

# Should my child be using a wrist-hand splint?

Evidence from a randomised controlled trial of children with cerebral palsy (CP)

## What is this about?

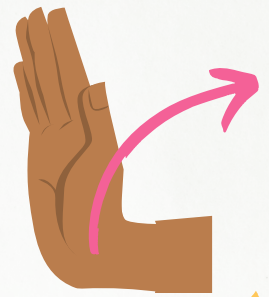
Children with CP are at risk of developing tightness in the muscles of the wrist and hand, which can lead to loss of movement. This can make it hard for children to use their hands for activities or for care-givers to manage caring tasks.



Therapists traditionally give children with CP wrist-hand splints (orthoses) to wear at night. We think the splint gives a stretch to the hand that reduces muscle tightness and increases (passive) wrist movement, but we are not sure. We did a study to find out. Below we share what we learnt.

## Do splints reduce tightness?

After 6 and 12-months of wearing a splint, some children had less wrist tightness, allowing their hand to be moved into a stop sign position by a therapist with more ease.



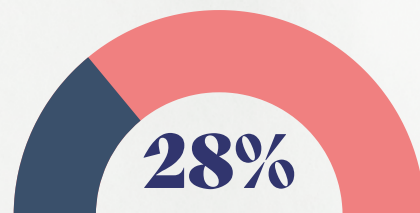
## Do splints improve hand function?

The only change in hand function we saw was after 12-months; some children wearing a splint had an increase in their grip strength.



## Did children wear their splints?

Children who received a splint reported wearing it 28% of the time (about 1 in every 4 days), for an average of 7.5 hours each time.



## Did the splints cause any side effects?

About 70% of children experienced side effects from wearing a splint. Most commonly they experienced *skin irritation, redness or trouble sleeping*. These usually lasted about a week.

## So, what can we recommend?



We were unable to study enough children for long enough to be able to clearly recommend whether splints should or should not be provided to children with CP.

We recommend that therapists and families carefully discuss the potential benefits and risks of wearing an orthosis before making a decision either way.



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