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Trends in preservative allergy in Cork, Ireland

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Several epidemics of preservative contact allergy have emerged, namely formaldehyde in the 1960s, MCI/MI in the 1980s, methyldibromo glutaronitrile in the 1990s, and the recent epidemic of MI following European Union (EU) approval in 2005 allowing MI to be used in stronger concentrations in leave-on and rinse-off cosmetic products. The aim of our study was to evaluate the trends in preservative allergy in our dermatology unit in Cork. Over a nineteen-year period (1997 to 2015) we analyzed the patch test results of 2,636 patients who were investigated for a contact allergy. The reports were reviewed via access to an online patch test database. Over this time period the incidence of allergy to paragons, formaldehyde and formaldehyde releasers have fallen. Isothiozolinone allergy has risen sharply and these results are in keeping with European figures. In 2015 we were surprised at persistent high rates of positive patch tests to methylisothiazolinone (MI) (15.4%) given recent recommendations from the Scientific Committee for Consumer Safety (SCCS). We examined over a thousand cosmetic products in local supermarkets and pharmacies and found MI still to be present in wash off products and some wipes but also were surprised to find it in 'leave-on' products (moisturizer, sunblock). This may explain the current high rates of positive patch tests to MI in Ireland. The incidence of sodium metabisulphite allergy has also increased but this is difficult to explain. From 1997 to 2009 418 patients were patch tested to sodium metabisulphite as part of the medicament series and all had a negative result. From 2010 to 2015 776 patients were patch tested and 42 had positive results to sodium metabisulphite (5.4%). Of those 42 patients only 3 results were of confirmed relevance. This recent increase in sodium metabisulphite contact allergy is difficult to explain.

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Treponema pallidum infection with cutaneous monoclonal B cell response

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Syphilis, often referred to as the great imposter, is a venereal disease caused by the spirochete *Treponema pallidum*. Syphilis has a myriad of presentations, both clinically and histologically, and often mimics other infectious or autoimmune conditions. Subspecies of *T pallidum* are responsible for the nonvenereal infections pinta, bejel, and yaws. These are referred to as endemic treponemal diseases and occur in limited geographical and ecological niches. To date, there are no serological tests to differentiate these subspecies from each other or venereal syphilis. We report an unusual case of secondary syphilis in a 51-year-old male who presented with recurrent red nodules on the face concerning for lymphoma and an atypical lymphoplasmacellular infiltrate with a clonal population of B cells on histology. Other treponemal diseases were also considered in the differential diagnosis, as the patient was a frequent international traveler and reported no high-risk behavior. Our case of secondary syphilis emphasizes several key points to keep in mind when analyzing biopsy specimens: syphilis should always be considered when a lymphoplasmacellular infiltrate is seen on biopsy, a monoclonal B cell proliferation is not pathognomonic for lymphoma, and lastly, endemic treponemal diseases are serologically and histologically indistinguishable from venereal syphilis.

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Tretinoin 5% peeling versus 0.05% cream for advanced photoaging of the forearms: An open, randomized, evaluator-blinded and comparative study

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Background: Skin photodamage can be prevented and reversed with sun protection and treatment. Tretinoin is the mainstay therapy for photoaging. To date, tretinoin cream versus peeling were not compared regarding efficacy and tolerability.

Objectives: Compare efficacy and safety of 5% tretinoin sequenced peelings versus 0.05% cream for advanced forearm photoaging.

Methods: Twenty-four women over 60 yo, phototypes II and III, presenting advanced forearm photoaging were included. After randomization the forearm extensor surface was treated by 0.05% tretinoin cream, 3 alternate nights a week, for 8 weeks in one side and 8 biweekly 5% tretinoin peelings on other side. Moisturizer and sunscreen were used on both sides. Parameters for efficacy: 1) blinded evaluation (2 independent dermatologists) of clinical photoaging signs through before and after photographs according to Guimarães (2015) scale; 2) noninvasive instrumental measures; 3) skin biopsies at baseline and 30 days after treatments for histology and immunohistochemistry. For safety, observation of side effects.

Results: Photographic assessment of severity scores showed 30% and 26% of patients with reduction as well as 65% and 73% with no modification considering 5% tretinoin peeling versus 0.05% tretinoin cream, respectively. Increase in stratum corneum water content (moisturizer action) and skin viscoelastic properties (dermal effect) were detected with no significant difference between treatments. Otherwise, US images showed decreased echogenicity in upper (hallmark of photodamaged skin) and total dermis ($P = .04$) in forearm treated by peeling. Therefore the peeling, on the contrary of tretinoin cream, did not benefit the dermal extracellular matrix, possibly by its superficial and just exfoliative action. Histologically, HE staining revealed significant thinning of stratum corneum (more compact and organized), only by tretinoin 0.05% ($P = .02$). No difference in epidermis thickness had occurred indicating no stimulus to epidermal hyperplasia. The immunohistochemistry showed p53 ($P < .01$) and bcl-2 ($P < .015$) reduction for both treatments, with no difference ($P = .191$ and $P = .924$ respectively), indicating possible effect for prevention of epidermal pre-neoplastic and neoplastic lesions. No relevant side effects were observed.

Conclusions: Both treatments were safe and effective concerning clinical aspects and epidermal findings. For dermal effects 0.05% tretinoin cream seemed to be superior.

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Trichodysplasia spinulosa

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Trichodysplasia spinulosa (TS) is a rare condition caused by the newly discovered trichodysplasia spinulosa polyomavirus (TSPyV) that is characterized by a cutaneous eruption of follicular skin-colored papules with protruding keratotic spines on the central face and can be associated with non-scarring alopecia most commonly of the eyebrows. TS occurs in the immunosuppressed patient population and has been associated with immunosuppressant agents used in organ transplantation or in chemotherapy regimens. There are a total of 33 cases published in the literature of TS including our case. We describe a case of a 25-year-old African American male with a history of heart transplantation ten months prior to presentation who complained of bumps on his face for two months. The patient was noted to have coalescing skin-colored papules of the central face causing a distorted appearance of his face. He had papules on his posterior neck with a central keratotic plug as well as loss of his eyebrows. At the time of presentation, he was taking anti-rejection medication that consisted of mycophenolate mofetil, prednisone, and tacrolimus. A clinical and histologic diagnosis of TS was made. He was started on valganciclovir 450mg twice daily with initial clinical improvement. Due to bone marrow suppression, the dosage of valganciclovir was decreased, and the patient reported a worsening of his TS. Another case in the literature describes a TS patient treated with oral valganciclovir who experienced worsening of the disease after a dosage decrease that was necessitated by bone marrow suppression. Our case is important because it is another documented case in which this rare disease was treated with oral valganciclovir which improved the patient's symptoms but may have caused or compounded the same undesirable side effect as in the previous reported case (ie, bone marrow suppression). Two years following his initial diagnosis of TS, the patient continued to take the valganciclovir and immunosuppressant agents sporadically. Although it is unclear how regularly the patient was taking his medications, he did note that the valganciclovir seemed to continue to improve his facial lesions. This case is important because it shows that oral valganciclovir is a long term treatment option for TS and demonstrates that interval blood counts are an important part of the long term management plan for patients treated with this drug.

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