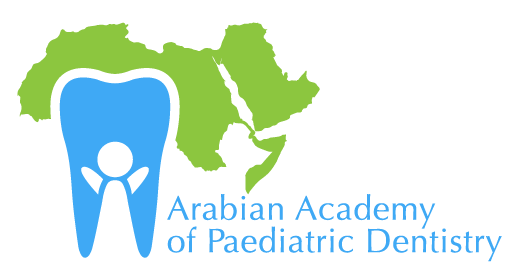
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# Protective Stabilisation for the Paediatric Dental Patients and children with Special Health Care Needs

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This position statement has been developed by the Arabian Academy of Paediatric Dentistry’s Clinical affairs committee in order to guide paediatric dentists and dental professionals, working in the Arabian region, on the appropriate use of protective stabilisation as a behaviour management technique in Paediatric Dentistry. This position statement should be used in conjunction with other Arabian Academy of Paediatric Dentistry’s guidance documents.

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| EPDC | Emirates Paediatric Dentistry Club |  |

***Introduction:***

The Arabian Academy of Paediatric Dentistry (ArAPD) developed the following position statement in order to ensure appropriate use of protective stabilisation for children, adolescents and children with special health care needs by dental practitioners in the Arabian region.

The ethical guiding principles of our profession should be kept central to the clinical decision making when determining the use of protective stabilisation. These basic principles include do no harm; act in the best interests of the patient; and respect the patient’s or parent’s right to refuse treatment (United Nations, 2006, United Nations, 1989, Americal Dental Association, 2018). Behaviour management techniques used in contemporary clinical paediatric dental practice are dependent upon the individual child, cultural context, social validity, and confines of national legislature (Oliver and Manton, 2015).

Protective stabilisation (PS) is the term used by the American Academy of Paediatric Dentistry (AAPD) to describe “the physical limitation of a patient’s movement by a person or restrictive equipment, materials or devices for a finite period of time in order to safely provide examination, diagnosis, and/or treatment”, also referred to as physical restraint and clinical holding by other organisations. The stabilisation can be either “active” or “passive” or a combination of both. Stabilisation involving another person (parent, dentist, or dental auxiliary) is referred to as active stabilisation while passive stabilization utilises a mechanical device such as Papoose Boards and Pedi-Wraps (American Academy of Pediatric Dentistry, 2019).

The practice of PS varies widely in different parts of the world. When determined to utilise it, the provider must consider the cultural, philosophical and legal requirements in the country of dental practice (Roberts et al., 2010). The literature shows that parents from diverse background differ in their level of acceptance of different behaviour management techniques which suggest that dentist should take into account cultural differences when choosing to use protective stabilisation (Martinez Mier et al., 2019, Nunn et al., 2008).

Studies completed in some Arabian countries such as Kuwait, Saudi Arabia and Jordan, showed that PS/ physical restraint was the least acceptable behaviour management technique which is consistent with studies published worldwide (Abushal and Adenubi, 2003, Alammouri, 2006, Muhammad et al., 2011). However, Kuwaiti parents were more accepting of active restraint when presented with advanced behaviour management techniques such as procedural sedation and general anaesthesia (Muhammad et al., 2011). Further research, especially in the Arabian region, is needed to confirm or refute this claim.

Holding children against their wishes for clinical procedures can cause upset, anxiety and stress for the children, parents and health professionals involved (Bray et al., 2018). Currently, there is a global shift toward reducing or even eliminating the use of patient restriction in healthcare settings (Preisz and Preisz, 2019). Perhaps this is due to inappropriate and common use of physical restraint to control general behaviour in long-term care facilities and psychiatric institution (Romer, 2009), changes in parenting styles (Long, 2004) and possible psychological impact of aversive approaches on children. McGill et al. (2009) showed the PS was routinely used rather than used as last resort.

The success of protective stabilisation is largely depending on the dentist’s frame of mind. It can improve parental acceptance and instil in the child a more positive attitude toward dentistry. It is completely unacceptable if restraint is used punitively, or out of a sense of anger or frustration (Roberts et al., 2010). Casamassimo (1991) explained it best when described the intent for using protective stabilisation; “it is used for “positive rather than negative ends; to facilitate rather than punish” and “restraint is support.” The literature points out that restraint should be used as a last resort and only for a very short duration (Linder, 2017, Ng and Doyle, 2019).

Despite the growing concern about its inappropriate use, protective stabilisation has been used as a calming agent for some patient with developmental and intellectual disabilities. Papoose board acts as a tactile stimulus device that provides deep touch pressure to stabilise and calm patient with special needs during anxiety-provoking situation (Chen et al., 2014). This calming effect of stabilising device is confirmed by Temple Grandin, who has both a PhD and autism. In her literature review on deep touch pressure to patients with autism, she found that it had a relaxing, calming and comforting effect (Romer, 2009).

In the 2014 Behaviour Symposium Workshop, the American Academy of Pediatric Dentistry recommended that stabilisation should only be considered when deferring treatment, due to lack of cooperation, would lead to pain and/or a poor outcome for the patient. Using stabilisation for dentist’s convenience and to provide extended treatment in one visit are unacceptable reasons for using protective stabilisation (McWhorter and Townsend, 2014). Protective stabilisation is indicated for patients who require immediate assessment or short emergency treatment and are uncooperative due to a young age or special health care needs (American Academy of Pediatric Dentistry, 2019). Therefore, Protective stabilisation is contraindicated (American Academy of Pediatric Dentistry, 2019) for:

* compliant and cooperative patients,
* patients with medical or physical condition that cannot be stabilised safely,
* patients with a history of psychological or physical trauma due to stabilisation (unless no other alternative is available and only for short urgent procedures),
* patients with no urgent treatment needs (to complete full mouth or quadrant dentistry, and to satisfy dentist’s or parent’s convenience).

Parent or legal guardian’s informed consent is essential when using PS. This should include a thorough discussion of the procedure and explanation of the benefits, risks, and alternative behaviour guidance techniques such as treatment deferral, procedural sedation, general anaesthesia. When PS is used suddenly or unexpectedly as a result of change of behaviour during a procedure, the dentist should explain the reasons for using such approach at the next available chance. Parents of children with disabilities are more accepting of protective stabilisation than parents of children with no disability. Brandes et al. (1995) found informed parents are more likely to approve the use of restraints. This emphasises the importance of explaining the procedures to the parents.

***Recommendation (See flow diagram below):***

The ArAPD:

* recognises that protective stabilisation is an advanced behaviour management technique. Therefore, the ArAPD warns against using this technique without adequate training. Stabilising patients without proper education can lead to physical and emotional harm not only to the patient but also to the practitioner and staff (Lambrenos and McArthur, 2003). Therefore, the dental team must have knowledge, experience and hands-on training in its safe and effective application obtained as part of structured training program or accredited continuing education courses (American Academy of Pediatric Dentistry, 2019).
* encourages individual or regional organisation to deliver regular and accredited protective stabilisation training courses.
* recommends that PS must be used as the last resort and only for immediate assessment or short procedure of patients who have urgent dental needs.
* recommends against the use of PS in routine care or in delivering full mouth rehabilitation unless used by trained specialists in the care of children with special needs where other management options have been considered and discussed.
* emphasises that the dentist must obtain informed consent prior to PS application and must take into consideration parental preference (American Academy of Pediatric Dentistry, 2019, Oliver and Manton, 2015).
* recommends the use of the following principles when using PS:
  + when indicated PS should be provided in the least restrictive manner.
  + patient’s oral health needs should be carefully assessed.
  + Patient’s medical history should be carefully assessed in terms of the proposed PS. The dentist should be aware of conditions that may further cause restriction of airways, or those that can lead to bone fracture (American Academy of Pediatric Dentistry, 2019, Oliver and Manton, 2015).
  + basic behavior guidance technique, mainly distraction should be used concomitantly with stabilisation.
  + when using a PS device, the device should be appropriately sized for the paediatric patient and allow proper disinfection after its use.
  + in active stabilisation, parents should be instructed to gently hold the child in order to prevent any injuries to the child. Holding the leg must be either above or below knee caps in order to protect them from injuries.
  + should the patient’s cooperation level change or when experiencing severe emotional stress, stabilisation must be terminated immediately to prevent possible physical or psychological trauma (American Academy of Pediatric Dentistry, 2019). Other behaviour management strategies should be discussed with parents.
  + vigilant monitoring of the patient during stabilisation is essential. The tightness of the stabilisation device should continuously be checked in order to detect any compromise in respiration and circulation (American Academy of Pediatric Dentistry, 2019).
* a detailed record of the procedure including PS should be kept. Such record must include: (American Academy of Pediatric Dentistry, 2019, Newton, 2009)
  + justification for the use of PS
  + type of stabilisation
  + duration of PS application
  + presence of parents/legal guardians or reason for their absence during the use of PS
  + written informed consent. When using PS unexpectedly, the reasons for use should be explained to the parents/legal guardians and documented in the notes.
  + behaviour rating during stabilisation
  + record of any unusual outcomes such as skin markings.

No

Protective Stabilization is NOT Appropriate

No

No

No

Protective Stabilization (PS) Clinical Decision Making Flowchart

Protective Stabilization is appropriate

Refer to a dentist trained on the use of PS

Yes

Yes

Yes

No

Yes

Is there any medical and/or psychological contraindication to the use of PS

Yes

Are alternative treatments such as minimally invasive dentistry and pharmacological options discussed?

Is informed consent obtained via discussion and written methods? (Does not apply when PS us deemed necessary during a procedure)

Are you trained on the use of PS?

Is the procedure urgent and short?

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