

Silk clothing offers no benefit for children with eczema, study finds

April 11 2017

Wearing silk clothing offers no additional benefit for children who suffer from moderate to severe eczema, a study led by researchers at The University of Nottingham has found.

The results of the trial, published in *PLOS Medicine* and funded by the National Institute for Health Research, revealed that wearing specialist silk garments did not reduce the severity of eczema for the children taking part, not did it reduce the amount of creams and ointments used for their eczema, or the number of skin infections experienced.

Professor Kim Thomas, from the Centre for Evidence Based Dermatology in the University's School of Medicine, led the study. She said: "The silk garments that we looked at as part of this trial did not appear to provide additional clinical or economic benefits over standard care for the management of children with eczema."

"These results provide robust evidence to inform health commissioners and prescribers in making informed clinical decisions about the treatment of their patients."

Three small clinical trials had suggested that the use of DermaSilk clothing might offer some possible benefits for children with eczema. However, these previous trials were insufficient for guiding clinical practice because of limitations in their methodology, prompting the Nottingham study to examine the issue in more detail.

The CLOTHing for the relief of Eczema Symptoms trial (CLOTHERS trial), which involved recruiting hospitals from across the UK, was the first large, randomised controlled trial to evaluate the use of silk garments (DermaSilk or Dreamskin) for children with moderate to severe eczema.

Eczema is an itchy, inflammatory skin condition that is common throughout the world. It can have a huge impact on the quality of life of children and their families, particularly when sleep is affected.

Clothing has been thought to play a role in either soothing or making eczema symptoms worse, and specialist clothing is now available on prescription in the UK in a variety of forms (including silk).

Due to limited evidence supporting the efficacy of silk clothing for the relief of eczema, the NIHR HTA programme commissioned the CLOTHERS trial, which aimed to examine whether adding silk garments to standard eczema care could reduce eczema severity in children with moderate to severe eczema, compared to use of standard eczema treatment alone. The CLOTHERS trial also looked at whether the use of the silk clothing was cost-effective.

The study took place in five recruiting centres across the UK, and included children aged between one and 15 years of age. The children were randomly given either standard eczema treatment or standard treatment plus the use of silk clothing.

The participants were given either DermalSilk or Dreamskin clothing - the two brands of garments available on prescription at the time the trial was designed. Both brands are made with antimicrobially-protected, knitted, sericin-free 100% silk. The participants were given three sets of long-sleeved vest and leggings (or body suits and leggings depending on the age of the child) and were instructed to wear the clothing as often as

possible during the day and night.

All the children continued with their regular use of emollient creams and topical corticosteroids for controlling inflammation, and were asked not to change their standard treatment for the duration of the trial if possible.

The participants' skin was assessed by nurses every two months using the Eczema Area and Severity Index (EASI), which measures how bad the eczema is (e.g. how red and inflamed the skin looks, evidence of scratch marks and swelling in the skin). The nurses were trained in how to make the assessments reliably and did not know which group the children had been allocated to. This was so that they could judge the effectiveness of the treatments fairly.

In addition to the main outcome measurement of EASI, the trial also assessed eczema symptoms, use of topical corticosteroid creams and ointments, quality of life and the number of skin infections and hospital admissions.

Use of the garments was good and probably reflects how people might wear the silk clothing normal practice - 82 per cent of the participants wore the clothes for at least 50 per cent of the time, although the clothing was worn more often at night than during the day.

In terms of severity of eczema, quality of life and use of eczema medications, the trial found no difference between the two groups. Safety outcomes e.g. the number of skin infections and hospitalisations due to eczema were also similar in the two groups.

When asking patients to monitor the severity of their eczema symptoms weekly, those using the silk clothing reported small improvements in the eczema, but these differences were small and unlikely to be clinical

meaningful.

At the time the research was commissioned, £840, 272 was spent on prescriptions for silk garments per year in the UK, rising to more than £2 million by 2014. The CLOTHES study found that the average cost of garments for 6 months was £318.52 per participant, and this amount was not offset by a reduction in other healthcare costs, such as prescriptions or GP visits. Overall the trial concluded that using silk garments for the management of eczema is unlikely to be cost-effective for the NHS.

Professor Thomas added: "Whilst some may find these results disappointing, we hope that patients and doctors will find the CLOTHES study useful in helping them to make informed decisions about how best to help children with eczema. Unfortunately, this trial suggests that silk clothing probably does not provide value for money for patients or for the NHS."

More information: Thomas KS, Bradshaw LE, Sach TH, Batchelor JM, Lawton S, Harrison EF, et al. (2017) Silk garments plus standard care compared with standard care for treating eczema in children: A randomised, controlled, observer-blind, pragmatic trial (CLOTHES Trial). *PLoS Med* 14(4): e1002280. [DOI: 10.1371/journal.pmed.1002280](https://doi.org/10.1371/journal.pmed.1002280)

Provided by University of Nottingham

Citation: Silk clothing offers no benefit for children with eczema, study finds (2017, April 11) retrieved 20 March 2024 from <https://medicalxpress.com/news/2017-04-silk-eczema-children.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.