Phthalate, paraben levels up in children with atopic dermatitis

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(HealthDay)—Children aged 4 to 9 years with atopic dermatitis and with frequent use of emollients have increased urinary levels of low-molecular weight (LMW) phthalate metabolites and parabens, according to a study published online March 9 in *Allergy*.

Line E.K. Overgaard, from Copenhagen University Hospital in Denmark, and colleagues studied 845 Danish children age 4 to 9 years to examine the correlation for emollient use, atopic dermatitis, and *FLG* mutations with urinary concentrations of phthalate metabolites and parabens.

The researchers found that atopic dermatitis prevalence was 16.1 percent. Children with frequent use of emollients generally had higher phthalate metabolite and paraben levels than uncommon users, reaching statistical significance for some LMW phthalates and parabens. No correlation was seen with common *FLG* mutations, but significantly higher urinary levels of one LMW phthalate and two parabens were seen for children with atopic dermatitis versus those without atopic dermatitis .

"Emollient use and atopic dermatitis were associated with modestly increased internal LMW phthalate and paraben exposure in 4- to 9-year-old children," the authors write. "It is unknown whether the difference is explained by increased use of the specific emollients that are used to treat pruritic and inflamed skin, and/or whether the impaired skin barrier allows chemicals to penetrate more easily. Moreover, the putative toxicological burden is unknown."

More information: Abstract
Full Text (subscription or payment may be required)