15861

Laser safety: Residents' comparative experience

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Background: Medical applications of lasers date back to the early 1960s. As technology, applications, and access grew exponentially so did laser associated accidents and injuries. Formal safety training of laser operators is paramount to laser safety programs. It is largely assumed physicians—particularly dermatologists—using lasers are well trained, having acquired theoretic and practical expertise during residency. However, to our knowledge, no study has evaluated laser education and adverse events occurring during residency.

Methods: A Mayo Clinic Institutional Review Board exempt online survey (IRB #18-006458) was distributed through the Mayo Clinic Intranet to plastic surgery, otolaryngology, and dermatology residents. In addition, the survey was distributed through the Association of Professors of Dermatology listserv to ACGME-approved dermatology residency programs.

Results: Thirty Mayo Clinic residents from plastic surgery, otolaryngology, and dermatology responded, as did 78 dermatology residents from across the country. At Mayo, 11% (2/18) dermatology, 17% (1/6) plastic surgery and zero otolaryngology residents reported adverse laser events. Comparatively, 13% (10/78) of dermatology residents surveyed identified an adverse event. At Mayo 39% (7/18), 50% (3/6), and 17% (1/6) of dermatology, plastic surgery, and otolaryngology residents, respectively, felt their laser education was adequate. Forty-seven percent (37/78) of dermatology residents identified their formal laser education as adequate.

Conclusions: Laser-associated adverse events are not uncommon, affecting more than one in ten residents. ACGME-accredited programs in dermatology, plastics, and otolaryngology meet basic laser safety requirements. However, residents still do not feel prepared to work safely with lasers and manage associated adverse events.

Commercial disclosure: None identified.

15871

A demonstration of the excellent tolerability and safety of a lanolin alcohol–containing wound healing ointment

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Background: Lanolin alcohol (LA) is an ingredient used in ointments for wound healing because of its high cholesterol content, a key component of skin's intercellular lipids. Purification of lanolin (wool wax) yields a subfraction of LA with many different purities present in the marketplace. LA has been identified as an allergen causing allergic contact dermatitis. In 2011, the concentration of a specific LA used in the standard dermatology patch test series was increased from 30% to 50% (resulting in a actual concentration of 5% LA). This increase corresponded to higher reported LA allergy rates among those patch tested in clinics due to suspicion of allergy, from about 1.8%-2.5% to 4.6%-5.7%.

Objective: This research was undertaken to evaluate the tolerability and safety of a well known OTC LA-containing skin protectant, widely used for postsurgical skin care.

Methods: This 3 center study enrolled 499 subjects who underwent a variety of in-office surgical procedures followed by application of a wound healing ointment containing LA without antibiotics.

Results: No allergic contact dermatitis (ACD) was identified in the 499 subjects who completed the study.

Conclusions: The lack of ACD observed may be due to the proprietary highly purified LA utilized in the study formulation. This is not the LA preparation found on the standard dermatology patch test tray. Not all LAs are equal. This is an important consideration when examining the reported incidence of ACD to LA and the absence of ACD demonstrated in this research.

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15896

Utility of the labial salivary gland punch biopsy for the diagnosis of Sjögren syndrome

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Background: Several labial salivary gland biopsy techniques exist, each with varying degrees of complexity, efficacy and potential omplications. Few studies evaluate the utility of the labial salivary gland punch biopsy (LSGPB) for the diagnosis of Sjögren syndrome (SS).

Methods: A retrospective medical record and pathology report review was conducted of patients with suspected SS, who had an LSGPB performed between 2014-2019 at the University of Puerto Rico dermatology clinics. Cases with missing data, such as pathology reports or biopsy size, were excluded.

Results: Thirty-seven patients were included in this study. The majority were female (94.6%) with a mean age of 48.3 years. Salivary glands (SGs) were present in 31 specimens. Although most LSGPBs were 3 mm, biopsy size was not associated to the presence of SGs ($P = .564$). CD45 immunohistochemistry (IHC) testing was used in 3 equivocal cases to facilitate lymphocyte count with ultimately 1 being suggestive of SS while the other 2 were not diagnostic for SS. Three patients required a second biopsy given the absence of SGs and 1 of these repeat biopsies had absent SGs as well. One patient reported minor, temporary complications described as suture failure, edema and pain. No severe or permanent adverse events were found.

Conclusions: Our findings suggest that the LSGPB is a safe and effective technique used to obtain SGs for the diagnosis of SS. An association between punch biopsy size and SG presence could not be established. IHC testing with CD45 as a leukocyte marker can help solve equivocal cases.

Commercial disclosure: None identified.

15904

Efficacy and safety of long-term tildrakizumab for plaque psoriasis: 4-year results from reSURFACE 1

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Background: Anti–interleukin-23p19 monoclonal antibody tildrakizumab (TIL) is approved for treatment of moderate to severe plaque psoriasis.

Methods: The reSURFACE 1 3-part, double-blind, randomized, controlled, 64-week trial (NCT01722331) evaluated TIL (100/200 mg) at weeks 0, wk 4, and every 12 subsequent weeks in adults with moderate to severe chronic plaque psoriasis. Patients with ≥50% Psoriasis Area and Severity Index improvement (PASI 50) at wk 64 could enter the extension at the same TIL dose. Here, PASI response, Physician's Global Assessment (PGA) response (0 or 1 with ≥2 reduction), and prespecified adverse event (AE) rates were assessed.

Results: Of 638 patients completing the base study, 525 entered the extension (2210.8 total patient-years [PY] follow-up). At wk 64 (n = 239), 87%, 54%, and 31% patients receiving TIL 100 mg achieved PASI 75/90/100, respectively; at wk 208 (n = 178), 82%, 56%, and 28% did. At wk 64 (n = 267) 82%, 52%, and 27% receiving TIL 200 mg achieved PASI 75/90/100; at wk 208 (n = 226) 82%, 55%, and 27% did. At wk 64 and wk 208, 65%/63% and 58%/60% of patients receiving TIL 100/200 mg, respectively, had a PGA response. From week 64-208, 113 (22%) patients discontinued (most common reasons: patient withdrawal [8%], AEs [5%], loss to follow-up [4%]). Exposure-adjusted rates per 100 PY for prespecified AEs during base and extension for TIL 100/200 mg (1410.4 PY/1606.5 PY) were 0.9/1.1 for severe infections, 0.5/0.6 for confirmed major adverse cardiovascular events, 0.1/0.1 for deaths, and 0.1/0.1 for drug-related hypersensitivities, respectively.

Conclusions: PASI and PGA responses were high and durable, with low prespecified AEs, over 4 years of TIL treatment.

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