**Introduction**

There are many types of ingrown toenail device therapy, but they are often difficult in the following cases.

1. If the nail is short,
2. If the granulation is large
3. If the nail is thinly softened,
4. If the nail is totally subsided
5. In the case of tightly wound nails like snails
6. When the entire nail is submerged in the skin

In the Sogawa method, all of the above cases can be easily treated. And the total cure rate is 99.5%.

**Sogawa Nail Correction Method**

**History and principle**

The Sogawa nail correction method was devised by the author in 2011. The wire used there is called SH (spring hook) wire. Hook the nail edge and glue the other side to the nail surface. Using the principle of leverage, the curvature of the nail is corrected (Figure 1a). The points of effort, fulcrum, and points of action at the time of actual mounting are shown (Figure 1b).

![Figure 1: SH Wire principle and practice.](image-url)
Features of the Sogawa Nail Correction Method

The most distinctive feature of the Sogawa method is that it uses a step-by-step method for treatment. At the first visit, the 1st line painless point treatment is performed. The 1st line painless point is the place closest to the invagination within the range where the wire can be hung without pain (Figure 2a). Then, a few days later, the 2nd line painless point treatment is performed. The 2nd line painless point is the point closest to the invagination within the range where the second wire can be hung without pain at the second visit (Figure 2a).

If necessary, perform 3rd line painless point treatment. Ingrown toenail painless treatment can be realized by performing such stepwise treatment.

Result

At our clinic, we treated 8100 ingrown toenails during the 11 years from April 2011 to March 2022 using the Sogawa nail correction method. There were 36 cases that did not heal. For those who did not heal, the phenol method was performed and the course was good. After all, the cure rate in this method was 99.5% (8064/8100).

Anesthesia is not required when performing the Sogawa nail correction method, but in one case, the skin covered the nail thorns so finger block anesthesia was performed. This was the only case that required anesthesia with the Sogawa nail correction method.

Case Report

Case 1 54-year-old woman First visit July 7, 2017

Chief complaint: Deeply ingrown toenail Medical history: Nothing to note

Progress: Deep ingrown toenail and granulation of the right hallux from 3 months ago (Figure 3a).

Treatment: The pain is so strong at the first visit that the wire cannot be hung on the ingrowing part.

Therefore, the 1st line painless point treatment was performed (Figure 3b). Two days later the pain and swelling subsided. Therefore, we were able to hang a wire on the 2nd line, which is about 2 mm closer to the recess than the 1st line. It’s called the 2nd line attack (Figure 3c). After that, it progressed smoothly and healed 32 days after the first visit (Figure 3d).
Figure 3: Case 1: 54-year-old female.

Case 2

25-year-old woman, first visit January 17, 2007

Medical history: Nothing to note

Chief complaint: Nail subsidence and severe pain.

Progress: One year ago, she underwent total nail avulsion for ingrown toenail treatment at another clinic. After that, the entire nail sank and became unable to grow forward. Complain of pain (Figure 4a).

Treatment: 11 days after the first visit, the second wire was hung (Figure 4b). 2.5 months after the first visit, the third wire was hung (Figure 4c). Nine months after the first visit, the nail was raised and steadily extended forward (Figure 4d). During this treatment she gave birth safely.

Discussion

In the case of VHO, a method is adopted in which hooks are hooked on the nail edges on both sides [1]. Machiwire is a method started by Dr. Machida in 1999. In this method, a wire is passed through a hole made in the nail to fix the nail and the wire [2].

As far as the author knows, there is no other method of adhering a wire to the surface of the nail to treat ingrown toenail (PubMed 2000-2021).

In the Sogawa method, there are 7 types of wire thickness, and they are used properly according to the hardness of the nail. We have never experienced any difficulty with this wire due to lack of straightening power.

When adhering a wire to a nail, there are various measures such as preparing the surface of the nails, a wire gripping device, a nail elevator that makes it easy to attach the wire. We are conducting remote training to acquire these skills.
It is available to people all over the world with English support. Access by e-mail is convenient.

References
