

Hand Rehabilitation Section Clinical Pearls

Topic: Intrinsic Muscle Home Strengthening Program--Simple Resistive Gadget

Submitted by: Carla Cleary, PT, DPT, CHT

Assistant Director

St. Dominic Outpatient Rehabilitation and Hand Management Center

Jackson, Mississippi

Here is a simple gadget made with rubber bands and velcro for intrinsic muscle strengthening. Patients report improved compliance with their home exercises since seeing the gadget is a reminder and it's more fun than using their uninvolved hand as the resistive device.

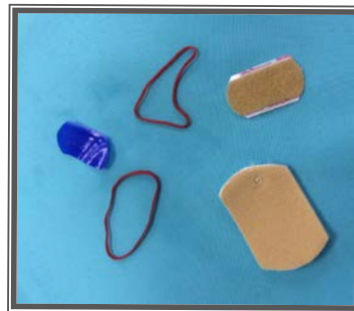
Supplies needed:

Dicem

rubber bands

sticky back loop velcro

loop velcro (I use dual strap)



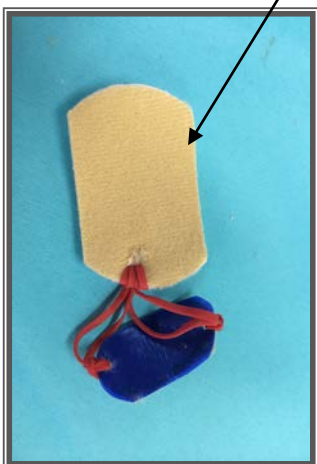
Fabrication:

1. Cut the dicem to the size of sling desired (generally 1 1/4 X 3/4 inch is good).
2. Place dicem on the sticky side of the loop velcro and cut to same size.
3. Punch two small holes through the dicem/velcro sling, one on each end to form the sling.
4. Thread the rubber band through the hole and pull it out to make small loop. Insert the opposite end of the rubber band through the loop and pull to attach the rubber band to one side of the sling. Repeat on the other side of the sling.



Fabric shown on top is sticky Velcro. Bottom shows dicem attached to sticky Velcro and holes punched for sling.

Stabilizing Tab

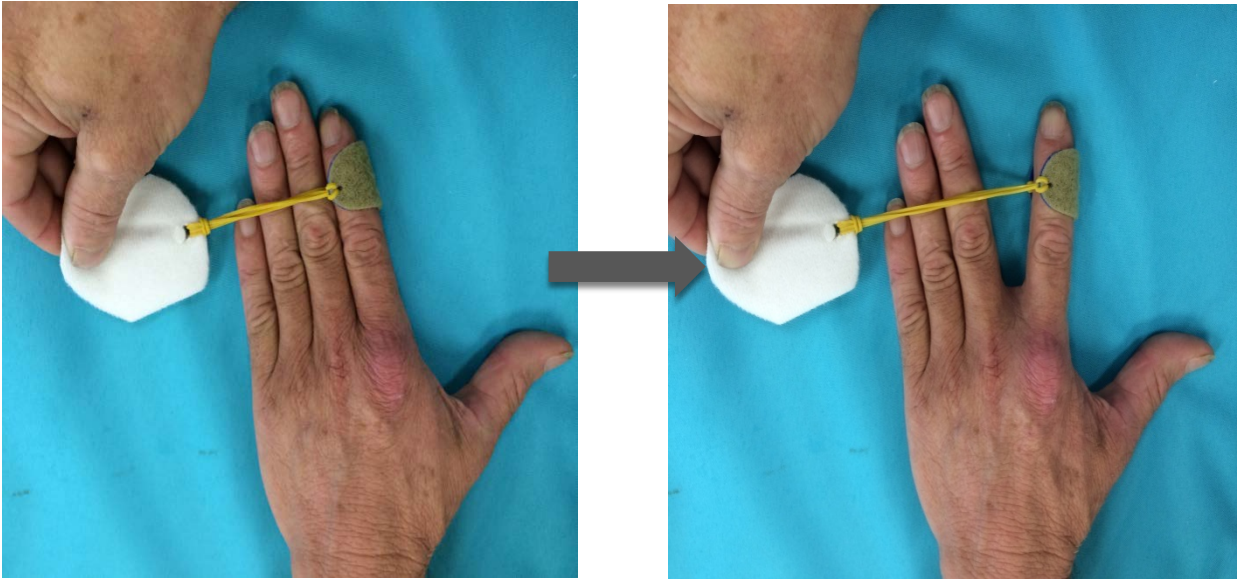


5. Cut a piece of loop velcro to make a large enough stabilizing tab (about 3 inches) and punch a hole in one end.
6. Insert both rubber band ends from sling through the latter hole and form one loop to insert main part of sling through to attach the sling to the stabilizing tab.
7. Voila--you are finished.

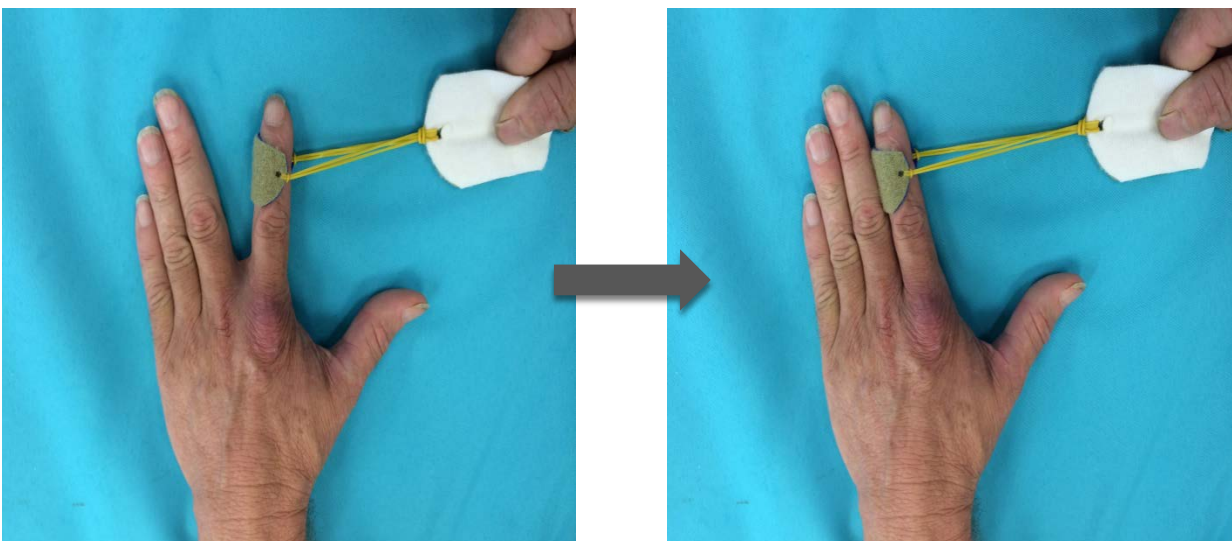
Hand Rehabilitation Section Clinical Pearls

Exercise examples: Use your creativity to come up with more. Also works well for finger extension and thumb muscles.

Finger abduction



Finger adduction



Hand Rehabilitation Section Clinical Pearls

Lumbrical

