



SET OF INSTRUCTIONS

TABLE OF CONTENT

1. Introduction	
1.1. Foreword	4
1.2. Treatment objectives	4
2. Work materials	
2.1. Braces and loops	5
2.2. Instruments	6
3. How to place the 3TO-Brace	
3.1. Preparing the nail fold	7
3.2. Preparing the brace	7
3.3. Bending the 1. brace side	8
3.4. Placing the 1. brace side	11
3.5. Placing the 2. brace side	12
3.6. Installing the loop	13
3.7. Cutting off wire ends	15
3.8. Fix and seal connection area	16
4. Remove and re-adjust the 3TO-Brace®	
4.1. Remove the brace	17
4.2. Re-adjust the brace	18
5. Patient notes	19
6. Therapist notes	
6.1. Safety hints	19
6.2. General treatment information	20

The information contained in this document must not be passed on or duplicated, exploited or shared, unless expressly approved in writing. Any violation shall result in payment of damages.

May 2013

1. Introduction

1.1. Foreword

These detailed instructions will help professional therapists to apply the 3TO-brace correctly. It contains practical hints and describes all steps of the application in great detail.

Please read these instructions carefully after you have attended the seminar and pay particular attention to the safety information for your own and your patients' safety.

1.2. Treatment objectives of the 3TO therapy

The 3TO therapy helps to restore the natural growth of the damaged nail.

The 3TO-BRACE® helps to reduce pain by immediately lifting the ingrown nail and it improves the overall condition of the patient quickly and effectively.



Toe before treatment



Toe 10 days after start of therapy

2. Work materials

2.1. Braces and loops

Our **3TO-Brace**[®] comes in four different variants:

Normal 3TO-Brace[®]

Our normal 3TO-Brace is made of 0.4 mm thick, stainless spring steel wire and is suitable for almost all kinds of applications.

3TO children braces

The 3TO children brace is designed for children braces and for all small nails and fingernails. Like the normal brace, it is 0.4 mm thick, only the distance between the S-bend and the omega is particularly small in this design.

Strong 3TO-Brace[®]

Our strong 3TO-Brace's shape is similar to our normal brace, but it is made of 0.45 mm thick wire and is used for very thick and solid nails only. The strong loop is used in order to contract it.

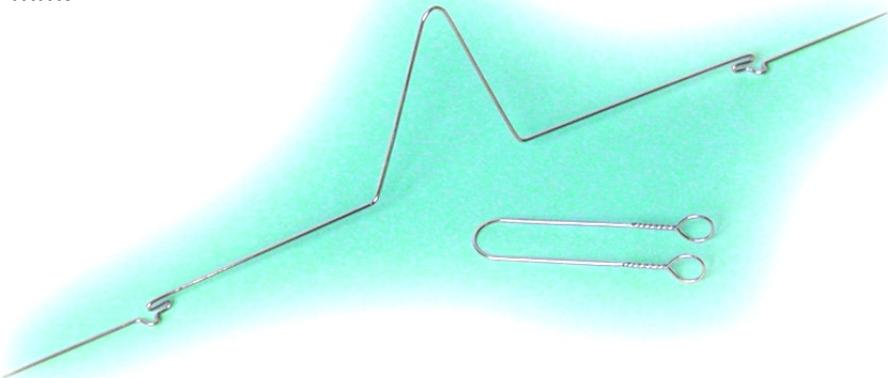
Our **3TO-Loops** come in two different variants:

Normal loop

Our normal loop is made of a 0.3 mm thick wire and is suitable for most applications.

Strong loop

The strong loop is used for thick and solid nails. Wire thickness: 0.35 mm.



2.2. Instruments



Side-cutting-nippers



3TO Combination-pliers



Fixation-pliers



Hook

3. How to place the 3TO-Brace®

➤ **Please ensure that the entire area to be treated is disinfected prior to treatment:**

Please use either skin disinfection (i.e. *Kodan® Tinktur Forte*) or suitable skin disinfection tissues (i.e. *Kodan® tissues*). Please observe the application times recommended by the manufacturer.

➤ **Also protect your own health when treating your patients with our brace:** Please wear gloves, mask and also wear protective spectacles when clipping off the wires.

3.1. Preparing the nail fold

Reduce manipulation of the nail fold to a minimum before placing the brace in order to avoid unnecessary irritation of the wound.

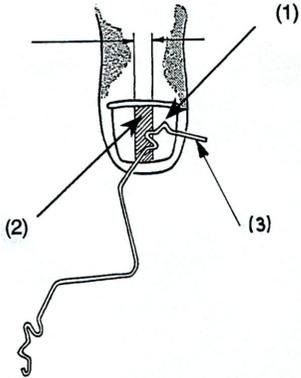
- please probe for a free spot to fasten the brace
- please clean the nail fold as required to place the brace

3.2. Preparing the brace

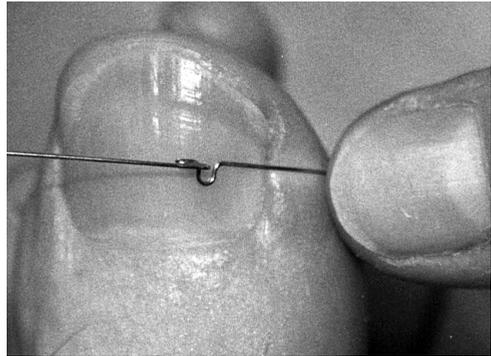
➤ The brace must be disinfected in an immersion bath using a disinfectant generally acknowledged by your local medical association for hygiene and microbiology (i.e. *Lysetol® Med*). Always follow the instructions regarding concentration and application times on the package or in the patient information leaflets. Please rinse the brace with clear water after disinfection.

3.3. Bending the hook on the first brace side

- Establish a diagnosis of the anatomic shape of the nail
- Defining a connection area (2) of approx. 5 mm width (guess by eye) for the loop. This area is normally located in the middle of the toe but may also be located more to the side, if the nail is heavily warped or rolled-in. (see *Picture 1 + drawing 1a*)



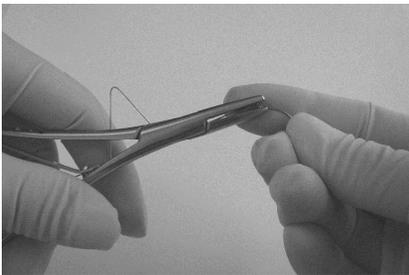
Drawing 1a



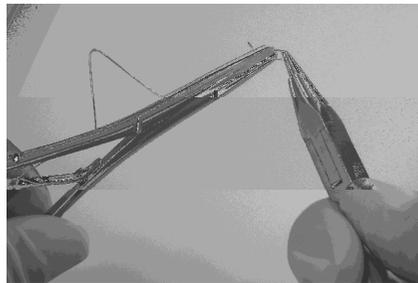
Picture 1

Bend the hook with the combination pliers:

- Fix the brace in the area of the omega into the fixation pliers
- Pre-bend the first hook with the combination pliers (pictures 2a, 2b)



Picture 2a



Picture 2b



- Press together the hook in a borehole of the combination pliers. The size of the holes will define the size of the hooks. The further you move to the rear, the bigger the borehole.



⤷ Important: The bend of the hook must be in the pliers completely and may not look out on the other side.

- Cut off the hook very short with the side-cutting nippers (*Picture 3*)



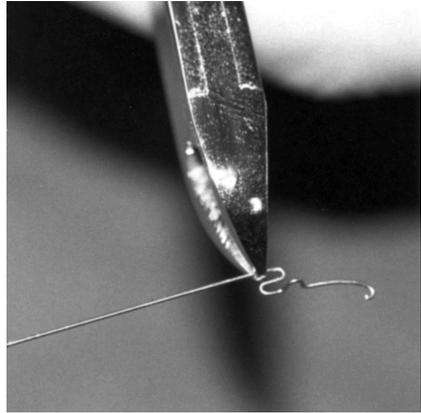
Picture 3



- Deburr the hook using a sandstone milling device or a nail file (Picture 4)

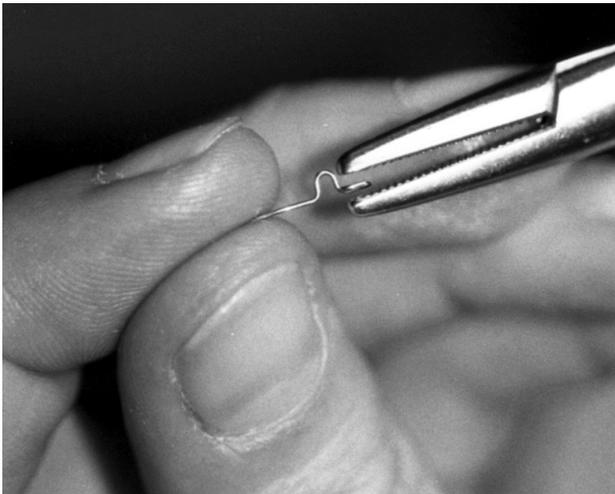


Picture 4



Picture 5

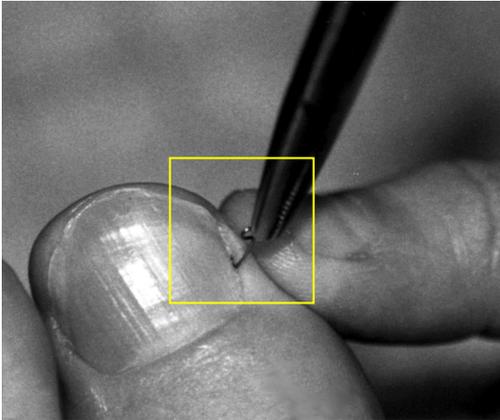
- Cut off the first brace side within the S-bend with the side-cutting nippers (Picture 5)
- Clamp the "S-loop" in the needle holder (Picture 6) and further adjust the bend of the side to the warping of the nail again.



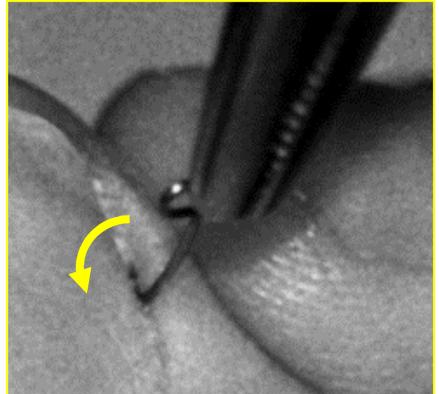
Picture 6

3.4. Placing the 1. brace side

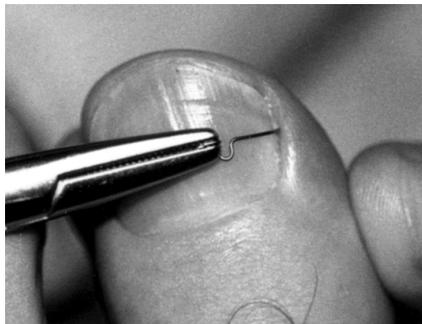
- Pull down the nail fold with your thumb, insert the 1. brace side from above into the nail fold and press downwards – the tip of the hook shows to the front (*Picture 7*)



Picture 7



- Turn the brace side by 90° ($\frac{1}{4}$ turn) and bring it down towards the nail (*Picture 8*)



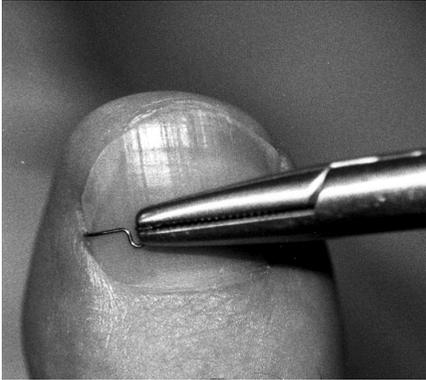
Picture 8

- You may need to clamp and fix the brace side by soft tamponing of the nail fold with a tamponment strap.

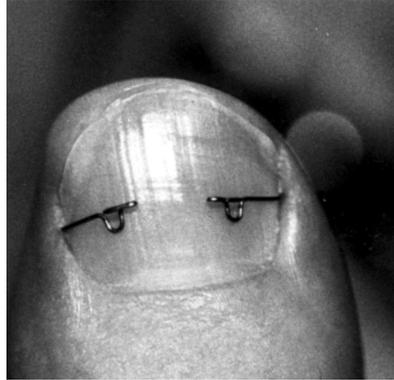
Note: If the nail is extremely rolled in, you can fix the brace using superglue

3.5. Placing the 2. brace side

Use the same procedure like you did for the first one as described in chapters 3.3-3.5. (Picture 9 and 10)



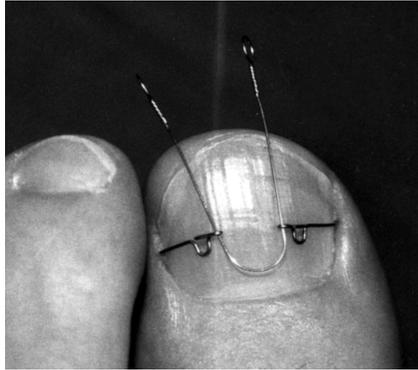
Picture 9



Picture 10

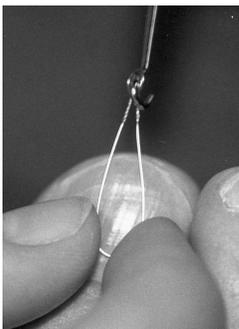
3.6. Installing the loop

- Place the loop around the two sides (*Picture 11*)

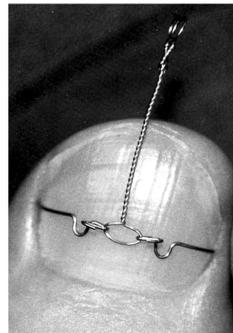


Picture 11: Installing the loop

- Press together the eyes of the loops and insert the hook into both eyes.
- press both sides at the „S-loops“ together with your thumb and forefinger and turn together the loop **clockwise** with your other hand – while doing so, hold the loop a little downwards (*Picture 12,13*). As soon as the patient feels some tension, stop turning and remove the hook.



Picture 12



Picture 13

- Check the brace for tight fit. The brace is correctly placed, when it provides sufficient hold and when the patient does not feel any tension yet.

How to avoid tearing of the loops:

- The tension of the 3TO-Brace is not applied with the loop directly, but with your thumb and forefinger instead. The loop is used for setting and fixing afterwards. (see *Picture 12*)
- While turning, please make sure that the spiral created is located in the middle of the two sides of the brace.



right



wrong

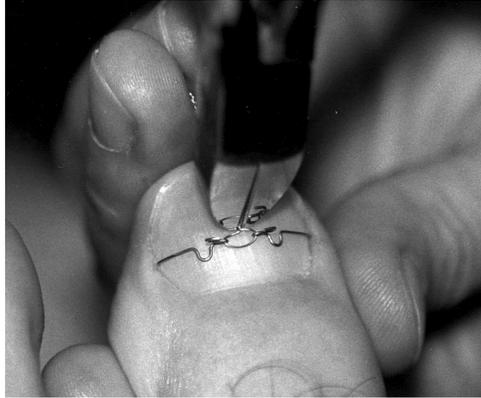
- While turning, the loop is slightly tightened with the hook.
- Hang the hook into the eyes of the loop. Do not stick it through:



3.7. Cutting off the wire ends

Loop:

Cut off short - 2 threads must be maintained – hold the side-cutting nippers in a vertical position to the loop and keep the cutting surface towards the brace (*Picture 14*).

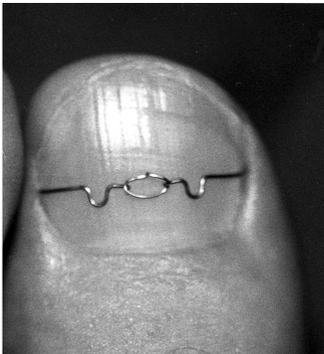


Picture 14

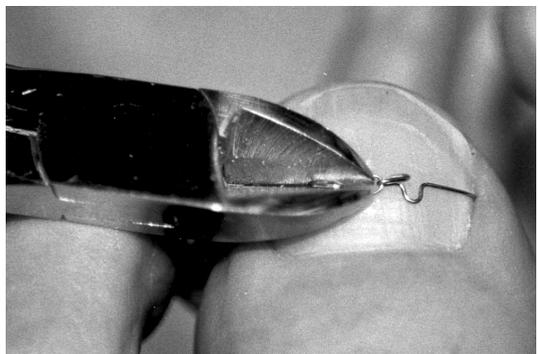
"S-loops of the brace":

Hold the side-cutting nippers in a flat position and cut off the wire ends in the "s-loop". (*Picture 15 and 16*) – put the fingers on the wire ends for protection to avoid the wire parts to jump off.

➔ **Be careful – risk of injury!** – it is recommended that both the patient and the therapist wear protective spectacles.



Picture 15



Picture 16

3.8. Fix and seal the connection area

Create a cover in the connection area:

- Use the spatula and apply one drop of PediGel onto all sharp wire parts (Picture 17)



Picture 17

- Harden the PediGel with the 3TO Micro Lamp for about 30 seconds. Keep the distance between the lamp and the PediGel as short as possible. (Picture 18)
- A fluid and adhesive film will be formed on the sealing surface during hardening. Remove this film with a swab (or anything similar) (Picture 19)



Picture 18



Picture 19

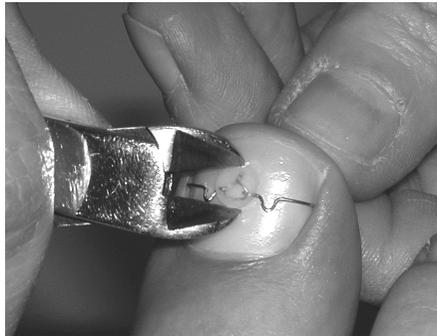
4. Remove and re-adjust the brace

4.1. Removing the brace

If you do not want to re-adjust the brace, you may cut off the wire at any desired place with the side-cutting nippers and remove the brace parts.

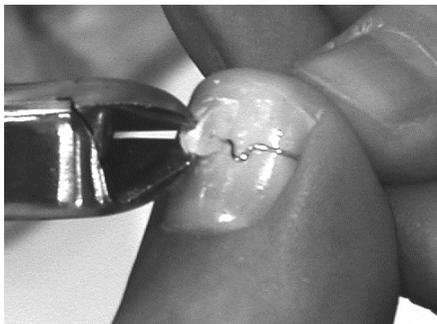
However, if you want to re-adjust the brace, the brace sides must remain intact. That is why the brace should be cut in the middle of the loop:

- For sealing removal, use the side-cutting nippers to separate the sealing from the nail plate (*Picture 20*).



Picture 20

- You can cut through the plastic drop with the loop from the side.



Picture 21

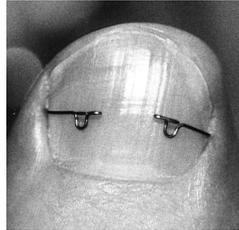
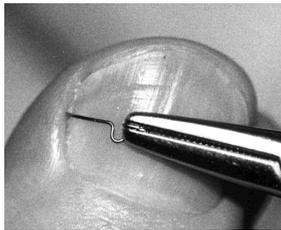
- The remaining plastic nail material on the brace sides can be removed from the brace wire with flat pliers similar to using a nutcracker.

4.2. Readjusting the brace

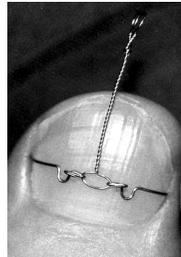
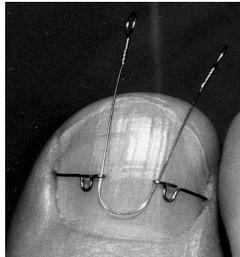
- Once the nail has adapted the form of the brace, the brace may become loose and may fall off. If that happens, it is recommended to remove the brace and re-adjust it proximally to the previous position.

➤ Before re-adjusting the brace must be disinfected in an immersion bath using a disinfectant generally acknowledged by your local medical association for hygiene and microbiology (i.e. *Lysetol® Med*). Always follow the instructions regarding concentration and application times on the package or in the patient information leaflets. Please remove any adhering contaminations and rinse the brace with clear water after disinfection.

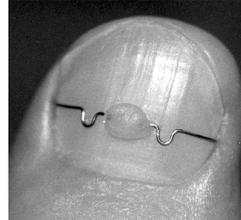
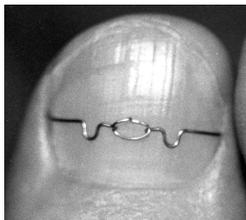
Please place the two brace sides on the nail again with a new loop as described in chapters 3.4-3.8:



- Hang the two sides into the nail fold again (see 3.4. & 3.5.)



- Contract the sides with a new loop (see 3.6.)



- Cut off any excess loop wire short – 2 threads must be maintained – then seal it (see 3.7. & 3.8.)

5. Patient notes

- The patient should contact the therapist right away, if he/she feels pain shortly after installing the brace.
- The reasons that cause ingrown nails should be avoided in the future.
- Use a hair-dryer to dry moist feet and nails.
- No trainers or safety shoes should be worn. Change moist shoes.
- Change socks (cotton) several times a day, if possible.
- Even if the patient does not feel any pain any longer, he/she should not do sports until the inflammation has disappeared.
- The toe must be kept absolutely dry in case of hypergranulation (approx. 3 to 5 days)
; use a plastic cover in order to protect the foot against wetness while taking a shower.
- Cut off the nails flat and slightly round them off at the edges – do not cut or tear with the pliers out of the edges.

6. Therapist notes

6.1 Safety hints

- The 3TO-Brace may only be used by trained therapists. That is why the brace and loops may not be given to third parties.
- The brace may not be transferred from one patient to the next!
- The following side effects may occur after improper use:
 - Stitching due to wrongly bent wire parts or wire parts that were not deburred
 - Infection due to insufficient disinfection in connection with stitching
 - Injury caused by flying wire parts when nipped off

6.2 General treatment information

- Any inflammatory areas must be treated.
- Once the nail has adapted the form of the brace, the brace may become loose and may fall off. If that happens, it is recommended to remove the brace and re-adjust it proximally to the previous position.
- The tension caused by the brace is helpful in case of an onychomycosis (ringworm of the nail), since it provides better access to the areas affected that can be treated more easily.
- Ask the patient to show up again for control depending on the severity of the condition:
 - after 1-3 days in case of a severe condition
 - after 3-6 days in case of mild condition
- Please provide the patient with any relevant information
 - Provide information about the method of action and any possible undesired side effects of the brace
 - Try to explore the causes for ingrown nails together with the patient and come up with a proposal how to manage the problem in the future.

These instructions should be used in order to avoid any accidents and injuries and all notes and rules regarding disinfection must be observed!



3TO GmbH
Birkenstraße 8
D-82041 Deisenhofen

Tel.: +49 89 4520833-0
Fax: +49 89 4520833-99
info@3to-gmbh.de
www.3to-spange.com