15685

Predicting onychomycosis clearance at as early as 3 months into the 1-year-long efinaconazole regimen: Role of noninvasive optical coherence tomography imaging

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Onychomycosis is the commonest nail disorder, with a prevalence in America of up to 14% (45 million). It can cause local destruction and decreased quality of life. Topical efinaconazole is effective in 54% of cases, but there is no established method for predicting clearance before the 48-week-long regimen ends. FDA-approved noninvasive optical coherence tomography (OCT) imaging has diagnostic capability for onychomycosis. This prospective study evaluated frequency domain (FD) OCT's prognostic utility for onychomycosis clearance on efinaconazole. 34 subjects were enrolled from 2 sites who had a great toenail with PAS-positive mild to moderate distal lateral subungual onychomycosis as defined by the Onychomycosis Severity Index score. They were treated with efinaconazole topical solution 10% for 48 weeks. OCT was used at weeks 0, 4, 8, 12, and 48. We evaluated onychomycosis findings on 680 OCT scans, including pseudohyphae-like hyperechogenicities in the distal nail plate (thereafter "pseudohyphae"). Our clearance rate matched previous reports ($P > .05$). We found that pseudohyphae onset between weeks 4 and 12 ($P = .018$) and pseudohyphae persistence into week 12 ($P = .019$) predicted PAS-positive nails at week 48, while lack of pseudohyphae up through week 12 predicted PAS-negative clippings ($P = .001$). Given our results, a FD-OCT scan of the distal nail plate should be obtained at 3 months to evaluate whether to continue efinaconazole daily for 9 additional months. Lack of pseudohyphae at 3 months warrants a re-diagnosis to rule out original false-positive PAS. OCT has the potential to increase both initiation of and compliance with treatment, and decrease the cost and burden of onychomycosis.

Commercial disclosure: None identified.

15699

Can you tell? A study evaluating whether patients can reliably differentiate cutaneous surgery results from different specialties

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Background: We created a survey designed to address the question of whether or not the public could tell the difference between a skin cancer excision and repair done by a Mohs surgeon vs another surgical specialist, and whether they have an implicit bias towards assuming more cosmetically appealing repairs were done by certain specialties.

Methods: 12 image sets of patients' surgical defects and subsequent repairs were collected, with 6 repairs done by Mohs surgeons and 6 by a surgical specialist. An expert panel ensured repairs were similar quality. Subjects were asked to complete a survey wherein they either a) rated 12 image sets and attempted to guess the provider performing the repair or b) rated 12 image sets unblinded as to the provider type.

Results: 584 respondents participated in the survey. Overall cosmesis ratings were similar in both groups. However, when looking at the subgroup of patients who guessed a facial plastic surgeon performed a repair, cosmesis scores were higher in 11 of 12 cases. In 3 of these cases the rating difference for Mohs compared with facial plastics was statistically significant ($P < .05$). This is despite 2 of 3 of these images being Mohs repairs.

Conclusions: Subjects rated surgical repairs objectively regardless of whether they knew the training background of the clinician. However, for those who assumed a facial plastic surgeon performed a skin cancer repair, ratings tended to be higher. This suggests an implicit bias towards believing facial plastics repairs are superior to those done by a Mohs surgeon.

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15701

Healthy skin for everyone: A bilingual health literacy program for homeless individuals

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Introduction: About 1 in 5 Americans will develop skin cancer, with higher rates among the homeless, indigent, and uninsured population. The "Healthy Skin for Everyone" program at Corazon Clinic—a weekly clinic providing free access to medical care to homeless patients in San Antonio—was created to improve skin cancer incidence in this vulnerable population.

Methods: A needs assessment was performed to identify gaps in knowledge regarding skin cancer and sun protection, unveiling the need for health education. Results of this assessment were used to create a bilingual educational program. The program comprised weekly educational sessions on skin cancer, specifically melanoma, for local homeless patients and raised awareness for accessible dermatologic care. Each session discussed risk factors for melanoma skin cancer, means of prevention, and self-recognition of pertinent signs and symptoms—measured via pre- and post-session survey questions completed by participants.

Results: The initial needs assessment revealed that only 18% of individuals were confident in their ability to identify skin cancer and 39% of individuals believed that people with darker skin do not have to wear sunscreen to protect themselves. Upon program completion, the chances of correctly identifying melanoma increased by 40%, correctly identifying risk factors increased 19%, and 59% of people identified themselves as having an average to higher-than-average risk of developing melanoma, compared with only 20% before.

Conclusions: This project successfully increased participants' baseline knowledge of melanoma. Future efforts include a larger audience and streamlined dermatologic point-of-care for skin cancer.

Commercial disclosure: None identified.

15706

Effect of a one-hour interactive sun safety presentation on sun protection knowledge and intentions in high school students

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Introduction: Skin cancer is the most common type of cancer in those aged 25-29 and the second most common in those aged 15-29. Teenagers and young adults continue to receive large amounts of both intentional and unintentional exposure to sunlight, which is a well known risk factor for developing skin cancer.

Objective: To evaluate whether a one-hour presentation can increase sun protection intentions and knowledge in high school students.

Methods: 30 high school students were given a one-hour presentation created by the Canadian Cancer Society aiming to educate teenagers about the risks of UV ray exposure. The students were given a survey consisting of 5 multiple choice questions immediately before as well as two months after the presentation. The paired Student *t* test was used to compare survey results.

Results: The mean scores were 2.4 out of 5 pre-presentation, and 3.8 2 months post-presentation ($P < .001$). There was a 29% increase in students who said that they would never use a tanning bed. The percentage increase in students who knew the correlation between UV exposure and skin cancer was 38%. There was a 950% increase in students knowing the significance of an SPF value. The percentage increase in students who knew the recommended amount of times to re-apply sunscreen when outdoors was 125%.

Conclusions: A one-hour interactive presentation is an effective long-term public-health intervention to increase sun-safety knowledge and to modify sun protection behaviours in high school students.

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