Peer Review File

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Reviewer #1:

Your paper needs considerable amount of work, as you assumed both TCS and OCS to be recommended treatments for Atopic Dermatitis. Please review recent data on Atopic dermatitis guidelines, as OCS are NOT first line systemic recommended to the treatment of AD, as it's associated with rapid relapse and rebound (worse than before). Recent data has shown that even in short term use of 10 days, OCS can cause serious effects such as osteopenia, osteoporosis, glaucoma, and other effects.

Suggested references:

1. Drucker AM, Eyerich K, de Bruin-Weller MS, Thyssen JP, Spuls PI, Irvine AD, et al. Use of systemic corticosteroids for atopic dermatitis: International Eczema Council consensus statement. Br J Dermatol 2018; 178: 768–775.

2. Boguniewicz M, Fonacier L, Guttman-Yassky E, Ong PY, Silverberg J, Farrar JR. Atopic dermatitis yardstick: Practical recommendations for an evolving therapeutic landscape. Ann Allergy Asthma Immunol. 2018 Jan;120(1):10-22.e2. doi: 10.1016/j.anai.2017.10.039. PMID: 29273118.

3. Wang Q, Liu L, Gao S, Su S. Guidelines for the Management of Atopic Dermatitis in Children: A Systematic Review. Int Arch Allergy Immunol. 2023;184(2):132-141. doi: 10.1159/000527007. Epub 2022 Nov 2. PMID: 36323240.

We thank the reviewer for this valuable comment. Based on current guidelines, Sidbury et al. (Sidbury R, Davis DM, Cohen DE et al: American Academy of Dermatology. Guidelines of care for the management of atopic dermatitis: section 3. Management and treatment with phototherapy and systemic agents. J Am Acad Dermatol. 2014 Aug;71(2):327-49. doi: 10.1016/j.jaad.2014.03.030) wrote:

"Systemic steroids are discouraged for continuous or chronic intermittent use in AD but may be considered for acute usage as a transitional therapy in severe, rapidly progressive, or debilitating cases in adults or children, while non-steroid immunomodulatory agents or phototherapy is being initiated."

Similarly, in their study Boguniewicz et al. (Boguniewicz M, Fonacier L, Guttman-Yassky E, Ong PY, Silverberg J, Farrar JR. Atopic dermatitis yardstick: Practical recommendations for an evolving therapeutic landscape. Ann Allergy Asthma Immunol. 2018 Jan;120(1):10-22.e2. doi: 10.1016/j.anai.2017.10.039. PMID: 29273118.) wrote:

"Systemic steroids may be used with caution only for short courses in patients with self-limited, severe exacerbations while maximizing topical therapy or as a bridge to another nonsteroid systemic therapy."

Though they may not be recommended, their use for atopic dermatitis remains widespread (Drucker AM, Eyerich K, de Bruin-Weller MS, Thyssen JP, Spuls PI, Irvine AD, et al. Use of systemic corticosteroids for atopic dermatitis: International Eczema Council consensus statement. Br J Dermatol 2018; 178: 768–775.). Our manuscript

aimed to evaluate their use by pediatricians and understand which factors influenced their prescription. However, we agree that our message might have been confusing and might not have reflected what guidelines were recommending. We changed the manuscript accordingly and added relevant references:
"Though no longer recommended by guidelines, oral corticosteroids (OCS) are still commonly used for management of moderate to severe cases" (Introduction, page 4, lines 79-80)
"As guidelines no longer recommend OCS use except in special cases, it is unsurprising that such a high number was found. However, recent literature has shown that OCS are still widely used in clinical practice with a significant number of dermatologists using this therapy as first-line for severe cases. As these cases are mostly referred to dermatologists for a more precise management, it may be that the initial lack of proper adherence to guidelines regarding flare management worsened the condition and drives dermatologists to ultimately prescribe OCS." (Discussion, page 13, lines 278-285)

I think you should split your data on TCS findings (Ok to improve knowledge on how to use them, but also on the other potential topical and systemic new treatments), and OCS (happy that more than 80% are not comfortable using them as they should NOT be used).
We thank the reviewer for bringing this important point to our attention. We agree with the reviewer regarding the importance of improving knowledge on TCS use along with newer treatments which would be an interesting subject for future research. Additionally, we agree with the reviewer regarding the caution behind OCS and further outlined this issue in the revised manuscript.
"As guidelines no longer recommend OCS use except in special cases, it is unsurprising that such a high number was found. However, recent literature has shown that OCS are still widely used in clinical practice with a significant number of dermatologists using this therapy as first line for severe cases. As these cases are mostly referred to dermatologists for a more precise management, it may be that the initial lack of proper adherence to guidelines regarding flare management worsened the condition and drives dermatologists to ultimately prescribe OCS." (Discussion, page 13, lines 278-285)

Suggest you see the following recent paper to base yours:
Hamideh N, Venkatesh P, Zhao S, Ariza AJ, Bolanos L, Necheles J, Fishbein AB. Perceptions on Management of Atopic Dermatitis in Children Under 2 Years by Community Pediatricians: A Focus Group Study. Clin Pediatr (Phila). 2023 Feb 16:99228231154132. doi: 10.1177/00099228231154132.
We added this valuable reference and thank the reviewer for this suggestion (Discussion, Page 11, Line 243, Reference #29)

Reviewer #2:

Interesting work about corticophobia: a real problem in the management of mild to moderate AD. The lack of adequate training in dermatology during the pediatric residency can be addressed with a multidisciplinary approach.
Here some comments:
- PAGE 3 LINE 79: please add "In most cases, cutaneous manifestations precede the onset of type 2-driven diseases. Based on the development of t2 pathologies in atopic march, in general, dermatologists and pediatricians represent the sentinels for the early identification of patients with AD" and cite Russo F, Santi F, Cioppa V, Orsini C, Lazzeri L, Cartocci A, Rubegni P. Meeting the Needs of Patients With Atopic Dermatitis: A Multidisciplinary Approach. Dermatitis. 2022 Nov-Dec 01;33(6S):S141-S143. doi: 10.1097/DER.0000000000000907."
We thank the reviewer for this valuable suggestion and added this message to the introduction of our manuscript along with the suggested reference.
"In most cases, cutaneous manifestations precede the onset of type 2 (t2)-driven diseases. Based on the development of t2 pathologies in atopic march, in general, dermatologists and pediatricians represent the sentinels for the early identification and treatment of patients with AD." (Introduction, page 5, lines 83-86).

- PAGE 3 LINE 92: please add "Also social media may contribute to steroid phobia: much of this content consists of patients describing negative personal experiences with TCS and subsequently discouraging viewer use" and cite "Nickles MA, Coale AT, Henderson WJA, Brown KE, Morrell DS, Nieman EL. Steroid phobia on social media platforms. Pediatr Dermatol. 2023 May-Jun;40(3):479-482."
We again thank the reviewer for this revision, we also added these lines and the reference to the introduction of our manuscript.
"Social media may contribute to steroid phobia: much of this content consists of patients describing negative personal experiences with TCS and subsequently discouraging viewer use." (Introduction, page 5, lines 95-97).

- Please add in the conclusion the importance of therapeutic patients education in the management of flare and for long- term strategies
Thank you, we added a sentence in the conclusion regarding this issue.
"This may in turn help improve patient's education regarding these therapies which would benefit the management of flares and help mitigate the growing corticophobia seen in the population." (Discussion, page 15, lines 339-341).

- It is also necessary to talk about the importance of a proactive therapy after reactive therapy with steroid sparing
We thank the reviewer for this comment, and we included a phrase about this important point in the introduction:
"Current treatments include proactive maintenance therapy during remission phases, liberal use of emollients and daily bathing with soap-free cleansers and topical corticosteroids (TCS) during flares. Systemic immunosuppressive treatments such as cyclosporine or azathioprine may also be used, especially in s resistant cases. Though

no longer recommended by guidelines, oral corticosteroids (OCS) are still commonly used for management of moderate to severe cases." (Introduction, page 4, lines 72-80).

Reviewer #3:

Nicolas Andre et al. in their paper titled: "Is Corticophobia Spreading Among Pediatricians? Insights from a Self-Efficacy Survey on the Management of Pediatric Atopic Dermatitis" are trying to establish evidence on corticophobia observed among Israeli pediatricians treating patients with atopic dermatitis (AD). Klassen and Klassen (Klassen RM, Klassen JRL. Self-efficacy beliefs of medical students: a critical review. Perspect Med Educ. 2018 Apr;7(2):76-82. doi: 10.1007/s40037-018-0411-3) wrote in their paper that: "Bandura's social cognitive theory suggests that self-efficacy—defined as the confidence to carry out the courses of action necessary to accomplish desired goals—plays an important role in influencing achievement outcomes through its dynamic interplay with environmental and behavioral determinants. In their review they evaluated three aspects of the measures labelled as 'self-efficacy':

a) Is the measure future oriented (not an evaluation of past performance or current skill level)?

b) Does the measure focus on beliefs about capability to carry out the courses of action necessary for success (and not outcome expectations or intentions to act)?

c) Does the measure focus on a particular domain (i.e., not general self-confidence)? This is not as Andre et al define it – they rather measure the level of confidence of prescribing steroids to patients with AD.

We thank the reviewer for his thorough review of our manuscript. In response to the above comments, the reviewer is referring to:

"Self-efficacy—defined as the confidence to carry out the courses of action necessary to accomplish desired goals" Our interpretation of this sentence is, do physicians feel confident enough to prescribe steroids as a treatment despite the known possible side effect. Their desired goal is their patient healing.

"Plays an important role in influencing achievement outcomes through its dynamic interplay with environmental and behavioral determinants" We believe that when a physician needs to prescribe a treatment, he is influenced not only by the professional guidelines but also by his own beliefs, by his colleagues' opinion and by media exposure.

For clarity purposes, we added the following phrase in our manuscript:

"Self-efficacy refers to the assurance in one's ability to execute the necessary steps towards achieving a desired goal. It significantly influences the achievement outcomes by interacting with environmental and behavioral factors in a dynamic manner." (Introduction, Pages 5-6, Lines 104-106)

a) In his paper "*Self-Efficacy: Toward a Unifying Theory of Behavioral Change*", see reference below, Bandura explains that individuals can generate current behavior by stating future outcomes. We believe all physicians see their patients' recovery as a future outcome. Moreover, in another paper by Bandura, "*On the Functional Properties of Perceived Self-Efficacy Revisited*", Bandura explains the importance of past experiences in determining one's self-efficacy. Hence, we sought to evaluate current self-efficacy, which is by nature past performance-based, toward a future patient recovery task.

b) In his paper, "*Self-Efficacy: Toward a Unifying Theory of Behavioral Change*," Bandura also explains that an efficacy expectation is the conviction that one can successfully execute the behavior required to produce a desired outcome. Thus, we believe our study is measuring the efficacy expectations of physicians regarding the ability to treat their patients (action) in a way that will lead to their recovery, which is a desired outcome. As a result, we added in our manuscript the following phrase:

"Our study estimates the self-efficacy of pediatricians regarding the action of prescribing steroids specifically for AD, in order to achieve the desired goal, referred by Bandura as the future outcome, of patient healing." (Introduction, page 6, Lines 111-113).

c) Our study is focused on physicians' self-efficacy toward prescribing steroids in a particular context of Atopic Dermatitis treatment. Hence, we consider our questionnaire domain specific.

On the other hand, "corticosteroid phobia" or "corticophobia": "describes exaggerated concerns, fears, worries, anxiety, doubts, reservations, reluctance or skepticism regarding corticosteroid use in patients, their caregivers, or health care professionals" (Heymann, W.R. Countering Corticophobia. 2017. Available online: https://www.aad.org/dw/dw-insights-and-inquiries/pediatric-dermatology/countering-corticophobia (accessed on 18 June 2023). This is again not what the authors measured in their study. They simply asked three questions on confidence of using topical and oral steroids and whether the doctors were avoiding the treatment because of the side effects.

We thank the reviewer for his comment. We agree with the reviewer 's definition of corticophobia of caregivers and healthcare professionals who are having doubts and are anxious regarding prescribing steroids. We have assumed that at least part of the hesitancy concerns the possible adverse effects. We specified this assumption in our manuscript:

"In this way, we assumed that at least part of the possible hesitancy related to CS use concerned the possible adverse effects." (Results, page 10, Lines 215-216)

There is no description what was meant by e.g., "average" – this was individual opinion of the responders.
According to the Likert scale used, our average was a numerical value (Results, page 9, Line 179). We were aiming for simplification of the questionnaire, which has led to a larger population and better compliance at the expenses of the questionnaire's validity.

Looking at lines 108-109 of the manuscript: "No studies have, to the best of our knowledge, investigated pediatricians' self confidence in using CS in the management of AD", this statement is not true - there is at least one study not only looking into it, but also using a validated score for the assessment of corticophobia. TOPICOP which was not used in the study (Lambrechts L, Gilissen L, Morren MA. Topical Corticosteroid Phobia Among Healthcare Professionals Using the TOPICOP Score. Acta Derm Venereol. 2019 Oct 1;99(11):1004-1008. doi: 10.2340/00015555-3220).

We thank the reviewer for the important comment regarding the existence of a validated questionnaire. We have added this reference to our manuscript and adjusted the manuscript accordingly.
"Expanding on recent data published on corticophobia in pediatricians, we investigated pediatricians' self-confidence in using CS specifically in the management of AD." (Page 6, Lines 114-116)

The next problem with the study is that in European as well as American guidelines on atopic dermatitis treatment usage of oral steroids is strongly discouraged. In European guidelines is practically prohibited and in American guidelines is to be avoided (Wollenberg A, Kinberger M, Arents B, et al. European guideline (EuroGuiDerm) on atopic eczema: part I - systemic therapy. J Eur Acad Dermatol Venereol. 2022;36(9):1409-1431. doi:10.1111/jdv.18345, Sidbury R, Davis DM, Cohen DE et al: American Academy of Dermatology. Guidelines of care for the management of atopic dermatitis: section 3. Management and treatment with phototherapy and systemic agents. J Am Acad Dermatol. 2014 Aug;71(2):327-49. doi: 10.1016/j.jaad.2014.03.030), therefore doctors not using oral steroids maybe following the guidelines and should be praised for that.

Based on current guidelines, Sidbury et al. wrote
"Systemic steroids are discouraged for continuous or chronic intermittent use in AD but may be considered for acute usage as a transitional therapy in severe, rapidly progressive, or debilitating cases in adults or children, while non-steroid immunomodulatory agents or phototherapy is being initiated."
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"Systemic steroids may be used with caution only for short courses in patients with self-limited, severe exacerbations while maximizing topical therapy or as a bridge to another nonsteroid systemic therapy."
Though they may not be recommended, the use of systemic corticosteroids for atopic dermatitis remains widespread (Drucker AM, Eyerich K, de Bruin-Weller MS, Thyssen JP, Spuls PI, Irvine AD, et al. Use of systemic corticosteroids for atopic dermatitis: International Eczema Council consensus statement. Br J Dermatol 2018; 178: 768–775.). Our manuscript aimed to evaluate their use in pediatricians and understand which factors influenced their prescription. However, we agree that our message might have been confusing and might have not reflected what guidelines are recommending. We changed the manuscript accordingly:
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Looking into the doctors' gender, religious beliefs or marital status is suggesting differences in treating patients because of any of those facts. This needs to be addressed extremely cautiously.
We thank the reviewer for this important comment. As only gender was eventually significant, describing this result and considering relevant literature seemed meaningful to our study.

Majority of the references are old, and they do not include current guidelines on AD treatment.
We have updated the reference list and thank the reviewer for this comment.

The manuscript will benefit from English improvement.
Thank you for this remark. the manuscript was edited for language improvement.

Reviewer #4:

The work is very well described in all details. The topic is correctly introduced, methods well characterized and the results are clearly presented. I think this is an important topic and the authors made an interesting paper, that should be offered to the scientific community.
We warmly thank the reviewer for his insight. We humbly appreciate his review.