

# MERMS Trial Splinting Protocols

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## Circumferential DIPJ Immobilisation Orthosis – Orficast Mallet Splint

1. Measure a piece of 2-inch Orficast ~20cm in length. Heat in the splint pan, fold to bring the cut edges together and press firmly to seal.

2. Measure the material against the finger to be splinted and cut off any excess material. Cut a small arch to allow for movement volarly at the PIPJ

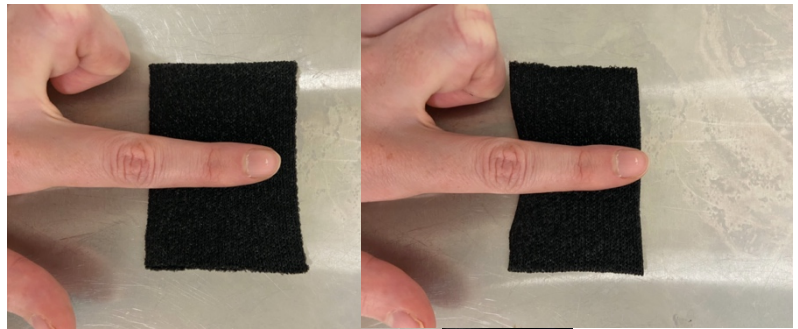
3. Heat the material in the splint pan and press into a towel remove excess water

4. Line up the thermoplastic on the volar surface of the affected digit, distal to the PIPJ creases. If the material needs further adjusting, it is easiest to do at this point.

5. Pinch the material together firmly on the dorsum of the finger, flush with the skin, and cut along the sealed edge to form a permanent bond

6. Position the affected DIPJ in extension and hold while the thermoplastic sets

7. Check PIPJ ROM – the material can be cut or remolded with a heat gun as needed



## Relative Motion Extension Orthosis – Border Digits

1. Measure a piece of 1-inch Orficast to ~40cm in length. Heat in the splint pan, fold to bring the cut edges together and press firmly to seal.

2. Measure the material against the finger to be splinted and cut back any excess, particularly around the LF P1

3. Heat the material in the splint pan and press into a towel to remove excess water

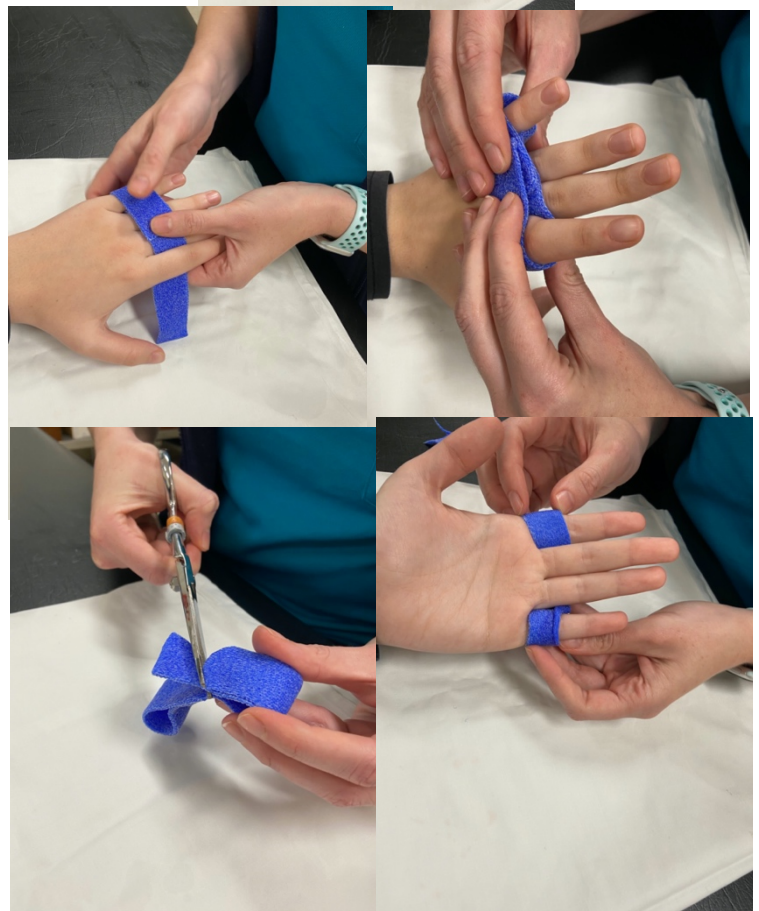
4. Line up the thermoplastic dorsally over the middle and ring fingers and weave volarly under the border digits.



5. Continue to wrap one end of the material around the *uninjured* border digit and press firmly to seal over the dorsum of the middle and ring fingers

6. Wrap the remaining end around the *injured* digit and hold loosely in place – **don't** seal this piece

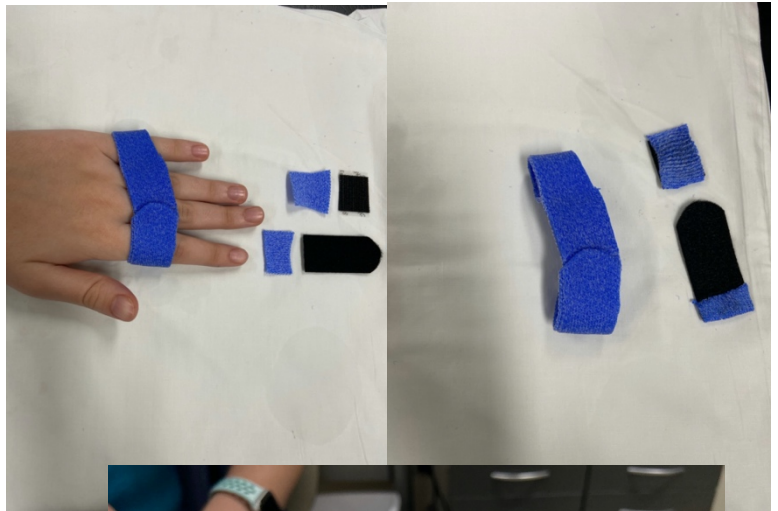
7. Position both border digits in relative extension (15-20 degrees) compared to the middle digits and hold while the thermoplastic sets



8. Trim the thermoplastic piece that wrapped around the injured digit and check the PIPJ and MPCJ ROM – the material can be cut or remolded with a heat gun as needed

## Splinting Protocols

9. Heat 2x small pieces of Orficast with a heat gun and secure to the back of hook and loop Velcro as shown



10. Dry heat the orthosis and Velcro pieces and press together firmly to bond



## Relative Motion Extension Orthosis – Middle or Ring Fingers

1. Measure a piece of 1-inch Orficast to ~35cm in length. Heat in the splint pan, fold to bring the cut edges together and press firmly to seal.

2. Measure the material against the finger to be splinted and cut a small arch to allow for movement volarly at the PIPJ

3. Heat the material in the splint pan and press into a towel to remove excess water

4. Line up the thermoplastic on the volar side of the affected digit and weave dorsally behind the fingers on either side

5. Continue to wrap the material around the adjacent fingers and pinch together firmly on the volar surface of the finger. Cut along the sealed edge to form a permanent bond

6. Position the affected digit in relative extension (15-20 degrees) compared to the adjacent fingers and hold while the thermoplastic sets

7. Check PIPJ and MCPJ ROM – the material can be cut or remolded with a heat gun as needed

