Reviewer’s report

Title: Cost And Effectiveness Of Prescribing Emollient Therapy For Atopic Eczema In UK Primary Care in Children and Adults: A Large Retrospective Analysis Of The Clinical Practice Research Datalink

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Reviewer: Robert T. Brodell

Reviewer’s report:

I enjoyed reading the article, "Cost And Effectiveness Of Prescribing Emollient Therapy For Atopic Eczema In UK Primary Care in Children and Adults: A Large Retrospective Analysis Of The Clinical Practice Research Datalink." On the surface the article validates my clinical experience ....the use of emollients early and often in children with atopic dermatitis is an effective and cost-saving approach. However, I would like the limitation section (lines 385-392) to more strongly state a major limitation of this study. It was not possible to determine that the severity of disease in the groups who obtained Aveeno and those that did not.

It is equally plausible that busy primary care physicians may have used emollients more commonly in patients with mild disease. Perhaps in some of the visits with milder disease, emollients were all they needed. More severe patients prescribed a topical steroid may not have received an emollient that visit as the prescriber focused on using the topical steroid. Thus, the findings of lower cost and fewer visits might be expected in the emollient group who had overall less severe disease. One approach to this conundrum would be to go back and assess the strength of topical steroid used in these groups. If more patients treated with mild steroid (hydrocortisone cream) were present in the emollient group and stronger topical steroids were used in the steroid-only group, there would be an indication supporting the possibility that the two groups were not equally severe.

Ultimately, a large, prospective study is required to settle this point. It would be difficult to blind this study since patients and physician will know if they received an emollient in addition to a topical steroid or non-steroid topical. There could be two treatment groups, one with Aveeno-Oatmeal and a second with a ceramide component.

Because of this deficiency, I would tone down the conclusions (lines 432-441). I agree that this study "demonstrated" fewer visits, fewer other prescriptions and reduced cost in the emollient group. This could be related to improvement in the skin barrier. BUT, lines 438-441 uses the verb "resulted in" suggesting it was causative. That is NOT clear.

Similarly, in the abstract, lines 54-56...I agree "was associated with" is correct, but I would like to see some additional qualification here so that the reader who only skims the abstract is not left with the impression that a causative relationship has been proven. Perhaps the conclusion could say, "Recognizing limitations inherent in a study design where severity of disease could not be documented, prescription of emollients to treat DS&E was associated with...."
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
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No

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I am able to assess the statistics

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