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Dermoscopy findings and HPV genotypes of keratotic genital lesions: Bowe- noid papilloma, seborrhoeic keratosis, and condyloma acuminatum

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Objectives: To investigate the clinical, histopathological findings, immunohistochemical features and therapeutic methods of hidroacanthoma simplex (HIS). Methods: The clinical pre- sentation of HIS can be quite difficult, it is important to recognize the entity and differentiate it from the patient’s quality of life. Dermoscopy has proven to be a useful, non-invasive tool. However, there is still a lack of dermoscopic data comparing Bowenoid papilloma (BP), seborrhoeic keratosis (SK), and condyloma acuminatum (CA). More than 40 human papillomaviruses (HPV) have been identified as viral agents capable of inducing neoplasms. This study is conducted to find distinctive dermoscopic features and HPV genotype distribution of BP, genital SK, and CA. Dermoscopically, glomerular vessels were predominant in BP that appeared in 7 patients (70.0%). Hairpin vessels were the most common vascular structures that accounted for 12 cases of CA (66.7%). SK was the least vascular-patterned disease as no vessel was observed in eight cases of SK (66.7%). Mucosal pigmentation was observed in 6 cases (60.0%) of BP. Seven cases of BP (70.0%) were classified into flat. SK showed verruform appearances in seven cases (58.3%). Most cases had knol-like or finger-like appearance and whitish halo. All of BP and CA presented positive results in HPV DNA detection, while seven cases (58.3%) of SK had positive results. For the high-risk ge- notype, principally HPV 16, BP showed the highest detection rate with 90.0%. SK and CA showed 58.3% and 44.4%, respectively. For the low-risk genotype, principally HPV 6 fol- lowed by HPV 11, CA presented the highest detection rate, with 88.9%. BP and SK showed 40.0% and 8.3% detection rate, respectively. The coexistence of both high-risk and low-risk HPV was seen in three cases (30.0%) of BP, one case (8.3%) of SK, and six cases (31.3%) of CA. Dermoscopy can be useful for differentiating the entity of genital keratotic lesions above an invasive method and a physician should consider the morphological plectron of HPV- related keratosis in the genital area or the genital wart in the expanded concept.

Improving telemedicine services: Opportunities and challenges

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Implementation science has gained recognition for its potential to improve the integration of evidence-based practices into routine dermatology care. The COVID-19 Pandemic led to rapid telemedicine implementation by dermatologists worldwide. We aimed to use tools from implementation science to identify factors associated with the successful implementation of telemedicine during the COVID-19 crisis. An anonymous, online survey was distributed to Association of Professors of Dermatology (APD) members. It incorporated sub-scales from the Organizational Readiness to Change Assessment, measured a validated organizational characteristics that predict rapid telemedicine implementation by dermatologists with 91% in academic practice. All respondents (100%) implemented or scaled-up telemedicine during the pandemic. Most agreed or strongly agreed that they had sufficient training (68.6%), financial support (74.3%), and technical infrastructure (59.1%). Only 42.0% agreed that they had adequate staffing support. All providers agreed that telemedicine reduced travel time and expense for patients; additional COVID-19 specific advantages included continued follow-up care (84.6%) and work-life balance (73.9%). Barriers to telemedicine implementation included technology issues (62.9%) and challenges caring for vulnerable populations (51.4%). Overall, the hybrid model of synchronous video/audio visits with stored digital photographs was the most favored telemedicine modality (65.7%), and 90.6% of respondents reported telemedicine to be an acceptable or highly acceptable for medication monitoring. Importantly, 94.3% of respondents plan to use telemedicine after the pandemic. This study revealed that despite the advantages of telemedicine for dermatologists during the pandemic, there were clear limitations. In sum, our survey used is research methods to identify organizational factors that can be optimized to improve future telemedicine imple- mentation efforts in dermatology.

Moisturizer prevents skin barrier damage induced by prolonged face mask usage

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Prolonged wearing of face masks, a new daily practice for people due to the COVID-19 pandemic, introduces high levels of humidity locally to facial skin, which may have unex- pected skin health consequences. An IRB approved double-blinded, randomized, split-face clinical study was conducted to investigate skin properties after repeated prolonged mask usage by comparing skin inside and outside of the mask-covered areas. Twenty-one healthy female volunteers wore face masks for at least 6 hours every day for one week, with one side of their face treated with a moisturizer three times daily. On day 8, and after 5 hours of wearing the mask, facial skin properties (sebum, hydration and TEWL) were assessed at 15, 60, and 120 min post-mask removal, followed by barrier disruption and recovery evaluations. Mask usage compromised facial skin properties compared to uncovered areas, including significantly larger reduction of skin hydration (p = 0.02 at 15 min) and a weakened stratum corneum barrier in response to tape strip challenge (p = 0.01 after stripping). Sebum produc- tion also increased significantly (p = 0.01 at 15 min). Notably, applying a daily moisturizer mitigated these effects by significantly increasing and maintaining two-fold more hydration (p = 0.01) and strengthening barrier integrity against barrier challenge. Daily and prolonged usage of a facial mask, which is an essential personal and public health practice due to the Covid-19 pandemic, can create a high-humidity microenvironment, which may negatively impact skin properties. However, facial moisturizer can help maintain skin hydration and barrier under the mask.