

# EARSPLINTING

## INSTRUCTION PACKAGE



## Supplies



### You are required to source your own supplies.

Most are available from chemist warehouse & Bargain Chemist. They do not however stock Duoderm Extra Thin spots. They do stock the square Duoderm extra thin. This can be cut to shape. Alternatively, you can source the Duoderm Extra Thin spots from Capes Medical (Tauranga), 0800 181919 – capesmedical.co.nz

**Table 1a. Common types of ear deformations**

#### PROMINENT / CUP EAR



- Prominent ear is an abnormally protruding ear.
- Cup ear deformity is an advanced form of prominent ear with an incomplete opening of the ear.
- Often characterised by very stiff and resistant cartilage around the scapha and helical rim that can feel as though a string envelopes the helical rim.

#### STAHL'S EAR



- Characterised by a transverse crus extending outward from the anti-helix, rather than continuing upward in a gentle bend as the superior limb of the triangluear fossa
- Often presents with multiple or a combination of deformities.

#### LIDDING / LOP EAR



- A folding over the helical rim or upper third of the ear.
- Occurs when the superior limb of the anti-helix or the fossa fails to properly form.
- Lop ear is the severe expression of lidding.

#### HELICAL RIM DEFORMITY



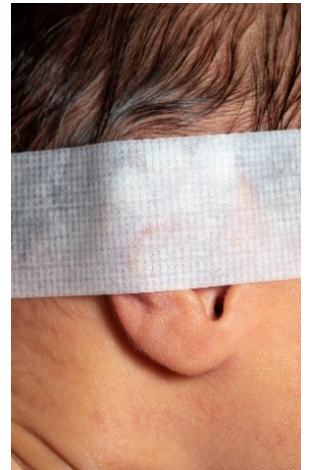
- Irregularities or compression that may occur anywhere along the entire circumference of the helical rim.

# EAR SPLINTING TECHNIQUE

## Patient Information – Plastic & Reconstructive Surgery Department

The Technique of ear splinting used at Christchurch Plastic & Reconstructive Surgery Department is, as described by Manji et al; a small roll of thin DuoDerm is used to splint the anti-helical fold, secured with steri-strips and 3M Silicone tape is used to set-back the ear.

Please note commencing splinting after 6 weeks of age may have limited impact and will likely require many months of splinting.



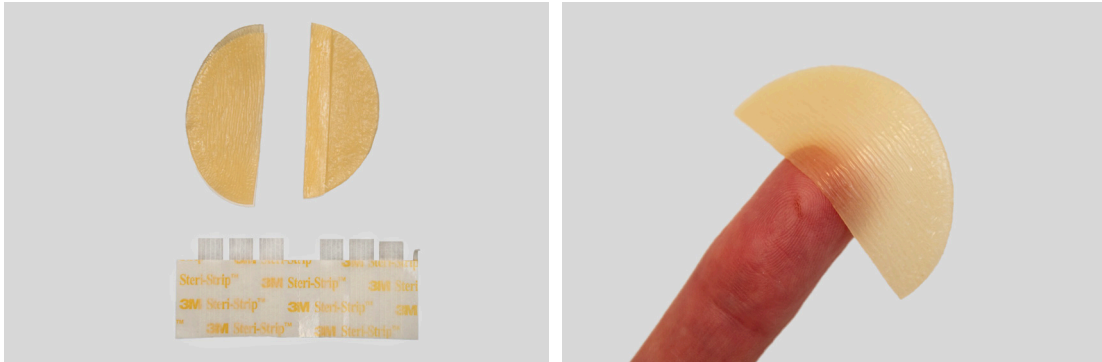
## Practice Points

Ideally this would be performed as soon as the deformation is noted and within the first few weeks of life to achieve the highest success of long-term correction in the shortest timeframe.

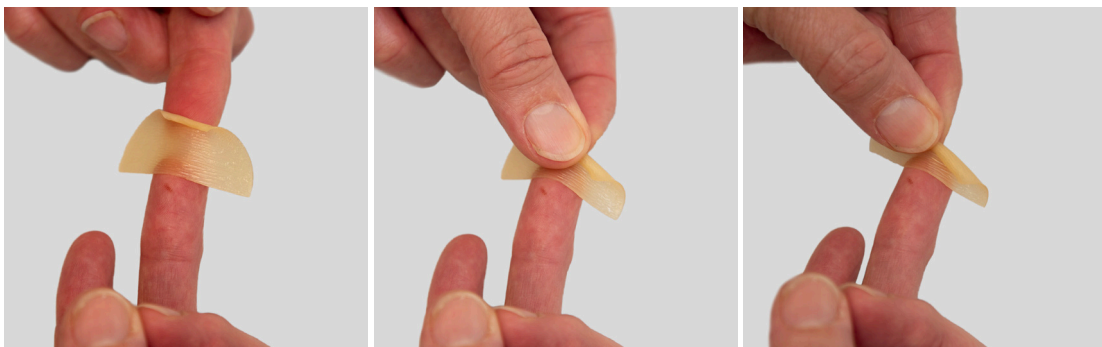
1. The duoderm and steristrip splint should be changed weekly at home, the blue tape changed daily at home
2. When changing the blue tape daily, ensure you check the skin for irritation
3. If the skin is irritated by the adhesives, stop using the splints until the skin has recovered.
4. At week 5, the splint is taken down for 24 hours and if the ear deformation remains corrected after this time, one further week of splinting is applied then ceased
5. **If your baby manages to pull tapes off, STOP SPLINTING.** This is due to airway risk if loose product becomes inhaled.

## How to apply the splint

1. Cut the DuoDerm in half length ways for the first 1-4 weeks of life, as the babies get bigger use a full piece of DuoDerm



2. Trim Length of the Steristrips. Roll the DuoDerm into a tight roll, sticky side on the outside



3. Make sure the DuoDerm 'roll' is rolled tightly and both edges are then cut into a tapered fashion



4. 'Anchor' the DuoDerm into the 'cave' of the helical root
5. Mould and roll the DuoDerm into the gutter of the ear (scaphae), and mould the outer rim (helical rim) around the DuoDerm splint (see images above)
6. Anchor with steristrips, placed comfortably not firmly over the rim. Anchor the steristrips from the posterior part of the ear first, and roll over the front.
7. Check for white skin (blanching) of ear rim, if so Steristrip is too tight, remove and reapply with less tension. **Continue to next page.**

## How to apply the splint (continued)

8. Apply the blue tape to protect splint and set back prominence, as above.
9. Keep dry (splashes ok) but no soaking wet whilst the splints are in place

## Reference:

Manji, I. Durlacher, K. Verchere, C. Correction of neonatal ear deformities using DuoDERM: A simple technique, Paediatrics and Child Health. 2020 1, 1-4

## For more information:

Hospital and specialist services, go to [www.cdhb.health.nz](http://www.cdhb.health.nz)

Health and medication, go to [www.healthinfo.org.nz](http://www.healthinfo.org.nz)