

Wet Wraps Cut Need For Drugs In Kids With Eczema

Study gives parents, doctors new options to treat painful, itchy condition

JULY 08, 2014

DENVER, CO — The number of children with [atopic dermatitis](#), often referred to as eczema, is on the rise. Some estimate that one in five children in the U.S. now suffers from the painful, itchy skin condition. In an effort to control their symptoms, many children are prescribed powerful medications like immunosuppressants or topical steroids.

“Those medications can be effective, but they also can be a cause for concern for a lot of parents, especially when they’re used long term,” said [Mark Boguniewicz, MD](#), a pediatric

allergist and immunologist at National Jewish Health in Denver. “Many families worry about the side effects those drugs might have on their child’s blood pressure, or on their bones and kidneys,” said Boguniewicz. “The problem is, there aren’t many effective alternatives.”

To help find simpler, safer treatment options, researchers at National Jewish Health evaluated an approach known as wet wrap therapy. First described in 1987, wet wrap therapy has rarely been studied and has never been used as a standardized treatment for children with atopic dermatitis. “Hopefully, that’s about to change,” said Boguniewicz.

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The technique involves just a few simple steps. First, a child soaks in a bathtub of warm water for about 20 minutes. After the child is removed from the tub, topical medications are quickly applied to eczematous areas and creams or ointments to the clear skin while the skin is still damp. . Then, the child is immediately dressed in wet clothing or wraps to seal in the moisture, followed by a layer of dry clothing. After at least two hours the clothing is removed.

It seems like a fairly simple and straightforward approach, but a new study co-authored by Boguniewicz, Noreen Nicol, PhD, and Mary Klinnert, PhD, in the July issue of the *Journal of Allergy and Clinical Immunology: In Practice* shows it can have profound effects. After being treated by health care teams at National Jewish Health, children who underwent in-patient therapy saw an average reduction in symptoms of 71 percent, they maintained healthy skin a month after returning home, and, perhaps most important, did so without relying solely on medications typically prescribed to these patients.

“We took a step up, step down sort of approach to managing their symptoms in this study,” said Boguniewicz. “We would apply the wet wraps two to three times a day, depending on the severity of the case, then we would taper the therapy down and only treat the affected areas as time went on,” said Boguniewicz. “Over roughly four days we saw dramatic improvements.”

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Try watching this video on www.youtube.com, or enable JavaScript if it is disabled in your browser.

In all, 72 children took part in the study, the largest ever for wet wrap therapy, and for the first time their conditions were quantified for their severity using SCORAD (Scoring Atopic Dermatitis) and ADQ (AD Quickscore) measurements. The most severe cases were given a score of 50 and over, moderate cases were classified between 25-49 and mild cases were those that scored less than 25.

“When these children arrived their mean score was right around 50, so they were severe cases,” said Boguniewicz. “When they left, their mean score was less than 15. That kind of improvement, in just a short amount of time, was very, very dramatic,” he said.

[Lucie Karazim](#), a four-year-old from Indianapolis, IN, was one of the children who took part in the study. Diagnosed with eczema just four months after she was born, her mother Heather says they saw several doctors and specialists trying to find relief. “It seems like the more doctors we saw, the more we were just adding medications,” said Karazim. “We got to the point where we were taking some pretty potent steroids and still nothing was fixing the problem.”

In 2012, Lucie was referred to National Jewish Health, and her mother volunteered her for the wet wrap study. “It was very labor intensive the two weeks we were at National Jewish Health, but it was worth it,” she said. “The treatment just makes sense, and the best part is, we were able to back off a lot of our medications when we left and established a new baseline for her,” said Karazim.

But Dr. Boguniewicz cautions that there is a technique that needs to be followed in order for wet wrap therapy to work. “You can’t just try this on your own because overuse can do more harm than good,” he said. “You first want to familiarize yourself with the concept at our website and talk to a specialist about it. We have a lot of material that can help you determine if this is the right approach for your child,” he said.

Learn more about [wet wrap therapy](#), also known as soak-and-seal.

National Jewish Health is the leading respiratory hospital in the nation. Founded 123 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources page](#).

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