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TELEDERMATOLOGY REDUCES DERMATOLOGY REFERRALS AND IMPROVES ACCESS TO SPECIALISTS

The authors, from the Department of Telemedicine at the Hospital Israelita Albert Einstein in São Paulo, Brazil, examined the role of telemedicine not in replacing in-person dermatology consults but rather in assisting telemedicine dermatologists to triage patients with dermatologic complaints. Thirteen board certified dermatologists were presented, on-line, with store-and-forward photos and clinical histories of more than 30,000 patients. These dermatologists, designated “teledermatologists,” evaluated the patients and channeled them into 1 of 3 options: (1) a direct referral for a biopsy, after which the patient would go to an in-person dermatologist appointment, (2) a referral for an in-person dermatologist visit, or (3) a referral to a primary care physician bearing the triaging teledermatologist’s diagnosis, along with recommended further workup and management of the complaint. A biopsy was the teledermatologist’s choice in only 4% of all presentations. Malignant tumors, including basal cell carcinoma, squamous cell carcinoma, and malignant melanoma, were diagnosed in 42% of those referrals. An in-person referral to a dermatologist was made in 43% of cases. Of those referrals, the most common resulting diagnoses were melanocytic nevus, wart, acne, seborrheic keratosis, and epidermoid cyst. A referral to the patient’s primary physician was made in 53% of the cases, with the most common suggested diagnosis being melanocytic nevus, acne, seborrheic keratosis, onychomycosis, and acrochordons, and other benign neoplasms. The authors found that teledermatology was useful in distinguishing patients who needed biopsy and/or dermatologic consultation from those who did not, thus optimizing use of dermatologic

specialist resources in a dermatology resource-constrained environment.

Giavini-Bianchi M, Santos A, Cordioli E. Teledermatology reduces dermatology referrals and improves access to specialists. *EClinicalMedicine*. 2020;29-30:100641. <https://doi.org/10.1016/j.eclinm.2020.100641>.

IDENTIFICATION OF INCIDENTAL SKIN CANCERS AMONG ADULTS REFERRED TO DERMATOLOGISTS FOR SUSPICIOUS SKIN LESIONS

The authors evaluated the rate and proportion of incidental skin cancer detection by total body skin examination (TBSE) on patients referred to dermatologists with suspected malignant melanoma, squamous cell carcinoma, or high-risk basal cell carcinoma. They also investigated whether the rate of incidental skin cancer detection was greater in patients who presented with a clinically suspicious index lesion requiring biopsy compared with patients who presented with clinically benign index lesions. They divided subjects into 2 groups: group A, consisting of 1654 patients with clinically suspicious index lesions, and group B, consisting of 3072 patients with clinically benign index lesions. They performed TBSE on each group. Group A yielded 138 patients with incidental malignant lesions on TBSE, for a yield of 8.3%. Group B yielded 53 patients with incidental malignant lesions on TBSE, for a yield of 1.7%. Based on their data, the authors recommend offering TBSEs for all patients who are referred for evaluation of skin lesions, with a priority extended to patients who are referred for evaluation of lesions clinically suspicious for malignancy.

Omara S, Wen D, Ng B, et al. Identification of incidental skin cancers among adults referred to dermatologists for suspicious skin lesions. *JAMA Netw Open*. 2020;3(12):e2030107. <https://doi.org/10.1001/jamanetworkopen.2020.30107>.

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IMMUNE CHECKPOINT INHIBITORS RETAIN EFFECTIVENESS IN OLDER PATIENTS WITH CUTANEOUS METASTATIC MELANOMA

The authors undertook to evaluate the effectiveness of immune checkpoint inhibitors (ICIs) in patients aged 65 years and older. Using Surveillance, Epidemiology, and End Results-Medicare data, they evaluated survival by first systemic treatment type in a retrospective cohort study of patients aged 65 years and older who were diagnosed with stage IV cutaneous melanoma between 2012 and 2015. The authors observe that response rates in clinical trials may not accurately reflect rates in older patients, who are underrepresented in cancer clinical trials, and they raise the question of whether there could be an impact on ICI activity by age-associated decline in immune function, known as immunosenescence or age-related immune dysfunction. The authors did not observe a difference in ICI effectiveness by age-group. Included in the authors' observations was that ICIs were effective in patients aged 75 and older, contrasting with 3 previous meta-analyses that found no statistically significant improvements in such patients. Additionally, the authors found that the age-group with the longest survival after programmed cell death protein 1 treatment was the group aged 70-80 years.

Howell A, Gebregziabher M, Thiers B, et al. Immune checkpoint inhibitors retain effectiveness in older patients with cutaneous metastatic melanoma. *J Geriatr Oncol*. Published online October 29 2020. <https://doi.org/10.1016/j.jgo.2020.09.023>.

ASSOCIATION OF KNOWN MELANOMA RISK FACTORS WITH PRIMARY MELANOMA OF THE SCALP AND NECK

Scalp and neck (SN) melanomas confer a worse prognosis than melanomas of other sites. The head and neck region accounts for 9% of the body's total surface area but an estimated 12% to 26% of total melanoma incidence. They also have poorer prognoses than other sites, with 5-year survival rates of 78.9% compared with 93.1%. The authors took data from 2 large population-based melanoma studies to identify risk factors distinguishing face and SN melanoma from melanoma of other anatomic sites. Among the significant differences were decreased odds of both face and SN melanomas in women, a significant increase in the odds of developing facial melanomas compared with other sites, with each decade after the age of 50 years, and an inverse association between lighter hair color and facial melanoma. The authors showed for the first time that a specific single nucleotide polymorphism of gene *IRF4* resulted in the overall risk of SN melanoma over other sites of 1.35 and the overall risk of

facial melanoma over other sites of 1.29. They authors cite this as evidence of possible multiple melanoma pathways.

Wood R, Heyworth J, McCarthy N, et al. Association of known melanoma risk factors with primary melanoma of the scalp and neck. *Cancer Epidemiol Biomarkers Prev*. 2020;29(11):2203-2210. <https://doi.org/10.1158/1055-9965.EPI-20-0595>.

PRIMARY DERMAL MELANOMA: CLINICAL BEHAVIOR, PROGNOSIS AND TREATMENT

The authors, from Royal Prince Alfred Hospital of Camperdown, New South Wales, Royal North Shore Hospital of North Sydney, New South Wales Health Pathology of Sydney, and The University of Sydney, Australia, undertook to characterize the histopathologic features, prognosis, and management of primary dermal melanoma (PDM). A search of the Melanoma Research Database at Melanoma Institute Australia was conducted, yielding 101 patients of a database of 33,483 primary melanomas who had potential PDMs. After excluding individuals with a prior history of melanoma, trauma to the surface of the lesion, and other findings which might throw the diagnosis of PDM into question, the authors deemed 62 patients suitable for inclusion in the PDM cohort. In these 62 individuals, the mean Breslow thickness was 5.9 mm, 56.5% of the patients were men and 43.5% were women, and the mean age at diagnosis was 64.1 years. There was significantly better overall survival and melanoma-specific survival of the PDM cohort compared with both stage I to II and stage IV M1A melanoma controls. The authors hold that this supports the notion that tumors diagnosed as PDMs are in fact true primary tumors and not cutaneous metastatic deposits from an occult or regressed primary site. They further hold that the evidence shows that PDM has a better prognosis than other melanomas and that the findings of the study justify early surgical management of PDMs by wide local excision, as for early stage cutaneous epidermal melanoma.

Harris C, Lo S, Ahmed T, et al. Primary dermal melanoma: clinical behavior, prognosis and treatment. *Eur J Surg Oncol*. 2020;46:2131-2139. <https://doi.org/10.1016/j.ejso.2020.04.043>.

A RETROSPECTIVE REVIEW OF PHOTOTHERAPY IN CHILDREN, AT A TERTIARY PAEDIATRIC DERMATOLOGY UNIT

The authors retrospectively analyzed children at a pediatric dermatology center in Southampton, United Kingdom, who received phototherapy for a variety of skin disorders and reported response, relapse rates, and adverse effects according to the disease process. All patients were aged younger than 18 years. Of those patients with psoriasis who

were treated with narrow-band ultraviolet B, 55 children (84.6%) had significantly improved or cleared, and 4 children (6.2%) had not improved or worsened. Of those who improved or cleared, 17.7% relapsed by 3 months, 23.8% by 6 months, and 28% by 2 years. This result contrasted with treatment of atopic dermatitis, where 6 of 10 children (60%) achieved significant improvement but 4 of those 6 children (67%) relapsed within 3 months. The authors offer narrow-band ultraviolet B as an effective treatment for childhood psoriasis, while questioning its effectiveness in atopic dermatitis.

Seccombe E, Wynne M, Clancy C, Godfrey K, Fityan A. A retrospective review of phototherapy in children, at a tertiary paediatric dermatology unit. *Photodermatol Photoimmunol Photomed*. 2021;37:34-38. <https://doi.org/10.1111/phpp.12604>.

ASSOCIATIONS OF SECOND-HAND SMOKE EXPOSURE WITH HAND ECZEMA AND ATOPIC DERMATITIS AMONG COLLEGE STUDENTS IN CHINA

The authors cite studies that second-hand smoke (SHS) contributes to 1% of the total global disease burden and represents approximately 10% to 15% of the disease burden caused by active smoking. Citing the health impact of atopic dermatitis (AD) and hand eczema, they undertake to elucidate any possible relationship between SHS and AD. A self-administered questionnaire was completed by 20,129 first-year college students, who were examined for signs of skin disease by certified dermatologists. The authors found that cumulative SHS exposure was associated with AD and hand eczema in a dose-response relationship. The risk of AD peaked when duration of exposure exceeded 6 years (overall risk, 1.50) or when frequency of exposure exceeded 2 times per week (overall risk, 1.51). Given the age homogeneity of the study participants (average age, 18.3 years), the authors conclude that exposure to SHS during childhood and puberty is an independent risk factor for AD in adolescence and young adulthood.

Jing D, Li J, Tao J, et al. Associations of second-hand smoke exposure with hand eczema and atopic dermatitis among college students in China. *Sci Rep*. 2020;10(1):17400. <https://doi.org/10.1038/s41598-20-74501-2>.

INCREASED OCCURRENCE OF HAND ECZEMA IN YOUNG CHILDREN FOLLOWING THE DANISH HAND HYGIENE RECOMMENDATIONS DURING THE COVID-19 PANDEMIC

During the first wave of the COVID-19 pandemic in Spring 2020, Denmark instituted nationwide lockdown measures, including the closing of all

daycare centers. After the reopening of daycare centers, Danish health authorities implemented a mandatory intensive hand hygiene regimen. The authors studied the incidence of hand eczema in Danish children in daycare centers before the lockdown and the incidence after being subject to hand hygiene guidelines implemented by the daycare centers. Submitting questionnaires both to parents and daycare centers, they found that before the lockdown, 7% of surveyed children had hand eczema. During the lockdown, while children were at home but home hygiene measures were enhanced in view of the pandemic, hand eczema incidence increased to 12.1%. After the children returned to daycare and a strict hand hygiene regimen was observed, the incidence of hand eczema increased to 38.3%. The authors suggest that prophylactic measures be implemented in the future, including the use of glycerol-based hand sanitizers as a potentially less irritating hygiene regimen than soap and water and the use of emollient after hand-washing.

Simonsen A, Ruge I, Quaade A, Johansen J, Thyssen J, Zachariae C. Increased occurrence of hand eczema in young children following the Danish hand hygiene recommendations during the COVID-19 pandemic. *Contact Dermatitis*. Published online October 21, 2020. <https://doi.org/10.1111/cod.13727>.

THE IMPACT OF VITAMIN D SUPPLEMENTATION AS AN ADJUVANT THERAPY ON CLINICAL OUTCOMES IN PATIENTS WITH SEVERE ATOPIC DERMATITIS: A RANDOMIZED CONTROLLED TRIAL

The authors undertake what they describe as the first study to investigate potential benefits of vitamin D supplementation in children with severe atopic dermatitis. The participants were patients aged 5 to 16 years with a diagnosis of severe atopic dermatitis according to Hanifin and Rajka criteria and the Eczema Area and Severity Index score. In a double-blind, randomized placebo controlled clinical trial, participants were allocated in a 1:1 ratio to receive vitamin D₃ (1600 U/d) or placebo plus baseline therapy of topical hydrocortisone cream twice daily for 3 months. At the conclusion of the study, children supplemented with vitamin D fared better than those allocated to placebo. The mean percentage change in the Eczema Area and Severity Index score from baseline was significantly greater in the vitamin D group (56.44%) than in the placebo group (42.09%). The Eczema Area and Severity Index 75 was achieved in 38.6% among the supplemented patients vs 7.1% of patients in the placebo group. The authors noted that at baseline, 84.1% of the treatment group

and 71.3% of the placebo group had deficient or insufficient serum 25-dihydroxyvitamin D levels. Whether supplement effects are replicated in populations whose baseline 25-dihydroxyvitamin D levels are sufficient remains to be seen.

Mansour N, Mohamed A, Hussein M, et al. The impact of vitamin D supplementation as an adjuvant therapy on clinical outcomes in patients with severe atopic dermatitis: a randomized controlled trial. *Pharmacol Res Perspect*. 2020;8(6):e00679. <https://doi.org/10.1002/prp2.679>.

IMPROVEMENT OF CLINICAL AND IMMUNOLOGICAL PARAMETERS AFTER ALLERGEN-SPECIFIC IMMUNOTHERAPY IN ATOPIC DERMATITIS

Allergic desensitization therapies are not at present a standard of care for atopic dermatitis (AD) due to a lack of existing supporting evidence. Hadju et al looked specifically at a subset of patients with AD with house dust (HDM) allergy and demonstrated that HDM desensitization improved clinical and laboratory markers of AD. There were 14 patients

with mild to moderate AD and house dust mite allergy (HDM) randomized to sublingual adjuvant allergen immunotherapy (AIT) to HDM or standard AD care. At 6 months, patients in the AIT group showed significantly decreased eczema severity by SCORing Atopic Dermatitis as well as reduced transepidermal water loss. The AIT group, unlike controls, had also converted to negative HDM atopy patch tests. Biopsy specimens of the atopy patch tests sites before and after AIT showed decreased dendritic-cell and T-cell infiltrates in the treatment group. The authors conclude that AIT is a beneficial adjuvant treatment for sensitized AD patients and that it improves not only clinical symptoms but also permeability barrier functions.

Hajdu K, Kapitany A, Dajnoki Z, et al. Improvement of clinical and immunological parameters after allergen-specific immunotherapy in atopic dermatitis. *J Eur Acad Dermatol Venereol*. Published online November 1, 2020. <https://doi.org/10.1111/jdv.17018>.

Conflicts of interest

None disclosed.