

# Interdisciplinary collaboration over naturopathic treatment to relieve the symptoms of hand-foot syndrome in cancer patients

I. Meyenburg-Altward<sup>1</sup>, M. Mascia-Papendorf<sup>1</sup>, G. Picksak<sup>2</sup>

<sup>1</sup> Department of Nursing

<sup>2</sup> Central Pharmacy

## Background

Many patients suffer from an anthracycline- or Taxol-containing chemotherapy by having paresthesia in hands and /or feet, up to a strainful Hand-Foot syndrome. This manifests itself through unpleasant prickling, painful redness and swelling on palms and / or soles of the feet, which makes it difficult to hold onto items or walk, to the point of it sometimes even being impossible. An evidence based therapy for the treatment of these paresthesia is unknown so far. Target is, to create a complimentary nursing measure within an interdisciplinary team to reduce the suffering of paresthesia in both hands and feet.

## Method

An interdisciplinary work group consisting of nurses, nursing scientists, a pharmacist and a physician, developed an easy to apply and uncomplicated nursing recommendation for the treatment of paresthesia in hands and /or feet under an anthracycline- or Taxol-containing chemotherapy – the flaxseed bath.

From the perspective of the ethical committee, there are no concerns regarding ethic-laws by applying this treatment.

For this care measure one needs crushed Bio-flaxseed (low selenium concentration) which is boiled in hot water for a few minutes, left to cool and then used to bathe the hands and /or feet in a pleasant temperature for several minutes. The mucilage released by the flaxseed during the boiling, develops a protective layer on hands and/or feet and thus accelerates the healing process and the fading of paresthesia.

## Results

All patients within the gynaecology clinic who receive anthracycline- or Taxol-containing chemotherapy, are offered a flaxseed bath and receive instructions to enable an independent application at home. (fig. 1) It is important to note, that a flaxseed bath is not antibacterial, and can therefore only be used on intact skin (no open wounds). The patients are asked to state the sensation experienced by the flaxseed bath by marking (from 0 – not at all to 4 – unbearable) before and 1 hour after the appliance, on a simple documentation sheet. The evaluation shows 9 months after the start of the project with 16 patients and 439 documented applications. 185 applications were assumingly conducted pre-emptively in the simple application observation, that the paresthesia in general (fig. 2) as well as the prickling and pain in hands and / or feet according to the area of application (more often the hands were more affected than the feet), decreased considerably (fig. 3) and infrequently patients were even able to hold onto items again.

The flaxseed bath is experienced as a *considerable feeling of relief*, the *strainful symptoms* are reduced; the general nervousness however remains. Often this measure is described by patients as a *very pleasant feeling*, which apparently leads to *temporary relaxation*. The patients can do something for themselves, they feel better!

This complimentary measure is realisable for everyone, even in a private environment, being financially affordable (0,80 – 1,50 € per 200g crushed Bio-flaxseed) and without needing a great training measure.

Fig. 1: Care instructions for the application of the flaxseed bath

Präsidium  
Geschäftsbereich Pflege  
Iris Meyenburg-Altward, Dipl. Pflegewirtin, RN

MHH  
Medizinische Hochschule  
Hannover

### Care Information for the application of the flaxseed bath

<b>GENERAL RECOMMENDATION</b>	<ul style="list-style-type: none"> <li>If possible, use biologically certified goods for the flaxseed bath</li> <li>500g flaxseeds only cost a few Euros in drugstores, natural- and health food shops and pharmacies.</li> <li>Store the crushed flaxseeds in a refrigerator. Take note of the expiry date and only use the product within 2 days after opening the package.</li> <li>Each flaxseed bath must be freshly prepared and can only be used once.</li> </ul>
<b>SKIN INSPECTION</b>	<ul style="list-style-type: none"> <li>The flaxseed bath is only suitable, if your skin is intact on the affected areas.</li> <li>If you are unsure (ie. if you have some small tears on your skin), please consult a nurse or doctor.</li> <li>You can apply this measure 1-2 x daily, and if tolerated well, this measure can be applied up to 5 x daily.</li> </ul>
<b>PREPARATION</b>	<ul style="list-style-type: none"> <li>Boil 3 Tbsp of crushed flaxseed for approx. 5 minutes in 2,5l of Water.</li> <li>Should you require a higher amount, just double the amount.</li> <li>Let the developed brew cool down to a pleasant temperature (approx. 37° c) and pour it into a foot basin or any other suitable basin.</li> </ul>
<b>Attention: Danger of scalding!</b>	
<b>IMPLEMENTATION</b>	<ul style="list-style-type: none"> <li>Bathe your hands and / or feet for approx. 5-10 minutes in the flaxseed bath.</li> <li>Wash the flaxseed mucilage off with clear water.</li> <li>Dab your hands and / or feet carefully dry with a towel.</li> </ul>

Fig. 2 : General paresthesia before and after the application

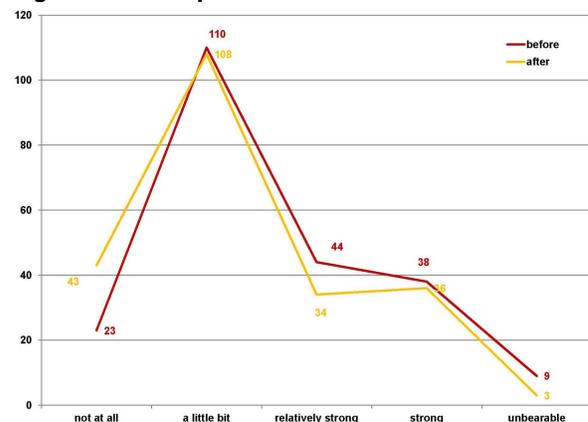
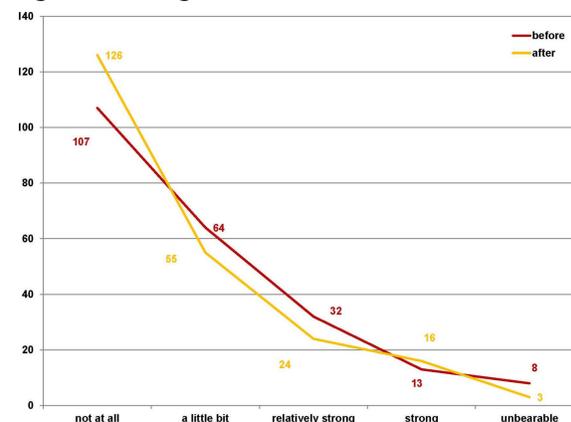


Fig. 3: Prickling in the hands before and after the application



## Conclusion

This easy, affordable and uncomplicated complimentary care measure for the treatment of paresthesia in hands and/or feet under an anthracycline- or Taxol-containing chemotherapy can be applied by patients themselves, also ambulant, several times daily. A combination using this care measure in alternation with the obligatory cooling of hands and/or feet during the chemotherapy can be applied without concern. The continuous positive patient feedback confirms the application of such complementary care measures, also in the frame of academic medical chemotherapy. An expansion of this care measure offer with the indication of polyneuropathy and Raynaud-Syndrome is planned.