

Editorial

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Volume 4 : Issue 1

Article Ref. #: 1000PNNOJ4e007

Article History

Received: March 22nd, 2017

Accepted: March 28th, 2017

Published: March 30th, 2017

Citation

Nathan JE. The appropriateness (or lack thereof) of physical restraints for managing challenging pediatric dental behavior. *Pediatr Neonatal Nurs Open J.* 2017; 4(1): e1-e3. doi: [10.17140/PNNOJ-4-e007](https://doi.org/10.17140/PNNOJ-4-e007)

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The Appropriateness (or lack thereof) of Physical Restraints for Managing Challenging Pediatric Dental Behavior

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Amongst the many controversial topics in the field of dentistry for children is the relative appropriateness (or lack thereof) of the application of physical restraints for the management of challenging and interfering child behavior. Believers in its appropriateness prefer the euphemistic¹ term “protective immobilization or stabilization” in contrast to the negative connotation implied by simply describing physical restraint. This manuscript provides a critical look from the perspective of a child-oriented behavioral researcher and private practitioner of forty years who shares a most unenthusiastic bias towards a reliance on restraint techniques to overcome interfering and undesirable child behavior. This bias is stipulated; from this author’s perspective there are but a few indications under which application of immobilization devices are safe and in the best interest of children and their developing psyche with respect to safe delivery of treatment and the development of future attitudes toward care.

In fairness, however, it would be remiss to not indicate the viability of these techniques for specific and isolated ultra-short and short-term interactions where the interception of potentially harmful child movements plays a role in the management of obstreperous responses of some children. Analysis of appropriateness or its lack begins where differentiation is made between neurological normality *versus* abnormality and patient’s cooperative potential. Those lacking behavioral control by virtue of incapacity to refrain from injurious impulses and refractory movement can necessitate greater vigilance from the dental team. Those capable of working within a framework of coping potential responsive to verbal communications and conventional mainstream interventions might best approach challenging if not resistive behaviors slowly if not exhaustively to avoid resorting to the application of physical restraints to permit efficiency and productivity.

Of the challenges facing clinical pediatric practice are economic pressures to accomplish treatment intervention and generation of revenues in a timely fashion. While there are some practitioners making use of a broad range of behavioral management strategies, there are others who make use of a limited arsenal of techniques to manage difficult and challenging behaviors. Those with authoritarian demeanors and high expectations for cooperation of challenging children may be hypothesized to have a heavier reliance on restraint techniques and possess a limited arsenal of management strategies to accomplish invasive treatment. Nevertheless it might similarly be hypothesized that while productivity is a reality of private practice, the obligation to comfort patient anxiety and its sequelae in the least stressful manner possible is ultimately the most expedient and optimal way to create a patient accepting of care while protecting the child’s self-esteem. As Mark Twain has offered, “*when you only have a hammer, all problems tend to look like a nail,*” addresses the subject of how imaginative and complete one’s behavioral management arsenal might, or might not be.

From the perspective of parents and clinicians alike, the climate of behavioral management has gradually changed over the past half century, with several abrupt alterations over the past two decades.²

Child rearing practices have changed. Parents once readily relinquished their authority to the clinician who best knew how to address their child's needs. Such preferences have been to a large degree replaced with parental desires to take a more active decision making role on how they wanted their child managed.³

While parents once felt comfortable, if not relieved to be kept out of the dental operator, the majority today express interest if not demand to be present to witness how their child is addressed and the methods employed by the dental team. Some clinician's today ban parents in a mandatory fashion from the operator with the belief that parent presence competes for their ability to establish a rapport with the child. This author contends that one explanation suggests these dentists are uncomfortable, unconfident under parental observation, or simply ill at ease with a parent observing how they treat their child. A skeptical analysis might also include that these clinicians prefer not to allow parents to witness their management of challenging children.

That said, there are circumstances where authoritarian dentist personalities have been highly successful in overriding negative child behavior and are able to accomplish considerable treatment that the passive, child-advocate (this author) may not accomplish, without resorting to sedative or unconscious techniques. These skilled communicators have potential to be magical in their ability to manipulate and influence child behavior. Not so many of us have those skills and magical powers. Alternatively, when unsuccessful, massive confrontation of wills among all parties is not an uncommon result. Where application of physical restraints are being considered, minimally necessary are for parent and clinician to be on the same page with informed consent secured.

Under circumstances where a parent cannot refrain from displaying their own anxieties of dental care, use inappropriate anxiety-provoking language ("*does that hurt,*" or the "*shot doesn't hurt,*" etc), most practitioners would agree that these parents may not enhance their child's perceptions and cooperation by being present.⁴ Interpretation of some parents that measures undertaken by dentists whose misuse of aversive measures (e.g., voice control, restraints, verbal sanctions, or harshness) has become problematic. Dentists who have lost elements of self control, in the heat of battle, or when behaviors deteriorate may be construed as having resorted to premature tactics (restraint).

Recent literature⁵ has begun to explore parent views regarding the point at which the use of sedative techniques to minimize or eliminate the use of physical restraint is or is not preferable for their children. The vast majority of parents who have observed both options applied to manage their children overwhelmingly agree they prefer the use of sedation. The impact of negative previous experiences, with or without "protective immobilization," has long been a concern in the dental profession. Typical of reasons for which adults cite fear and avoidance of dental care includes their recollections of how they were treated as children. Inadequate pain control, verbal or physical mistreatment from an impatient and frustrated clinician account for why millions of Americans report misgivings about seeking timely dental care.

Justifiable Applications of Physical Restraint

Advocates of the appropriateness of physical restraint are not without merit. The American Academy of Pediatric Dentistry has included the use of protective stabilization in its guidelines on behavior guidance since 1990. It has acknowledged that it is outside the mainstream of techniques and considers its use as an advanced behavior guidance technique that are carefully selected and integrated into an overall behavior guidance approach that is individualized or customized for each patient in the context of promoting a positive dental patient attitude while ensuring the highest standards of safety and quality of care.

Protective stabilization is defined as "any manual method, physical or mechanical device, material or equipment that immobilizes or reduces the ability of the patient to move his or her arms, legs, body, or head freely. The term "active" immobilization refers to restraint by another person (parent, dentist, dental auxiliary. "Passive" immobilization utilizes a restraining device."⁶

I. Appropriate use of protective stabilization for the neurologically normal or challenged:

- A. To access and manage traumatic oro-facial injuries necessitating immediate intervention for:
 1. Uncontrollable hemorrhage
 2. Permanent tooth avulsion
 3. Laceration requiring wound closure
 4. Inability to utilize a sedative technique due to recent food ingestion
- B. For all of the above when sedation to adequately obtund interfering patient movement falls short.
- C. To serve as an adjunct to help a neurologically impaired individual to reduce or minimize uncontrollable and interfering movement.

II. Inappropriate use of restraint or protective immobilization-for use on a neurologically normal subject who is not being sedated for performance of routine or lengthy treatment.

Use of Protective Stabilization when Using Sedative Techniques

Decisions to make use of PS or PR when sedation is contemplated are neither simple nor straightforward. While it is the intention of using sedative techniques to eliminate or reduce the need to restrain undesirable patient movement, inadequacy of sedative measures alone is not at all uncommon.⁶ Judgment of many clinicians to err on the side of under dosage is generally regarded as preferable to induction of deeper planes of sedation, hence need for physical restraint comes into play. Despite recommendations/guidelines to indicate the safety of sedation pathways mishaps have been reported. Adverse reactions and poor outcomes have not been reported when compliance with safety guidelines and appropriate application of restraining devices occurs. Close scrutiny and vigilance must occur to insure that any restraining device does not impair pulmonary expansion or the ability to monitor respiratory function and ventilation.

A dilemma which has become apparent in the last decade has become a tendency of advanced training programs to make use of lower dosing of available sedative agents in an effort to minimize or eliminate the occurrence of sedation mishaps. The drug armamentarium has been reduced and efforts to make use of regimens where no reversal agents are available are disappearing. Use of low-range dosing with maximum dosing topping out near what might have previously been considered mid-range appear to prevail. Both program directors and residents report significantly lower success using these sedation protocols and greater need to deploy restraint.⁷

SUMMARY

The primary intent of this manuscript was to focus on the use of physical restraints (or protective immobilization) as a means by which interfering and potentially harmful child behaviors can be best managed. It is the bias of this clinician and researcher with four decades experience that little need exists to make use of devices that are intended and designed to restrict patient movement, in particular when neurologically normal subjects are involved with or without sedative techniques. Under conditions where sound judgment making use of effective and therapeutic dosing of sedative agents, need for physical restraint should be minimal to none. Practitioners, who arbitrarily and routinely make use of restraints due to sedation inadequacy, might best reassess their agent and dosage selection from the outset before resorting to the use of restraints. Patterns in teaching in advanced pediatric dental training programs today have moved in the direction of using sub-therapeutic dosing and shorter acting agents in the interest of safety and avoiding unintentional induction of deep sedation and greater risk. This latter issue has become increasingly more prevalent and the resultant need for greater application of physical restraint has become the norm rather than the exception. Need for restraint in this author's practice is virtually non-existent. One might hypothesize that decades of experience have cultivated improved communication skills managing difficult forms of behavior, or more effective use of sedation has served to reduce need for restraint.

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