12712

Use of local anesthetic for intralesional corticosteroid injections: A double-blinded randomized controlled trial

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Background: Corticosteroid injections are commonly used to treat a variety of inflammatory dermatologic conditions. Standard practice entails administering corticosteroids sometimes mixed with a local anesthetic, typically lidocaine with epinephrine. Owing to an acidic pH, local anesthetics cause a burning sensation during infiltration and this may be a significant component of associated injection pain. The goal of this study is to determine if removing lidocaine from intralesional steroid injections changes pain outcomes.

Methods: In this double-blinded, prospective, randomized controlled trial, patients were treated with a corticosteroid (triamcinolone acetonide) combined with either lidocaine with epinephrine 1:100,000 (anesthetic) or with normal saline. 30 patients were enrolled with 13 receiving anesthetic and 17 receiving corticosteroid with saline. Pain was the primary outcome and was measured using the visual analog scale (VAS) immediately following the injection.

Results: The two study groups had similar demographics. The most common conditions treated include alopecia (8), psoriasis (8), and keloid (6). The injection containing corticosteroid mixed with anesthetic had a significantly higher average VAS pain score compared with those containing corticosteroid mixed with saline (5.38 vs 2.76, $P = .0058$). There were no adverse outcomes from the injections.

Conclusions: The data show that corticosteroid injections containing anesthetic were more painful than those mixed with saline. This indicates that lidocaine with epinephrine is an unnecessary component in intralesional injections as it increases pain outcomes as well as cost and risk. We therefore recommend administering intralesional corticosteroid injections without lidocaine.

Commercial disclosure: None identified.

12726

Allergic contact dermatitis in the operating room: A comprehensive analysis of surgical scrubs and disinfectants

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Background: Antiseptics and disinfectants used for preoperative scrubbing and patient site preparation are integral to avoidance of postsurgical infections. While allergic contact dermatitis to these products has been reported (1-5), little is known about their ingredients.

Objective: To identify common allergens in surgical scrubs and patient surgical disinfectants that health care workers and surgical patients may encounter.

Methods: DailyMed.com was searched for surgical disinfectants and scrubs. Products used for health care worker handwashing/scrubbing and patient surgical cleansing/disinfecting were included. The 2017 American Contact Dermatitis Society Core Series allergens present in each product were noted.

Results: 267 products were included in the analysis. 66.3% contained iodine, 25.8% contained chlorhexidine digluconate, and 2.6% contained chloroxylenol. Among these products, 1586 ingredients were identified; 241 were ACDS allergens. Most products contained 1 allergen. There were differences in allergens based on active ingredient; iodine-containing products contained the fewest number of allergens (0.2) while chlorhexidine-containing products contained the most (2.7). The most common allergens were cocamide DEA (22.5% of products), fragrance (21.7%), lanolin (19.5%), propylene glycol (6.7%), and alkyl glucosides (6.0%). The most common allergens in iodine-containing products were alkyl glucosides (9.0%) and sorbic acid derivatives (7.9%) while the most common in chlorhexidine-containing products were cocamide DEA (78.3%), fragrance (73.9%), and lanolin (68.1%).

Conclusions: Surgical scrubs and disinfectants are occult sources of many common allergens. These products pose potential allergic contact dermatitis risks to both health care workers and patients. It is essential to provide allergic patients safe product recommendations and knowledge of potential sources of relevant allergens.

Commercial disclosure: None identified.

12761

Acne, twins, and glycemic index: A sweet pilot study of diet and dietary beliefs

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Background: Acne vulgaris is an inflammatory skin condition of the pilosebaceus unit. Epidemiologic and biochemical studies implicate a high glycemic index and load in the pathogenesis of acne.

Methods: We surveyed individuals with and without acne (as determined by a board-certified dermatologist) attending 2 consecutive Twins Day festivals. After, participants completed a 24-hour dietary recall, reported food items were cross-referenced with the University of Sydney online database and an online calorie tracking application to determine the glycemic index and load, carbohydrate content and calories. Participants with acne also reported their dietary beliefs and acne. Only the initial responses of twins who participated both years were used. Demographic analysis was performed with the use of R. P values were calculated based on t.test for pairwise comparisons or χ^2 test for multiple categories comparisons.

Results: We surveyed 270 individuals (acne, n = 186; control, n = 84). Individuals with acne self-reported consuming more servings of carbohydrates (3.58 vs 2.8, $P = .0054$) and had a higher dietary glycemic index than controls (57.64 vs 54.31, $P = .041$). There was also a significant difference between the acne severity and the belief that animal products worsened acne severity ($P = .048$).

Conclusions: A higher glycemic index diet may play a in acne pathogenesis. Individuals with acne also have many held misconceptions regarding diet's role in acne. While further studies elucidate the correlation between diet and acne, general practice should include patient education on healthy eating habits, especially those that overlap with existing knowledge on diet and acne.

Commercial disclosure: None identified.

12812

Understanding the causes and treatments of nipple pain secondary to breastfeeding

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Background: The American Academy of Pediatrics recommends exclusive breastfeeding for 6 months and continued breastfeeding as complementary foods are introduced for 1+ years. Nipple discomfort inhibits breastfeeding goals, particularly 1-8 weeks postpartum. Contributors to nipple soreness include mechanical stressor, infections or inflammatory skin conditions. Although OTC products (eg shields) are available, they can inhibit maternal-infant interactions and exacerbate pain, and there remain no evidence-based guidelines for skin diseases of the nipple.

Methods: A 13-question survey was developed and distributed to 6-8-week postpartum mothers, 18-50 years of age, with intent to breastfeed. Exclusion criteria included non-English speaking patients or those unable to independently complete the study. Data was analyzed on REDCap.

Results: Among 215 respondents (84.6% Caucasian, mean 30.0 years of age), 43.6% had previously breastfeed 1+ infants and 86.0% reported intent to breastfeed. At 6-8 weeks, breastfeeding rates decreased to 62.8%. Nipple pain/itching, skin redness and cuts were most prevalent 1-2 weeks postpartum, and 45% (10/22) of women with history of eczema reported nipple pain. Women primarily sought care from the mother-baby unit (lactation, 65.8%; nurses, 52.6%). and identified Lanolin cream (81.2%) and Soothies Pads (32.7%) as primary therapies.

Conclusions: At 6-8 weeks postpartum, 1/4 of women with intent to breastfeed exclusively had stopped or supplemented with formula. Findings suggest nipple pain/itching and trauma most commonly arise 1-2 weeks postpartum despite OTC product use and guidance from health care professionals. Although the study cannot correlate types of nipple trauma and effective therapies, data adds to the existing body of knowledge on management practices for nursing mothers.

Commercial disclosure: None identified.