. patient's physical considerations.
6. the potential for negative effect on the patient's attitude toward future appointments.

~~Written i~~Informed consent from a ~~legal guardian~~ parent must be obtained and documented in the patient record prior to the use of HOM~~E~~.[10]

The patient's record ~~should~~ must include:

1. informed consent;
2. indication for use.

Objectives:

1. 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:

1. 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*~~ *Protective Stabilization*

Description: The use of any type of protective stabilization in the treatment of infants, children, adolescents, or persons with special health care needs is a topic that concerns healthcare providers, care givers, and the public.[46-54] The broad definition of protective stabilization is the direct application of physical force to a patient, with or without the patient's permission, to restrict his or her freedom of movement.[55] The physical force may be human, mechanical devices, or a combination thereof. The use of protective stabilization has the potential to produce serious consequences, such as physical or psychological harm, loss of dignity, violation of a patient's rights, and even death. Because of the associated risks and possible consequences of use, the dentist is encouraged to evaluate thoroughly its use on each patient and possible alternatives.[55]

Partial or complete ~~immobilization~~ stabilization of the patient sometimes is necessary to protect the patient, practitioner, ~~and/or the dental~~ staff, or the parent from injury while providing dental care. ~~Immobilization~~ Protective stabilization can be performed by the dentist, staff, or ~~legal guardian~~ parent with or without the aid of ~~an immobilization~~ a mechanical device. The dentist always should use the least restrictive but safe and effective restraint. The use of a mouth prop in a compliant child is not considered protective stabilization.

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

The decision to use patient ~~immobilization~~stabilization should take into consideration:

1. other alternate behavior~~al~~ guidance 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~~ protective stabilization with or without ~~an~~ a ~~immobilization~~ stabilization device must obtain and document in the patient's record ~~written~~ informed consent from a ~~legal guardian~~parent. ~~Medical immobilization~~Protective stabilization performed by a ~~legal guardian~~parent does not require ~~written~~ informed consent. However, due to the possible aversive nature of the technique, informed consent should be obtained from the parent.

~~Written~~ Informed consent from a ~~legal guardian~~ parent must be obtained and documented in the patient record prior to ~~medical immobilization~~protective stabilization. Also, an explanation to the patient regarding the need for restraint, with the opportunity for the patient to respond, must occur.[56] In the

event of an unanticipated reaction to dental treatment, it is incumbent upon the practitioner to protect the patient and staff from harm. Following immediate intervention to assure safety, if techniques must be altered to continue delivery of care, the dentist must have informed consent for the alternative methods.

The patient's record ~~should~~ must include:

1. informed consent;
2. ~~type of immobilization~~ indication for stabilization ~~used~~;
3. ~~indication for immobilization~~ type of stabilization;
4. the duration of application;
5. frequency of stabilization evaluation and safety adjustments;
6. behavior evaluation/rating during stabilization.

Objectives:

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

Indications:

1. a patient who requires immediate diagnosis and/or limited treatment and cannot cooperate due to lack of maturity;
2. 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~~ , staff, dentist, or parent would be at risk without the protective use of ~~immobilization~~ stabilization.
4. a sedated patient who requires limited stabilization to help reduce untoward movement.

Contraindications:

1. a cooperative non-sedated patient~~;~~
2. a patient who cannot be immobilized safely due to associated medical or physical conditions.
3. a patient who has experienced previous physical or psychological trauma from protective stabilization (unless no other alternatives are available).
4. a non-sedated patient with non-emergent treatment requiring lengthy appointments.

Precautions:

1. the tightness and duration of the stabilization must be monitored and reassessed at regular intervals;
2. the stabilization around extremities or the chest must not actively restrict circulation or respiration.
3. stabilization should be terminated as soon as possible in a patient who is experiencing severe stress or hysterics to prevent possible physical or psychological trauma.

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. The need to diagnose and treat, as well as the safety of the patient, practitioner, and staff, should be considered for the use of sedation. ~~Background~~ Detailed information ~~and documentation for the use of sedation is detailed~~ concerning the indications, contraindications, and additional clinical considerations may be found in the Clinical Guideline on Elective Use of ~~Conscious Sedation,~~ Minimal, Moderate, and Deep Sedation, and General Anesthesia ~~in~~ for Pediatric Dental Patients (Pages XXX) [2]

~~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;~~

~~2. reduce untoward movement and reaction to dental treatment;~~

~~3. enhance communication and patient cooperation;~~

~~4. increase tolerance for longer appointments;~~

~~5. 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;~~

~~2. 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 an ambulatory setting, including the dental office. Detailed information concerning the indications, contraindications, and additional clinical considerations may be found in the Clinical Guideline on the Elective Use of Minimal, Moderate, and Deep Sedation and General Anesthesia for Pediatric Dental Patients[2] and Clinical Guideline on Use of Anesthesia Care Providers in the Administration of In-office Deep Sedation/General Anesthesia to the Pediatric Dental Patient.(Pages XX and XX) [57]

~~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:**~~

~~1. 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;~~

~~5. patients for whom the use of general anesthesia may protect the developing psyche and/or reduce medical risks;~~

~~6. 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.~~

Appendix 1 - Patient Assessment Tools

Patient Assessment Tools			
Tool	Format	Application	Reference
Toddler Temperament Scale	Parent questionnaire	Behavior of child ages 12-36 months	29,36
Behavioral Style Questionnaire (BSQ)	Parent questionnaire	Child temperament 3-7 years	28,37
Eyberg Child Behavior Inventory (ECBI)	Parent questionnaire	Frequency and intensity of 36 common problem behaviors	38
Facial Image Scale (FIS)	Drawings of faces – child chooses	Anxiety indicator suitable for young preliterate children	39
Children's Dental Fear Picture test (CDFP)	3 picture subtests – child chooses	Dental fear assessment for children > 5 years	40
Child Fear Survey Schedule-Dental Subscale (CFSS-DS)	Parent questionnaire	Dental fear assessment	5,40,41
Parent-Child Relationship Inventory (PCRI)	Parent questionnaire	Parent attitudes and behavior that may result in child behavior problems	26,42
Corah's Dental Anxiety Scale (DAS)	Parent questionnaire	Dental anxiety of parent	5,35,43

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