#### 14233

### Higher human papillomavirus detection in Bowen disease in the pelvic area compared with the non-pelvic area: A retrospective study



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Bowen disease (BD) is synonymous with squamous cell caricinoma in situ (SCCIS) of nongenital skin regions. Human papillomavirus (HPV) infection is one of the known etiological factors of BD. However, in previous studies, the detection rate of HPV in BD greatly varies from 0% to 83%, depending on DNA detection methods and study papulation's characteristics. The objective of this study was to detect HPV DNA in BD samples using Ezplex HPV next generation sequencing (NGS) technique, which can detect 100 types of HPV. DNA was extracted from representative formalin-fixed and paraffin embedded (FFPE) tissue block of patients who was histopathologically confirmed as BD. In addition, we compared HPV profiles between pelvic and nonpelvic BD suspecting that detected HPV types in pelvic BD will predominantly be mucosal types, which is known to be sexually transmitted. FFPE tissue from 99 patients were studied. HPV was detected in 26 (26.3%) BD samples. 10 types of a-HPV genotypes was detected: HPV 16, 53, 31, 58, 66, 26, 27, 57, 45, and 72. The most common HPV type was 16 (12 patients, 12.1%). HPV detection rate was significantly higher in pelvic BDs (45.2%) compared with non-pelvic BDs (17.6%). In specific, mucosal a-HPV was detected significantly more often in pelvic BD (45.2%) compared with non-pelvic BD (14.7%). To our knowledge, this is the first study to use NGS technique in HPV detection in BD samples. The HPV detection rate, especially mucosal types, was higher in pelvic area. This study indicate the possible role of sexually transmitted mucosal HPVs to pathogenesis of BDs, especially in pelvic area.

Commercial disclosure: None identified.

#### 14273

# Navigating health insurance for unauthorized immigrants with severe dermatologic disease



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Unauthorized immigrants (UIs) face many obstacles in obtaining health care, often delaying treatment for diseases until they are life-threatening. The limited scope of resources for this population can be mitigated by increasing access to emergency insurance, which may be acquired for emergent conditions as defined by the Emergency Medical Treatment and Labor Act (EMTALA). We suggest certain dermatologic diseases be defined as emergent, including cutaneous malignancies such as melanoma, Stevens-Johnson syndrome/toxic epidermal necrolysis, erythroderma, cicatricial pemphigoid, and pemphigus vulgaris, among others. Classification of these conditions as medical emergencies is justified as each manifest with symptoms of sufficient severity to result in rapid deterioration and death in the absence of treatment. Thus, appropriate care may require transfer from clinics or hospitals with limited resources to institutions with specialized capabilities of treatment. Defining what constitutes a dermatologic emergency and developing appropriate guidelines for characterizing such conditions is imperative to propose legislation intended to cover costs for patients with these conditions. At present, each institution should consider developing protocols specifying which cutaneous conditions are emergent, taking into consideration the needs represented within their community. Dermatologists play a critical role in advocating for unauthorized immigrants to apply for emergency insurance by providing letters for patients to take to local state Medicaid offices. Letters should include the diagnosis, the emergent nature of the condition, and include any pertinent studies that may have been performed previously in a free clinic, such as pathology reports and imaging studies.

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### 14265

# Having the (b)lues: A case of malignant syphilis with paronychia and asymptomatic neurosyphilis



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Malignant syphilis (lues maligna) is regarded as a rare variant of secondary syphilis. As syphilis infection rates rise, dermatologists should be familiar with the features of malignant syphilis to ensure prompt diagnosis and treatment. A 56-year-old Chinese man presented with nonhealing ulcers of one-month duration. He was not forthcoming initially but subsequently reported recent sexual intercourse with multiple partners. On examination, multiple rupioid plaques and ulcers were noted on the penis, face, inner thighs and periungal regions. No neurological deficit was present. Skin biopsy of an ulcer on the inner thigh showed diffuse plasma cells and lymphocytes. Warthin-Starry stain was negative. Serum venereal disease research laboratory (VDRL) titer was 1: 256. Treponema pallidum particle agglutination assay (TPPA) was positive. Cerebrospinal fluid (CSF) VDRL titer was 1:8. Elevated CSF protein of 1.23 G/L was noted. CSF glucose, red cell and white cell count were normal. Human immunodeficiency virus (HIV) screen was negative. A diagnosis of malignant syphilis with paronychia and neurosyphilis was made. Ten days of intravenous crystalline penicillin G resulted in clearance of all plaques and ulcers. This case illustrates that malignant syphilis should be considered in the differential diagnosis of multiple rupioid plaques and ulcers, especially in the presence of highrisk sexual exposure(s). Patients may not be forthcoming with their sexual history, so a high index of suspicion is required. Histology from lesional skin may be nonspecific and syphilis serology should be performed. Lastly, malignant syphilis may be associated with paronychia and asymptomatic neurosyphilis.

Commercial disclosure: None identified.

### 14279

## Clinical and histologic predictors of subclinical extension of nonmelanoma skin cancers



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Background: Studies have previously looked at factors leading to subclinical extension (SCE) of nonmelanoma skin cancers. However, those studies were limited in scope or did not delineate among subtypes of cancers. In addition, factors such as lesion characteristics have not been studied (eg, prior treatment).

Methods: This was a retrospective chart review over a 6-month period. Only Mohs cases for NMSC were included. For each we recorded: stages required for clearance, cancer type, lesion characteristics (pre-op size and the time a lesion has been present), whether the lesion is recurrent, prior treatments, location, and patient characteristics (age, sex, smoking status, history of skin cancer, and immune status).

Results: 988 cases were reviewed, totaling 654 BCC, 178 SCC, and 156 SCC-in situ. The overall rate of SCE was 9% (BCC 10.4%, SCCis 10.9%, SCC 3.9%; P=.02). Though not statistically significant, other notable results were: a two-fold higher risk of SCE for high-risk zones vs low-risk zones according to Mohs AUC; some subtypes never had >2 stages (acantholytic, arising in AK, KA, pigmented, verrucous-hypertrophic); superficial multifocal BCC had  $\sim$ 2× higher rate (19% vs 9%) of SCE than the overall average for all NMSC.

Conclusions: The majority of NMSC are cleared in 1 or 2 stages. Given the  $2\times$  higher rate of SCE for smBCC, we might need to rethink how we view smBCC in terms of both Mohs surgery and other destructive methods. This project also seems to validate the AUC zones and Mohs in general for smBCC.

Commercial disclosure: None identified.

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