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### Sexual quality of life in patients with autoimmune bullous disease



Andrew Creadore, BS, Sara Jiayang Li, BS, Department of Dermatology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts; Arash Mostaghimi, MD, MPA, MPH, Brigham and Women's Hospital; Erin Wei

**Background:** Sexual quality of life (SQOL) is an important component of health and has been evaluated for other dermatologic diseases, but never for autoimmune bullous disease (AIBD), a group of conditions characterized by sudden onset of open erosions and sores in the skin and mucosa, including the genitalia, which can negatively affect functional capabilities, self-esteem and image.

**Design:** Cross-sectional study.

**Methods:** A survey based on validated questions by PROMIS was administered to patients with a history of AIBD at the Dermatology Outpatient Clinic at Brigham and Women's Hospital. Survey questions evaluated the impact of the patient's psychosocial wellbeing, disease manifestations, and treatment on their desire and ability to participate in sexual activity.

**Results:** A total of 25 patients (mean age 62.5, range 35-82) with AIBD were surveyed. Eighty-eight percent of patients (n = 22) reported the desire to engage in sexual activity during the preceding 30 days, and forty-eight percent (n = 12) reported engaging in sexual activity during that timeframe. Ninety-two percent of patients (n = 23) reported that their AIBD had a negative impact on their SQOL, with contributing factors including fatigue (72%), stress (60%), pain (40%), anxiety (40%), feeling unattractive (36%), sadness (32%), or prescription medications (12%).

**Conclusions:** This study is the first to evaluate SQOL in AIBD and found 92% of patients with AIBD report negative impacts on their SQOL, an important measure of overall psychosocial well-being. This study underscores the importance of addressing the patient's overall psychosocial well-being when treating their AIBD.

*Commercial disclosure: None identified.*

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### Vitamin D plasma levels after mild exposure to the sun with photoprotection: Is there any variation?



Luiza Alonso Pereira Ruas, MD, Rubens Antunes da Cruz Filho, Flávio Barbosa Luz, Analucia Rampazzo Xavier, PhD, Hélio Miot, MD, Federal Fluminense University; Clivia Oliveira Carneiro, Federal University of Pará, Brazil; Kamilla Missiaggio Cruz, Salim Kanaan, Sandra Maria Barbosa Durães, Francisco E. Pacifici Guimarães

**Background:** Sunscreens are indicated for the prevention of actinic damage to the skin, however there are few clinical trials assessing the synthesis of cutaneous vitamin D (VD) in real-world situations of sun exposure with ordinary clothing and usual photoprotection. **Objective:** To evaluate the synthesis of VD with suberythral sun exposure in healthy adults using usual photoprotection (SPF 30).

**Methods:** Experimental study, conducted at Rio de Janeiro (Brazil), during winter, with 56 healthy adults who had 25-OH-VD, 25-OH-VD<sub>2</sub>, and 25-OH-VD<sub>3</sub> checked twice, 24 hours apart, and were exposed to the sun (UVB = 20 mJ/cm<sup>2</sup>), according to a randomized grouping: SC = use of sunscreen on main sun-exposed areas (n = 20), NO = no sunscreens (n = 18), CO = confined from sun exposure for 24 h (n = 18). The groups were paired according to gender, age, phototype and body mass index. The volunteers avoided food sources of VD and sun exposure since the day before the first VD dosage. All samples were processed using the liquid chromatography-mass spectrometry technique. The outcome evaluated was the variation in serum levels of VD ( $\Delta$ VD) between the groups.

**Results:** A statistically significant difference was identified between  $\Delta$ VD of CO and SC groups (-1.4677, 95% CI -2.3437,  $\alpha$  = -0.5918;  $P$  < 0.001), and between  $\Delta$ VD of CO and NO (-2.2159, 95% CI -4.1957,  $\alpha$  = -0.2361;  $P$  = .024). There was no difference between SC and NO groups (-0.7482, 95% CI -2.5608,  $\alpha$  = 1.0645;  $P$  = .419).

**Conclusions:** Suberythral sun exposure with sunscreen (SPF 30) provides similar vitamin D serum variation than without photoprotection in healthy adults.

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### Allergenic potential, ingredients, marketing claims, and pricing of eczema moisturizers



Angelina Chan, University of Illinois College of Medicine, Chicago; Bryan Kromenacker, Alyssa Thompson, MS, University of Arizona College of Medicine; Kyla N. Price, Catherine M. Ludwig, BA, Jennifer M. Fernandez, Robert J. Segal, MD, University of Arizona; Vivian Shi, Division of Dermatology, Department of Medicine, University of Arizona, Tucson

**Introduction:** Atopic dermatitis (AD) is a chronic relapsing-remitting inflammatory dermatosis. As a pillar of AD management, topical emollients should be assessed for potential superimposing allergic contact dermatitis. This study aims to evaluate allergenic potential and consumer ratings of the 30 best-selling eczema moisturizers, highlighting marketing claims (natural, fragrance-free, anti-itch, etc) and ingredients.

**Methods:** In June 2019, the 30 best-selling over-the-counter emollients for "eczema" were identified. Common ingredients (ceramide, hydrocortisone, etc), average user rating, and marketing claims were recorded. Ingredients were compared with allergens in the American Contact Dermatitis Society's Contact Allergen Management Program database (ACDS-CAMP) using Matlab. Nonparametric analysis of variance and correlation were used to evaluate the statistical significance ( $P$  < .05) of product claims and allergen counts.

**Results:** 28 of the 30 products contain at least one allergen and on average contain 3.6 allergens. The most prevalent allergens were cetyl alcohol, phenoxyethanol, and aloe. Products sealed by the National Eczema Association (NEA) (mean = 2.92,  $P$  = .049) and 'hypoallergenic/sensitive skin' (mean = 2.45,  $P$  = .009) demonstrated significantly lower allergen counts. Products containing 'dimethicone' had significantly higher ratings (mean = 4.56,  $P$  = .007), and products containing 'natural oils' had significantly lower (mean = 4.40,  $P$  = .015) ratings. The mean price per ounce (USD) of all products was \$2.82. Products with 'anti-inflammatory' (mean = \$5.52,  $P$  = .007) and 'hyaluronic acid' (mean = \$4.49,  $P$  = .025) labeling had significantly higher prices.

**Conclusions:** Most eczema emollients contain known allergens. Attention should be paid to counsel and select emollients for susceptible AD patients to prevent concomitant allergic contact dermatitis.

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### An exploratory, open-label study of secukinumab in patients with moderate to severe papulopustular rosacea



Anusha M. Kumar, BS, Albert S. Chiou, MD, Stanford University School of Medicine; Yi-hsien Shih, MD, Shufeng Li, MS, Anne Lynn S. Chang, MD, Dermatology Department, Stanford University

**Introduction:** Recent work has shown that interleukin (IL) 17A is increased in rosacea.

**Objective:** To assess if the IL-17A inhibitor, secukinumab, could improve moderate to severe papulopustular rosacea (PPR).

**Design:** Exploratory, open-label, single-arm clinical trial.

**Methods:** After institutional review board approval and written informed consent, adult subjects meeting eligibility criteria used secukinumab 300 mg by subcutaneous injection weekly for 5 weeks, then monthly for 2 months. Outcomes were assessed by 3 board-certified dermatologists blinded to pre (week 0) versus post (week 16) treatment status on photography, and included primary measure of rosacea papule count and secondary measures of erythema, global severity, and quality of life. Incidence and severity of adverse events were recorded.

**Results:** Comparing week 16 to 0, median papule count decreased by 5.0 (IQR: -17.7 to 1.0) ( $P$  = .01) (a 38% reduction); median Clinical Global Erythema Assessment score decreased by 0.3 points (IQR: -0.8 to 0.2) ( $P$  = .21); median Clinician's Global Severity Score decreased by 0.3 points (IQR: -0.8 to 0.2) ( $P$  = .03); median Rosacea Quality of Life score improved by 0.6 points (IQR: 0.1 to 1.5) ( $P$  = .001). Improvements in all these measures were more pronounced in subjects with the most severe PPR (defined as  $\geq$ 20 inflammatory lesions at week 0) (n = 8), and included median papule count reduction of 22.3 papules (IQR: -26.0 to -17.7) at week 16. No new safety signals were observed in our sample; no severe adverse effects occurred during the study.

**Conclusions:** and Relevance: Secukinumab has activity against moderate to severe PPR, and larger, placebo controlled studies are needed to confirm these findings.

*Commercial disclosure: Novartis was the sponsor of this investigator-initiated trial (topic of poster) but did not pay for any poster-related costs.*