

Restraints/Protective Stabilization in Special Care Dentistry

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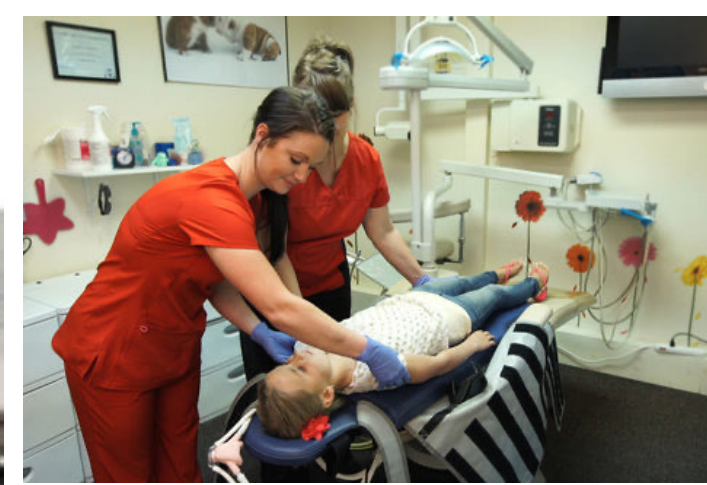
Introduction: To provide needed dental care, individuals with neurodevelopmental disabilities may need protective stabilization (PS), a method of medical restraint. PS has been successfully used to evaluate and treat patients, such as patients with special healthcare needs or pediatric patients in both medical and dental settings. PS is an alternative behavioral and pharmacologic method of physical restraint that involves the partial or complete immobilization of a patient's head, body, and/or extremities for a finite time. It is considered as a method of advanced behavior guidance to provide urgent diagnosis or treatment as a part of a procedural sedation, or because they exhibit uncontrolled movements that jeopardize their own safety and that of dental staff and families.

Passive Stabilization Devices

Device Type	Method	Example	Methodology
Full-body stabilization/immobilization	Passive	Papoose Board Rainbow Wrap* (PB, Olympic Medical Cooperation) Joey Board *(Joey Board)	Secures extremities as well as full body for immobilization for procedures
Extremity stabilization	Passive or active	Posey Secure Straps* Posey Secure Straps* Seat belts (Velcro* Companies)	Assists in keeping a patient's mouth open for dental procedures
Oral Stabilization	Passive	Velcro* straps Posey Secure Straps* Seat belts (Velcro* Companies) Molt adjustable mouth props	Secure limbs individually to decrease untoward movements
Patient Positioning	Active or passive	Hydraulic patient lift Wheelchair tilt	Assists with the transfer of a patient to the dental chair, or assists in the tilted back position of a patient within a nonreclining wheelchair significantly influenced by the systemic condition of the patient, i.e., whether the patient is healthy or medically compromised.
Pharmacological Method	Conscious sedation & combination of sedatives	Nitrous oxide (traditional approach to behavior guidance, midazolam (sedation, Local anesthesia, general anesthesia	



Papoose Board



Rainbow Wrap
Joey Board



PB, Olympic
Medical Cooperation)



Posey Secure Straps*



Posey Secure Straps-
Seat belts



Velcro Straps



Hydraulic Patient lift



Wheelchair tilt



Molt Prop

Contraindications for Use

According to the American Academy of Developmental Medicine & Dentistry, American Academy of Pediatric Dentistry, PS is contraindicated in scenarios in which the risks outweigh the potential benefits, the providing team is not comfortable or trained in utilizing PS, or when written informed consent is not provided by the patient, their legal guardian, or a durable power of attorney.¹ Contraindications include: a patient who is cooperative, a patient for whom immobilization can cause physical harm due to a physical or medical condition, and a patient who requires lengthy appointments and significant treatment to be completed in a single visit.

Conclusion:

Protective Stabilization is a different approach to physical restraint that entails partially or fully immobilizing a patient's head, body, and/or limbs for a set period, providing immediate diagnosis or treatment during procedural sedation is seen as an advanced technique to address uncontrolled movements that could put the safety of patients, dental staff, and families at risk.

References:

1. Chavis SE, Wu E, Munz SM. Considerations for Protective Stabilization in Community General Dental Practice for Adult Patients with Special Healthcare Needs. Vol 42.; 2021:134-138.
2. Contreras CI, Cervantes MJ. Behavior management techniques and protective stabilization in pediatric dentistry. Lecture presented at: Texas State Board of Dental Examiners at the University of Texas Health Science Center Dental School. April 8, 2017; San Antonio, TX.
3. Baakdah, R. A., Turkistani, J. M., Al-Qarni, A. M., Al-Abdali, A. N., Alharbi, H. A., Bafaqih, J. A., & Alshehri, Z. S. (2021). Pediatric dental treatments with pharmacological and non-pharmacological interventions: A cross-sectional study. BMC Oral Health, 21.
4. Gandhi RP, Klein U. Autism spectrum disorders: an update on oral health management. J Evid Based Dent Pract. 2014 Jun;14 Suppl:115-26. doi: 10.1016/j.jebdp.2014.03.002. Epub 2014 Mar 27. PMID: 24929596.