Care of nail hyperplasia of the lower limbs using an electric nail file

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Abstract

Hospitalized patients are often bedridden due to neurodegenerative disease. They frequently present with hyperplasia and transformation of the toenails. Moreover, the diseased nails may fall off the fingers. We sharpened toenails affected by hyperplasia using an electric nail file. We used foot care together subsequently. We considered whether loss of toenails could be prevented by this method. The subjects were seven patients with neurological degeneration. Using an electric nail file did not induce bleeding. It was useful for preventing the loss of toenails affected by hyperplasia. The drying of the foot part of all the subjects was improved by performing the bed bath of the foot part.

Keywords: hyperplasia nail, foot care, electric nail file

Introduction

We work in a ward for patients with intractable myoneural disease. There are many patients having difficulty in verbal communication due to tracheotomy, muscle weakness, and muscle rigidity. The patients are old and are bedridden all day. The toenails often become diseased, with conditions including hyperplasia, bleeding of the nail, and spontaneous loss. Causes of nail thickening include drying due to aging, ringworm, poor blood circulation and physical pressure. It is safer to sharpen toenails affected by hyperplasia with an electric file than to cut them using a clipper. After bathing and a foot bath, an antifungal agent is easy to soak. The patients of our ward have systemic contractures and muscle rigidity, and it is difficult for them to preserve the posture of the foot bath. Therefore, we decided to maintain their cleanliness by performing a bed bath for the feet in substitution for a foot bath.

Subjects and methods

Patients from whom agreement was obtained to take part in the study were the subjects. They had toenail hyperplasia. The study period was from September 2015 to March 2016.

Ethical consideration. We obtained the consent of the Ethical Review Board of the Tokushima National Hospital in 2015. We considered the privacy of the patients. When we announce it in a society or an article, we encode the personal names to prevent the patients from being identified. We explained the benefits and disadvantages of the treatment to the studied individuals and their families. We obtained consent from the individuals and their families with understanding about contents as things mentioned above.

Intervention method

1) Electric nail file usage

We determined how much of the nail to remove by considering the state of the nails of the individual patients and sharpened the surface of the dry nail. When the cuticle had collected under the nail and thickened, we removed only the surface of the cuticle. One nurse sharpened the nails of all the subjects.

2) Perform it on the day except the bed bath method bathing day of the foot part. We covered the foot with a towel which we warmed to 52 degrees with a warmer to collect it in the bed bath and we pour a plastic bag and keep the top warm for two minutes. We wiped the foot with a dry towel

and dried it well. Some patients applied topical medicine just after the foot care.
Evaluation method
It is two months later at initiation before intervention initiation one month later. We took pictures of the foot before and after the intervention. When taking the photographs, we kept a 5-centimeter distance between the nail and the camera. We evaluate it in an evaluation list while seeing the photograph.

Results

We determined that there was no hyperplasia in the hyperplasia 1 millimeter or less. After having sharpened the nails with an electric nail file, the nails which thickened again were as follows. Patient 1, 1/3; Patients 2 and 3, none; Patient 4, 7/10; Patient 5, none; Patient 6, 1/10; Patient 7, 3/10. The nails for which hyperplasia was reduced were as follows. Patient 1, 2/3; Patient 2, 4/4; Patient 3, 1/1; Patient 4, 3/10; Patient 5, 1/1; Patients 6, 9/10; Patient 7, 7/10. There were no patients who experienced a nail falling off during the study period. Also, the feet of all patients were maintained in a dry state and were improved.

Discussion
Kawano et al. state that they are effective after a foot bath and bathing after a foot becomes beautiful because a drug is easy to soak. 2) Patients 5-7 used an antifungal agent, but onychomadesis and nail thickening were found. However, the nail thickening was relieved, and onychomadesis did not occur due to this intervention. Therefore, it was thought to be effective to apply an antifungal agent after performing the bed bath of the feet. Patient 1 and Patient 4 improved as regards the dry state of their feet, but their nails thickened again. An effect of preventing re-hyperplasia did not seem to be obtained only by this intervention. An improvement of the method was more necessary for them. However, it was thought to be useful in the method using the electric nail file for the deciduous prevention of the nail that there was not the dropout of the nail.

References

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