Information to be used in conjunction with the childhood eczema Q and A event recording March 2021.

March 2021 Centre of Evidence Based Dermatology, University of Nottingham.

This document contains the following information:

- Link to the Q and A recording plus a list of questions and topics covered in the Q and A session.
- Useful links.
- Answers to missed/extra information to questions.
- A record of the questions asked in the chat.

Link to recording plus a list of questions and topics covered in the Q and A session.

Link to recording: https://mediaspace.nottingham.ac.uk/media/1_oif1lj2n

07:10 How to tell whether the skin condition is eczema

- How to identify eczema - brief introductory talk with pictures. Dr. Jane Ravenscroft, Consultant Paediatric Dermatologist.
- How long is eczema likely to last?
- Diagnosing eczema - skin of colour.
- Appearance of eczema in babies.
- Is psoriasis always symmetrical?
- Can eczema get worse during puberty?
- What signs can a pharmacist look out for to know whether a patient needs extra help?

21:15 Use of treatments for eczema

- Outline of the principles behind eczema treatment. Professor Hywel Williams, Professor of Dermato-Epidemiology.
- How to choose an emollient.
- How long can patients use topical corticosteroids for and how long do they take to work?
- What are the treatment options for severe eczema e.g., scaring and lichenification?
- What can you do to prevent staining with emollients?
- Can hydrocortisone be used on the face for very long periods?
- Which should be used first topical steroids or moisturizers?
- How do you explain the risk and benefits of topical steroids? Do they affect growth?
- What can be done about eczema around the eyes?
- Should topical corticosteroids be used on the face?
- Side effects of topical steroids.

44:00 Lifestyle factors – allergy and potential causes of eczema

- What are the causes of eczema? Mrs. Sandra Lawton, Dermatology Nurse Consultant.
- Cow's milk allergy and eczema.
- What advice can you give about eczema which occurs due to handwashing to prevent COVID transmission?
- Can Dermol 500 be used as a hand sanitiser?
- Is eczema becoming more common or are we getting better at diagnosing it?

Support groups

Nottingham Support Group for Carers of Children with Eczema

http://www.nottinghameczema.org.uk/

This website includes lots of information including patient information leaflets and a wide range of topics in different formats (e.g. audio). Please see:

- Get control, keep control (infographic)

  http://www.nottinghameczema.org.uk/documents/eczemaposter2020.pdf

- Treating eczema - what do I do when?

  http://www.nottinghameczema.org.uk/documents/what-to-do-about-eczema-headedapr19v2.pdf

- Patient information leaflets

  http://www.nottinghameczema.org.uk/information/index.aspx

- Eczema and COVID questions and answers

http://www.nottinghameczema.org.uk/information/covid-19-questions-answers.aspx

Twitter: @eczemasupport

Eczema Outreach Support

We support and connect families with eczema across the UK

Website: www.eos.org.uk

Email: info@eos.org.uk (leaflets sent out on request)

Find us on Facebook, twitter and Instagram

National Eczema Society

National Eczema Society is the UK charity for everyone affected by eczema. We are committed to making life easier for the 1 in 5 children and 1 in 12 adults who suffer from eczema.

https://eczema.org/

Key NICE guidelines

- Atopic eczema in the under 12s

https://www.nice.org.uk/guidance/cg57

- Secondary bacterial infection of eczema

https://www.nice.org.uk/guidance/ng190/resources/visual-summary-pdf-9018190045

Knowledge mobilisation in eczema

- 5 key messages to improve self-management and consultation experiences

https://www.bcu.ac.uk/health-sciences/research/centre-for-social-care-health-and-related-research/research-projects/eczema-mindlines

Information on Topical Steroids

- Clinical Knowledge Summaries- topical corticosteroids

https://cks.nice.org.uk/topics/eczema-atopic/prescribing-information/topical-corticosteroids/

- Cochrane review of topical steroid strategies (protocol only, full review to be published this year)

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013356/full

- Summary of Product Characteristics

All UK licensed products are very useful for identifying what ingredients are within a product, its potency classification and what side effects/special precautions for use. This is immediately available to pharmacists online and a useful resource.

https://www.medicines.org.uk/emc

Information on Emollients

- Clinical Knowledge Summaries – prescribing information for emollients

https://cks.nice.org.uk/topics/eczema-atopic/prescribing-information/emollients/

- Cochrane review of moisturizers

https://uk.cochrane.org/news/featured-review-moisturizer-eczema

- INCI label

The INCI label should detail all ingredients within the product in line with European Cosmetic Directive. Some websites have been created to contain this information e.g.

https://incidecoder.com/

- Best Emollient for Eczema (BEE) study website

http://www.bristol.ac.uk/primaryhealthcare/researchthemes/bee-study/

- Results of Bathe study of emollient bath additives

https://www.bmj.com/content/361/bmj.k1332

- British Association of Dermatologists statement on Bath Emollients

https://www.bad.org.uk/shared/get-file.ashx?itemtype=document&id=4163

- Papers on emollients

Oakley R, Arents BWM, Lawton S, Danby S, Surber C. Topical corticosteroid vehicle composition and implications for clinical practice (paper available from the author 06oakleyr@googlemail.com). https://pubmed.ncbi.nlm.nih.gov/33108015/

This paper focuses on the significance of topical vehicles used to carry corticosteroids, it is applicable to using emollients/moisturisers in practice as "topical vehicle" is another way to describe an emollient/moisturiser. The confusion around naming these topical products is addressed in the paper, alongside how topical vehicles may affect skin status and drug bioavailability.

Key papers referenced in the Q and A session

- Is eczema really on the increase worldwide? Paper written by Hywel which is referred to in the presentation

https://www.sciencedirect.com/science/article/pii/S0091674907022129?via%3Dihub

Answers to missed/extra information to questions

Regarding how to choose emollients:
As the Van Zuuren et al 2017 systematic review concluded, there doesn't appear to be any clinically significant difference between emollients used in clinical trials in terms of efficacy. The Best Emollients in Eczema (BEE) study has investigated if there is a difference between commonly prescribed emollients which should help us understand if there are differences in products used in practice, results of which will be published soon. On this basis, cosmetic acceptability is the main concern as we want the patient to remain adherent to their emollient. As described in the presentation, please refer to Surber et al (see below), which includes a nice figure that can help pharmacists select equivalent emollient formats e.g. lotion, cream, based on viscosity, polarity and surface area to be treated.

Surber, C. Kottner J. Skin Care Products: What do they promise, what do they deliver? Journal of Tissue Viability. 2016.

See (PDF) Skin Care Products: What do they promise, what do they deliver (researchgate.net).

In current climate pharmacies often experience medicines shortages and that often affects also emollients /bath additives. What is the advice the pharmacists can give in order to replace one or the other effectively. Would cream applied on wet skin work as bath additive?
In terms of bath additives, mechanistically they do not have any detergent activity and are there to provide a moisturising substance to the skin whilst bathing. Therefore, a leave on emollient would be suitable to apply during bathing and after bathing once dried to fulfil a similar role. Please note, that the BATHE study 2018 concluded that there was no significant difference observed between using bath additives in comparison to standard practice of soap avoidance and leave-on emollients.

Emollients containing the same oil phase and emulsifying systems in similar percentages are most likely to have similar aesthetics to the emollient in shortage. These ingredients are likely to be among the first 3-5 ingredients on the ingredient list of the emollient and can be recognised from a quick internet search, summary of product characteristics, INCI label Cosmetic Product Ingredient Labelling (ctpa.org.uk) or consulting the Martindale.

Which should be applied first steroid or emollient? Should emollients be applied at the same time as topical corticosteroids? (additional information to question asked in the chat)
Some recommendations have been made by NICE and the BDNG (British Dermatology Nursing Group), but we currently do not have any evidence about how order of application can affect efficacy/side effects. We know that generally using emollients alongside pharmaceutically active topical products increases efficacy. This is likely to be due to the emollient increasing skin permeability (so the active can penetrate better) and due to the flare prevention effects incurred by the moisturiser. From a pharmaceutics perspective, I would suggest to avoid/discourage mixing the pharmaceutically active topical products and an emollient together, as this can affect drug delivery. Regardless of the order of application, it is important to keep it consistent and ensure that the patient has regular reviews with their medical team in case of side-effects or issues with efficacy. Please see the publication by Oakley et al (paper available from the author 06oakleyr@googlemail.com) for further information and references.

Would you apply insect repellent on first and then sun cream as well as those who suffer with sensitive skin? What would the procedure be?
Hypothetically, I'd advise applying sunscreen first so that when metamorphosis of the vehicle occurs (see paper by Oakley et al (paper available from the author 06oakleyr@googlemail.com)), a film protecting the skin is present. Insect repellent may sit on top of this film or it may disrupt it if applied second. I feel this disruption may be greater if the insect repellent is applied first, you also may also increase penetration/permeation of irritant substances in the repellent into the skin if sunscreen is applied over insect repellent.

When children get mild/ moderate eczema, would it be best to mix the steroid in with the emollient and then cover with cling film to get maximum moisture locked into the skin?

We never advise mixing topical steroids with emollients – some emollients may inactivate the steroid, and dilution does not necessarily reduce potency e.g. there is no good evidence that Betnovate 1:4 is actually less potent that full strength Betnovate even though it sounds weaker. Applying large quantities of diluted topical steroid might also result in overuse on areas that don't need treatment. Cling film will certainly enhance penetration of topical corticosteroid through the skin and hence efficacy, but it also greatly increases the risk of side effects such as skin thinning and absorption into the bloodstream. We sometimes use cling film occlusion for small very thick areas of eczema e.g. on the palms, but would generally advise strongly against recommending use of cling film in the community unless under specialist instructions.

What is the logic behind the use* of *protopic and TCS?

Protopic (topical tacrolimus which comes in a weaker 0.03% strength and stronger 0.1%) is a different class of drug called calcineurin inhibitors. Along with pimecrolimus, they are not as effective as topical corticosteroids in general, but can be used for "sensitive" sites such as the centre of the face as they do not cause skin thinning. The logic of using Protopic and topical steroids together is twofold (i) in someone with persistent widespread disease, topical steroids are often used intermittently on the body and topical tacrolimus is used daily on the face to keep the eczema down. The other scenario is for more severe cases, whose eczema cannot be controlled with emollients and weekend topical steroids, it to use the topical steroids on a Saturday and Sunday and to use the topical Protopic Monday to Friday. But this is really the sort of approach that only specialists should be advising on.

How do I explain eczema to parents?

Look at the Nottingham Support Group of Carers of Children with Eczema to get some ideas. Here is our starter leaflet that gives parents a good introduction.

Some TCS such as hydrocortisone is licensed for 7 day use OTC can we recommend use for 2 weeks?

To do so is an unlicensed activity, in which you as an individual would take on all responsibility for the outcome. This practice is outside the scope of OTC sales, perhaps you could have a conversation with your local GP practice as they may be happy for some of their patients to use hydrocortisone differently? If 1% hydrocortisone for 1 week does nothing, maybe they to step up in potency – again reason to discuss with GP.

Could you confirm if the fingertip measure for steroid application is correct?

Yes – it is a pretty good guide for estimating appropriate quantities.

Answers to questions in the chat

Q: Is there any reason not to use tcs on infected eczema?
A: Topical steroids can be used and need to be used on infected eczema.

Q: What is "early" on set?
A: Early onset = in first few months

Q: Can eczema lead to other conditions/diseases? Eg. arthritis or cancer etc?
A: Not arthritis (like psoriasis) or cancer.

Q: What are the treatment options for scarring/lichenification in severe eczema
A: It depends on info from the history. Allergic contact dermatitis is suggested by history of things in contact with the skin causing a flare in that area. Patch tests are for things in contact with the skin not ingested or airborne things which can flare eczema in an immediate way. ACD is commoner as you get older but can occur in childhood. Thankfully eczema isn't a condition which causes scarring, though it can cause pigmentary changes. Lichenification is active eczema which requires intensive treatment with TCS or other active treatments

Q: How prevalent is topical steroid withdrawal and is it a major cause for concern?
A: The National eczema society and British Association of Dermatologists have just produced an information leaflet on TCS withdrawal. It is probably a number of different things going on. It is rare. Underuse of steroids is a bigger problem.

Q: What about acceptability of emollients with autism or asd?
A: For autism, I feel it is important to try many different formats e.g. lotion, cream and a variety of different ingredient compositions to see what suits best. The emulsifier and oil phase generally relate to skin feel. The 50g containers or drug rep samples are very useful for experimenting.

Q: How's the evidence for omega 3 oils in eczema?
A: In regards to omega 3 oils, there is no evidence I am aware of. Some evidence suggests that some oils such as sunflower can damage the skin, but the evidence is limited. Evidence of an ingredient vs a product is very different.

Q: What recommendations do you have regarding antihistamines? Should this be recommended at every instance when to ease itching as in daily, or to be used sparingly?
A: Antihistamines not effective - the itch of eczema is not caused by histamine (unless it is eczema around the eyes with hay fever). See the Cochrane review on antihistamines.

Q: In my CCG TCIs are secondary care initiation only.
A: Yes - in some areas CCG have to be initiated by a dermatologist. It may be time to challenge this now they have been around a few years without concerns

Q: Which item normally put first on the skin? ie steroid or emollient Do they have to use at same time or better to use at separate time?
A: Concomitant application, we don't know about the order. Generally using emollients and actives increases efficacy as the emollient will increase skin permeability. I would suggest to avoid mixing predominately as that is where you get solubility issues. A paper will be provided on this,

Q: What is needed to stop the itch in Eczema?
A: Control the eczema and the itch will generally disappear. Sometimes itching becomes a habit or stress response- that can be helped by psychological approach eg habit reversal, but more research is needed

Q: How common is dyshidroic eczema?
A: Dyshidrotic (or pompholyx) eczema is less common that flexural eczema, but we certainly see it in adults and some children. It can occur in atopic eczema or on its own. It can be difficult to treat and we don't understand fully what causes it.