Comfort positioning during procedures in pediatric dermatology

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**Abstract** 

Procedures performed in pediatric dermatology can often be painful or distressing for patients

and their families. Comfort positioning, which involves sitting the child upright, immobilized

and held by a caretaker, is one strategy that may be employed in this setting; this measure has

been shown to reduce patient distress, improve cooperation and give caretakers a more active

role in the procedure. We demonstrate several positions of comfort for dermatologic procedures

involving the arm, cheek, back and leg of a young child.

Introduction

The care of patients in pediatric dermatology often necessitates procedures which may be

uncomfortable or painful, including skin biopsy, intralesional injection and cryotherapy. There

has been substantial work within the pediatric literature exploring nonpharmacologic strategies

for reducing procedural pain and anxiety, including preprocedural preparation, effective and age-

IRB approval: This submission does not require IRB approval.

Photo consent: Obtained 6/14/19 and 11/22/19.

This is the author's manuscript of the work published in final edited form as:

Skaljic, M., McGinnis, A., & Streicher, J. L. (2020). Comfort positioning during procedures in pediatric

dermatology, Pediatric Dermatology, 37(2), 396–398. https://doi.org/10.1111/pde.14089

appropriate intraprocedural communication, parental involvement and distraction.1, 2 The use of cognitive behavioural techniques as well as distraction tools has been described in the setting of pediatric dermatology in particular.3, 4

Comfort positioning is yet another promising modality that can improve the patient experience during painful dermatologic procedures. This technique involves the child sitting upright, immobilized and held by a parent (rather than lying supine on an examination table). Supine positioning increases the sense of vulnerability felt by the patient and can quickly escalate preprocedural anxiety.5 In contrast, comfort positioning has been shown to reduce distress in children during the three periods of a procedure (pre-procedure, procedure and post-procedure) without, in the case of intravenous catheter insertion, increasing the number of procedure attempts necessary.6 It also may require fewer people to complete the procedure and can give parents a more active role in supporting the child, resulting in increased parental satisfaction scores.7

Through the collaboration of a child life specialist, physicians and nursing staff, comfort positions were successfully implemented in our pediatric dermatology clinic. In the following, we present three different comfort positions for dermatologic procedures involving the arm, cheek, back and leg, respectively, of a young child. We discuss the salient features of each position and how they may be replicated.

## **Comfort Positions**

Each comfort position must begin with an overview of the procedure in order to ensure that the caregiver feels safe participating. The actual position of comfort should include the child sitting upright when applicable, as much skin to skin contact with the caregiver as possible, and

immobilization of the procedure site. A staff helper is a critical component of child positioning; immobilization by the staff member ensures safety (whereas caregiver holding is primarily for comfort). Additionally, extraneous people (ie other siblings) should be removed from the room when possible.

The back-to-chest position (Figure 1) has the child sitting with his back to the caregiver's chest allowing the child to be hugged from behind. The position in Figure 1 shows the caregiver securing both arms and legs by crossing her legs over his ankles. The holder staff member immobilizes the child's face, and he is still able to engage in distraction (in this case, watching a video).

The side-sitting position (Figure 2) uses a similar approach to back-to-chest but with the caregiver sitting in a chair so that the examination table may be used as a work surface for the upper extremity. The caregiver is able to secure the opposite arm and legs, while the child is able to engage in distraction. The holder uses the examination table to stabilize her elbow and hand for sufficient immobilization.

The chest-to-chest position (Figure 3) has the child sitting facing the caregiver with her legs off to each side. The patient's arms are secured by the caregiver, and the legs can only kick from the knee down in this position, allowing the provider to have full access to the back. This position can also be used with only one arm secured for an upper extremity procedure and allows the patient to watch or engage in distraction in the opposite direction. In addition, the position can be employed for a procedure on the lower extremity (Figure 4), as the arms and opposite leg are secured and the holder staff member can secure from the knee to ankle. If access to the upper or

inside leg is needed for a procedure, sitting up also helps to limit leg movement more than with the supine position (which allows for more upper leg movement).

## Conclusion

Comfort positioning techniques are an invaluable tool that has many benefits for patients and families, including decreasing distress during both present and future procedures, increasing a sense of control and improving cooperation.6, 7 With some practice, these techniques may be seamlessly integrated into the procedural workflow of any pediatric dermatologist.

## References

- Leroy PL, Costa LR, Emmanouil D, van Beukering A, Franck LS. Beyond the drugs: non-pharmacological strategies to optimize procedural care in children. *Curr Opin Anesth*. 2016; 29: S1- S13.
- 2. Uman LS, Birnie KA, Noel M, et al. Psychological interventions for needle-related procedural pain and distress in children and adolescents (Review). *Cochrane Database Syst Rev.* 2013; 10: 1- 135.
- 3. Armenta AM, Jaquez SD, Levy ML, Diaz LZ. Use of psychologic strategies to reduce pain and anxiety related to dermatology procedures. *Pediatr Dermatol*. 2019; 36(3): 416-417.
- 4. Hoernke JM, Schoch JJ. The art of distraction: how to compile and use a distraction kit in pediatric dermatology. *Pediatr Dermatol.* 2019; 36: 418-419.
- 5. Baxter AL. Common office procedures analgesia considerations. *Pediatr Clin N Am*. 2013; 60(5): 1163- 1183.
- 6. Sparks LA, Setlik J, Luhman J. Parental holding and positioning to decrease IV distress in young children: a randomized controlled trial. *J Pediatr Nurs*. 2007; 22(6): 440- 447.
- 7. Stephens BK, Barkey ME, Hall HR. Techniques to comfort children during stressful procedures. *Accid Emerg Nurs*. 1999; 7(4): 226- 236.



Figure 1. Back-to-chest position for a procedure involving the face



Figure 2. Side-sitting position for a procedure involving the upper extremity



Figure 3. Chest-to-chest position for a procedure involving the back



Figure 4. Chest-to-chest position for a procedure involving the lower extremity