

Submission Criteria for the Splint of the Month

Name: Stacey Patee

Date: 12/16/2008

Credentials: OTR/L

Title: Occupational Therapist (OTR/L)

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Brief Description of Splint and (if applicable) the story behind how this splint came into development:

Parents of children under the age of 2 often complain of difficulties keeping on pressure gloves. At a recent continuing education course I was introduced to a simple way of keeping splints on children and I applied these concepts to a strapping system for pressure gloves.

References:

Splint course: Pediatric Hand Therapy and Splinting, by Jill Peck Murray.

Articles:

Joanne Johnson, PT, Barbara Greenspan, OTR, Delia Gorga, OTR, PhD, Willibad Nagler, MD, and Cleon Goodwin, MD. Compliance With Pressure Garment Use in Burn Rehabilitation. *Journal of Burn Care & Rehabilitation*, March/April 1994.

N. R. McLean and E. Warren. A Simple Device to Encourage the Unwilling Child to Wear a Pressure Garment. *British Journal of Plastic Surgery* (1983):529-530.

Disclaimer:

All submissions that meet the eligibility criteria will be posted to www.burntherapist.com and will be freely accessible for review and sharing among any individuals whom have access to this site

Anti- Houdini Strap for Pressure Garment Gloves

Submitted by:
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Description of Device:

A strapping system for a pressure glove that impedes a child's ability to remove the garment since both hands are required to unfasten the velcro.

Materials used/needed:

2 pieces of hook 1" velcro, cut 1" long (one for volar surface and one for dorsal surface)

1 piece of loop 1" velcro, cut 3" long or longer as needed for the strap

Fabrication instructions:

1) Along the radial side of the zipper, sew the end of the 3" loop velcro strap with one row of stitching as close to zipper as possible. (Figure 1)

2) Along the ulnar side of the zipper, sew the end of the short dorsal 1" hook velcro piece. Stitch as close as possible to the zipper. (Figure 1)

Figure 1



3) Place the short 1" hook velcro piece on the radial side of the volar wrist. Sew down the edge that is nearest the radial border. (Figure 2)

Figure 2

*Note: All Velcro tabs are anchored at one end only.



Application Instructions:

1) Apply glove and zip up

- 2) Wrap long looped velcro strap across zipper and attach it to the short dorsal piece (this prevents the child from unzipping the zipper). Figure 3.

Figure 3



- 3) Attach the end of the long looped velcro strap to the volar piece to secure it. Figure 4.

Figure 4



Advantages: This strapping device inhibits young children from self removal of pressure garment gloves.

Disadvantages: If the material of the garment is too stretchy and/ or there is no contour of the wrist, the device may not be effective.

Indications: Young children who inappropriately self-doff pressure garment gloves.

Precautions/Contraindications: Swelling of the hands, open wounds, and skin irritation from the glove.

Primary reference: Splint course: Pediatric Hand Therapy and Splinting, by Jill Peck Murray.

Supporting references:

Joanne Johnson, PT, Barbara Greenspan, OTR, Delia Gorga, OTR, PhD, Willibad Nagler, MD, and Cleon Goodwin, MD. Compliance With Pressure Garment Use in Burn Rehabilitation. *Journal of Burn Care & Rehabilitation*, March/April 1994.

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Level of Therapist Skill / Specialization Required: Occupational Therapist, Registered and Licensed.

Total Time Required to Fabricate Splint / Device: 20 minutes

Outcome Measure: Parent report of improved compliance has been documented however no study has been designed to measure outcome of use of this strap.

If you have any questions about the design of the device or comments about the fabrication, please email Stacey at spatee@shrinenet.org