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33396 Nonuremic calciphylaxis precipitated by COVID 19 infection

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33699

Nodular melanoma of the nipple in a male with in-transit and satellite metastases

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An 80-year-old male with medical history of oropharyngeal squamous cell carcinoma treated with chemotherapy presented to the hospital following a fall at home. On physical examination, a 5.5 cm dark brown exophytic hemorrhagic mass was incidentally noted arising from the left nipple with multiple clustered, adjacent dark brown to black irregularly shaped papules. CT of the thorax performed for dyspnea demonstrated a prominent lymphovascular stalk extending from the central mass to the pectoralis musculature and multiple superficial cutaneous nodules. Histopathology of biopsy specimens from the mass and adjacent lesions revealed tumor composed of epithelioid cells consistent with melanoma. All specimens stained positively for MART-1 and SOX-10. After undergoing left mastectomy and comprehensive staging, the final pathologic stage was IIID (T4bN3cM0). Primary nodular melanoma of the nipple is exceedingly rare. The presence of in-transit and satellite metastases, identified in only 4% of melanoma cases, represents intralymphatic or angiotrophic tumor spread. As such, their presence results in a minimum of stage IIIB pathologic disease with further staging determined by number of tumor-involved regional lymph nodes. Management of the primary lesion, in-transit, and satellite metastasis, in the absence of disseminated metastasis, is surgical resection. No strict criteria for unresectable disease exist, but the presence of three or more in-transit lesions or single large lesion in which the skin cannot be closed primarily following excision are indications to consider alternate initial therapies such radiotherapy or immunotherapy. This case highlights the importance of regular examinations for at-risk populations, due to propensity for rapid progression.

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33396

Nonuremic calciphylaxis precipitated by COVID 19 infection

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A 40-year-old female with a medical history of hypertension, anxiety, and COVID-19 pneumonia in May 2021 that was complicated by cardiac arrest, presented in July 2021 with bilateral lower extremity wounds. Wounds initially were described as 'sunburns' that progressed to form multiple large retiform purpura with black necrotic eschars and surrounding induration on bilateral thighs and lower legs. A telescoping punch biopsy was performed showing calciphylaxis with intravascular thrombosis. Labs were significant for a mildly elevated phosphorus, PT/PTT, lupus anticoagulant antibody, and positive ANA. Creatinine, BUN, calcium, PTH, and GFR were within normal limits. Patient had no prior personal or family history of coagulopathies or renal dysfunction. The patient was diagnosed with nonuremic calciphylaxis (NUC) precipitated by a COVID-19 induced coagulopathy. Intravenous sodium thiosulfate and sevelamer was started for treatment. NUC is a rare disease characterized by arterial calcification leading to ischemia and skin necrosis that occurs in the setting of normal renal function. Other conditions associated with NUC include prothrombotic states like Protein C and S deficiency, antithrombin III deficiency, antiphospholipid antibody, cryofibrogenemia, and malignancy. COVID-19 has been demonstrated to generate a prothrombotic state leading to hypercoagulability. The patient's recent COVID-19 infection and positive lupus anticoagulant antibody together promoted a hypercoagulable state that was the nidus for cutaneous calciphylaxis and making this case of NUC induced by COVID-19 hypercoagulability a novel presentation of an uncommon disease.

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35253

Nonmelanoma skin cancers in skin of color solid organ transplant recipients

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Solid organ transplant recipients (SOTR) are at high risk for developing nonmelanoma skin cancers (NMSC), with 65-fold increased risk of squamous cell carcinoma (SCC) and 20-fold increased risk of basal cell carcinoma (BCC). Literature describing NMSC in skin of color SOTR, especially Native Americans (NA), is lacking. We designed a retrospective review study to characterize NMSC in skin of color SOTR seen at our institution, from 2000 to 2020. Data including demographics, transplant history, and skin cancer history was collected. Statistical analysis was done with Fisher exact test. A total of 1249 SOTR were identified (331 NA, 117 Hispanic and 722 White). Prior to transplant, 2.9% of Whites and none of the Hispanics or NA had a history of NMSC. Posttransplant, 15.8% of Whites, 7.83% of Hispanics, and 2.72% of NA developed at least one NMSC. Hispanics ($P = .023$) and NA ($P = 1.992 \times 10^{-11}$) had a significant decreased prevalence of posttransplant NMSC compared with Whites. The prevalence of BCC and SCC respectively in NA was 0.60% and 1.81%, versus 5.12% ($P = 7.51 \times 10^{-5}$) and 7.89% ($P = 3.64 \times 10^{-5}$) in Whites. The average time from transplant to NMSC was similar amongst races. Mean follow-up was 8 years. Regular dermatology visits were reported in 13.04% of Hispanics and 35.3% of NA. Our large cohort of skin of color SOTR, especially NA, provides valuable information to optimize and guide clinical decisions and care for these populations. Multicenter studies are needed to further characterize NMSC in various groups and address the shortage of diverse literature.

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33967

Nourishing fatty acid moisturizers provide superior barrier benefits in ex vivo skin

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A deficiency in lipids and ceramides is an indicator of a compromised skin barrier. Previous research has shown that skin can create new longer chain fatty acids and ceramides from topically applied fatty acid containing moisturizers, if successfully delivered, to help replenish the skin's barrier. It has also been previously shown that topically applied ceramides do not penetrate as effectively as fatty acids and are therefore not as efficient at replenishing the skin barrier. The objective of this research was to determine if moisturizers with fatty acids can more effectively repair barrier-disrupted skin than ceramide-containing moisturizers in an ex vivo model. Human surgical discard abdominal skin was obtained upon consent and the stratum corneum was removed by tape stripping. Following tape stripping, sites were treated with either a marketed fatty acid-containing moisturizer or a marketed ceramide-containing moisturizer. 3-mm punch biopsies were collected and embedded in a collagen matrix and maintained using standard organ culture techniques. Stratum corneum recovery was measured using confocal laser scanning microscopy (CLSM). The marketed fatty acid-containing moisturizers applied to the damaged stratum corneum resulted in an increased number of repaired corneocyte layers. These moisturizers showed a statistically significant increase in repaired corneocyte layers compared with the marketed ceramide-containing moisturizer. The results confirm that moisturizers containing fatty acids more effectively improve stratum corneum recovery following damage than moisturizers containing ceramides, highlighting the importance of moisturizer selection for optimal barrier repair.

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