18131

A systematic review and meta-analysis of the prevalence and phenotype of acne in adults

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Background: While acne remains a high prevalence in adolescence, adult acne has a rising trend in healthy institutions. Studies have displayed considerable negative psychological and physiological impacts and comorbidity associated with acne in adults.

Objective: To determine prevalence, predictors, and phenotypic differences of adult acne.

Methods: A systematic review was performed with all published observational studies in Medline, Embase, Cochrane Library, and Cinahl that analyzed the adult acne. Two reviewers performed study title, abstract review, and data extraction. Pooled meta-analysis of the proportion of adult acne was manipulated by using random-effects weighting ($I^2 = 99.96\%$).

Results: 16 studies met inclusion criteria and 12 of them provided sufficient data for meta-analysis. The pooled proportion (95% confidence interval) of adult acne was 17.7% (8.8%-30.0%) and found similar results in different study regions, 16.7% (5.2%-33.0%) in the United States, 16.3% (3.5%-35.5%) in Europe, and 20.3% (5.8%-40.7%) in Asia. Phenotypic differences were reviewed across studies for adult acne and adolescent acne, including more inflammatory acne and more prevalent among women than men with post-adolescent acne.

Conclusions: Acne is not only a prevalent disease among adolescence. More than 1 in 6 adults suffer from acne with distinct clinical characteristics.

Commercial disclosure: None identified.

18137

Association between change in metabolic syndrome and psoriasis: A nationwide population-based study

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Background: The relationship between psoriasis and metabolic syndrome (MetS) has been reported in many literatures, but studies on changes in MetS and psoriasis are still insufficient. Therefore, we investigated the changes in MetS and its components and the risk of psoriasis.

Methods: We analyzed using data from the National Health Insurance Service of Korea. Study groups were divided into 4 groups; 1) control without MetS (no group); 2) MetS in 2009 but improved in 2012 (pre group); 3) no MetS in 2009, but new onset in 2012 (post group); 4) MetS in both 2009 and 2012 (both group). The risk of psoriasis was observed in each groups:

Results: For high waist circumference and low HDL, there was a statistically significant increased risk of psoriasis in the pre, post, and both groups compared with no group. For high triglycerides and MetS, there was a significant increased risk in the post and both groups, but not in the pre group. The hazard ratios (95% confidence intervals) for MetS were 1.001 (0.956-1.048), 1.084 (1.045-1.124) and 1.106 (1.068-1.145) in the pre, post, and both groups.

Conclusions: Among the MetS components, waist circumference, HDL and triglycerides, as well as MetS itself, were shown to be associated with increased risk of psoriasis. The risk of psoriasis was higher in patients with sustained or newly induced MetS than without or improved MetS.

Commercial disclosure: None identified.

18173

Autoimmune progesterone dermatitis presenting as recurrent marked angioedema-like lip changes: A presentation with clinical photos

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Autoimmune progesterone dermatitis (APD) is a rare condition characterized by a cyclical rash which usually appears just before menstruation and settles a few days after cessation of menses. The clinical features vary and include dermatitis, urticaria, erythema multiforme and angioedema. APD is thought to represent a hypersensitivity reaction to endogenous progesterone. The diagnosis is confirmed with an intradermal progesterone sensitivity test. A 16-year-old girl presented with a nine month history of episodic, severe angioedema-like swelling to her top and bottom lips with crusted erosions. There was no other rash. The episodes begin just prior to menses and can last several days to a week. Each episode is worse than the preceding episode. She also suffers dysmenorrhoea, menorrhagia, fatigue and myalgia. A lip biopsy showed mild parakeratosis and acanthosis with normal dermis. Intradermal skin testing with progesterone was positive. She also developed lip swelling following the test. These findings are consistent with a diagnosis of APD. Treatment options include the oral contraceptive pill, oestrogens, antihistamines, oral steroids, GnRH antagonists, danazol, tamoxifen and oophorectomy. Desensitisation has also been performed. Our patient has responded well to the oral contraceptive pill (30 μg ethinylestradiol, 150 μg levonogestrol) when taken continuously with no break.

Commercial disclosure: None identified.

18206

Hyperhidrosis Disease Severity Measure—Axillary: Evaluation of measurement properties in phase II study data

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Background: Primary focal axillary hyperhidrosis (AHH) is a disorder of excessive sweating. Appropriate patient care requires the ability to accurately evaluate symptoms and treatment responses. The Hyperhidrosis Disease Severity Measure—Axillary (HDSM-Ax) is an 11-item measure of AHH severity in subjects ≥12 years of age. Each question has 5 response categories scored 0-4. A child-specific HDSM-Ax was developed for children ≥9 to 3 and >50 mg/5 min of sweat production in each axilla, with a two-axilla combined total of >150 mg/5 min.

Results: Classic test theory analyses showed good reliability (Cronbach alpha = 0.98; test retest reproducibility = 0.71). Correlations and mean score differences supported validity and large effect sizes implied good ability to detect change. Rasch measurement theory analyses showed good targeting, ordered item thresholds, statistical cohesiveness, no item scoring bias or instability and good person fit. A 1-point improvement was found to be clinically meaningful.

Conclusions: HDSM-Ax satisfies psychometric criteria as a fit-for-purpose patient-reported outcome measure of AHH severity.

Commercial disclosure: None identified.