Online misinformation around acne vulgaris: a qualitative review

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Acne vulgaris is a multifactorial disorder of the pilosebaceous unit which can have an often significant psychosocial impact on patients. With a peak incidence during adolescence, patients often seek advice online, leaving them particularly vulnerable to misinformation. The aim of our study was to assess misinformation around acne available online. We conducted a literature research search on PubMed using the terms ‘acne’ AND ‘misinformation’ OR ‘disinformation’ OR ‘conspiracy theory’. This search identified 1024 abstracts, which were reviewed for suitability, five of which were deemed appropriate for inclusion with content specific to online acne-related misinformation. We also conducted a Google search using combinations of the terms ‘acne’ and ‘misinformation’, ‘disinformation’ and ‘conspiracy theories’. Further targeted searches were performed on Facebook and Instagram. These searches were carried out in September and October 2021. From these searches, we identified key themes in acne-related misinformation, which included diet and other ‘causes’ of acne, nonconventional acne ‘cures’ and a distrust of conventional acne treatments. Supposed causes of acne included fluoridated water, multiple food types such as dairy and ‘greasy’ foods, poor hygiene and infections. Multiple ‘miracle cures’ for acne were identified, with branded creams, nutritional supplements and meat-free diets, often claiming to treat severe acne, refractory to conventional treatments. Conventional acne treatments also feature heavily online, most often in the form of antibiotics and oral isotretinoin. Frequently, these have negative connotations, in particular the controversial relationship between isotretinoin treatment and depression with isotretinoin being referred to as a ‘extreme’, ‘a last resort’ and ‘radical’ treatment. There is a large amount of misinformation around acne available online. The significant psychosocial impact that acne can have on teenagers, who may spend considerable amounts of time online, leaves them particularly vulnerable to this information. It is important that paediatric dermatologists are aware of the available misinformation and be able to refute inaccurate health information.

PA28
Two cases of linear ecchymosis in children: another dermatosis related to COVID-19?
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Cotter et al. (Cotter C, Howard E, Williamson E, Tewari A. Relapsing-remitting linear ecchymosis. Clin Exp Dermatol 2021; 46: 931–2) described three cases of relapsing-remitting linear ecchymosis possibly related to COVID-19 or its psychological impact. We report two similar cases seen in the last year. Case 1 was a 9-year-old male and case 2 was a 17-year-old female, both with ongoing episodes of painful linear ecchymoses (< 10 flare-ups). Case 1 had weekly episodes since May 2021 and case 2 had episodes every couple of months since August 2020. The ecchymosis affected the limbs in case 1, and the limbs and face in case 2, appearing over several hours and gradually resolving over 2 weeks, and not reoccurring in the same patches of skin. Neither patient could recall having symptoms of COVID-19. Neither had major comorbidities or a history of trauma. Case 2 had post-traumatic stress disorder related to bullying. The differential diagnoses in both cases included haematological disorder, dermatitis artefacta, non-accidental injury or vasculitis. Blood tests, including platelet count, coagulation and vasculitis screens were unremarkable. Case 1 had a raised antistreptolysin O titre after one episode. Both cases had skin biopsies with perilesional direct immunofluorescence (IMF). Case 1’s skin biopsy from the rash showed mild focal red blood cell extravasation in the dermis but no other features of vascular damage. On IMF, IgA showed Civatte bodies and IgM showed nonspecific granular basement membrane zone positivity. Case 2 had two skin biopsies, one did not show vasculitis, but the second showed possible leucocytoclastic vasculitis with a mild perivascular, inflammatory infiltrate of lymphocytes, neutrophils and occasional eosinophils. IMF detected IgM positivity in vessel walls and C3 linear basement membrane zone positivity in the first biopsy, and was negative in the second. Similarly, all biopsies showed red blood cell extravasation. COVID-19 polymerase chain reaction (PCR) testing was negative in both cases, similarly to the cases of Cotter et al., and most cases of COVID toes. SARS-CoV-2 (anti-N) IgG testing, which can confirm a past COVID infection irrespective of vaccination status, was positive in case 1 but negative in case 2. In summary, we wonder whether other departments have seen a rise in similar cases during the pandemic? The aetiology remains unclear in these cases, but we suggest COVID-19 PCR and SARS-CoV-2 (anti-N) IgG testing in these cases, as it would be useful to
see whether or not this phenomenon is associated with COVID-19 in a larger number of patients.

PA29
Safety outcomes when using topical corticosteroids on admission in eczema herpeticum: a single-centre retrospective cohort
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Topical corticosteroids (TCS) are not included in eczema herpeticum treatment guidelines (https://www.nice.org.uk/guidance/cg57). Historically, a concern was that TCS could facilitate dissemination of herpes simplex virus (HSV) through immunosuppressive effects, resulting in more serious disease. However, more recent evidence suggests that TCS do not precipitate eczema herpeticum nor prolong inpatient stays (Aronson PL, Shah SS, Mohamad Z, Yan AC. Topical corticosteroids and hospital length of stay in children with eczema herpeticum. Pediatr Dermatol 2013; 30: 215–21). We aimed to assess safety outcomes in a centre where TCS is routinely used for eczema herpeticum. We retrospectively reviewed dermatology inpatient admissions at a single centre from 2016 (start of electronic notes) to 2021. We included cases admitted with a clinical diagnosis of eczema herpeticum confirmed with a positive HSV DNA polymerase chain reaction (PCR) swab. We identified 39 cases of eczema herpeticum with a positive PCR swab [n = 37 (95%) HSV1; n = 2 (5%) HSV2]. Most patients were aged < 18 years (n = 31; 79%), with an age range of 4 months to 38 years and of Bangladeshi descent (n = 23; 59%). On admission, eczema severity was scored as mild (n = 14; 36%), moderate (n = 7; 18%) or severe (n = 17; 44%). TCS was given within 24 h of admission in 36 patients (92%), all of whom received systemic aciclovir. The median length of stay was 72 h (3 days). In patients treated with TCS, there were 0/36 mortalities, 0/36 intensive treatment unit admissions and 0/36 long-term sequelae. One patient developed a facial nerve palsy, but this resolved within a month of discharge. We demonstrated that the use of TCS was safe in a cohort of 36 patients with PCR-confirmed eczema herpeticum when used in conjunction with aciclovir, with relatively short admission times and no long-term sequelae. Safety concerns have previously been a barrier to use, but we add to the evidence base supporting the use of TCS in eczema herpeticum. TCS can reduce symptoms of itch in eczema and thus reduce a major source of morbidity for patients. Limitations of our study are the retrospective, single-centre nature; the relatively small sample size; and the absence of a comparator arm omitting TCS. Strengths are that eczema herpeticum cases were PCR-confirmed, excluding eczema coxsackium, and we report safety in cases sufficiently severe to require admission.

PA30
Localized facial hypopigmented mycosis fungoides in younger children of skin type VI presenting as multiple coalescing macules
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We present two paediatric cases of hypopigmented mycosis fungoides (MF) with predominant involvement of the face and suggest that perhaps this is an evolving entity with certain canal variants affecting predominantly the face. The first case was a 4-year-old boy referred to paediatric dermatology due to a 2-year history of increasing hypopigmentation affecting the face and, to a lesser degree, the arms. There was a history of atopic dermatitis and initially the differentials included pityriasis alba and, later, pityriasis versicolor. However, the rash progressed despite courses of multiple topical immunosuppressants and antifungals. On examination, there were widespread, hypopigmented macules, coalescing in places on the face with no associated scale. There were several scaly hypopigmented macules on the arms. Given the poor response to topical therapy and difficulty with phototherapy at this age, a skin biopsy was taken from the left arm. This showed moderate perivascular lymphocytic infiltrate and immunohistochemistry was positive for CD2, CD3, CD5 and CD8 cells, and sparse CD4 cells. CD7 was significantly reduced. Given the diagnosis, the child was treated with 16 sessions of TL01 with full resolution of hypopigmentation. The second case was a 10-year-old girl with a 1-year history of white patches on her cheeks, chin and upper chest. She had no history of inflammatory skin problems. The patches were increasing in number and causing cosmetic concern. A trial of adapalene 1% did not alter the rash and neither did a short course of topical moderately potent steroids. On examination there were hypopigmented macules 3–4 mm in size over the cheeks and chin without overlying scale. She had a similar patchy band of hypopigmentation on the right chest. So far, treatment with tacrolimus 0-1% daily for 3 months has produced significantly favourable repigmentation of the facial rash. She has declined a skin biopsy at present. Typical features of hypopigmented MF include an earlier age of presentation (4–20 years, mean age 13) and a predilection for the trunk, buttocks and extremities, and occasionally involving the face (Castano E, Glick S, Wolgast L et al. Hypopigmented mycosis fungoides in childhood and adolescence: a long term retrospective study. J Cutan Pathol 2013; 40: 924–34). We report two children (aged 5 and 10 years, respectively) who have presented with more localized facial MF. This could be a forme-fruste of hypopigmented MF; however, we suggest that perhaps a more localized form of hypopigmented MF may occur in our younger cohort of children, clinically presenting as multiple hypopigmenting facial macules, which responds to therapy.