9-1-2021

26843 Carbon dioxide laser excision for hidradenitis suppurativa patients—Healing, complications, and recurrence in patients with diabetes mellitus and history of smoking

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Delphi method study in defining surgical site infection following Mohs surgery

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Background: Although the Centers for Disease Control and Prevention (CDC) has defined surgical site infection (SSI) as occurring within 30 days of a procedure and having certain characteristics, this definition is infrequently used in the dermatologic literature and among dermatologists.

Methods: A Delphi study was conducted among a national panel of 5 Mohs surgeons to assess consensus related to the definition of SSI following Mohs surgery. Consensus was defined when a scenario was rated as very important or absolutely essential by ≥80% of the experts.

Results: Sixty percent of experts were female, 40% had been in practice ≥21 years, and 80% were from academic settings. No consensus on SSI was achieved in the clinical scenario where the surgical site had warmth, swelling, or erythema without pain or discharge on postoperative day 7. Eighty percent of experts do not require positive wound cultures to diagnose a SSI. No experts were familiar with the CDC definition nor had standardized criteria for SSI. One expert noted in an open-ended question that “diagnosis of SSI can be challenging. While pain is often the very first sign of infection...on rare occasion, it is absent.”

Conclusions: Consensus on the definition of SSI is difficult to reach among Mohs surgeons, which implies that further refinement of the definition of SSI is needed to compare patient outcomes in dermatology. Based on the results of this study, we are currently developing a larger survey to administer to the members of the American College of Mohs Surgery.

Commercial Disclosure: None identified.

Analysis of cutaneous T cell lymphoma hospitalizations in the United States

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Background: There is paucity of national population studies on cutaneous T cell lymphoma hospitalizations in the United States (U.S.). This study aims to determine baseline characteristics and the most common reasons for hospitalization among patients with cutaneous T cell lymphoma (CTL).

Methods: Data were abstracted from the National Inpatient Sample (NIS), the largest inpatient hospitalization database in the U.S. The NIS was searched for CTL hospitalizations in 2016 and 2017 using ICD-10 codes “C86.0,” “C86.1,” and “C86.4” as the principal or secondary diagnosis. CTL hospitalizations included Sezary syndrome, mycosis fungoides and unspecified CTL.

Results: There were over 71 million discharges included in the combined 2016 and 2017 NIS database. 7,275 hospitalizations had an ICD 10 code for CTL. CTL Patients were mostly white (63.5%), male (56.4%), mean age of 65.0 years, mean hospital length of stay was 8.3 days and mean total hospital charges was $87,355. The top 5 reasons for CTL hospitalization by ICD-10 code system-based categories were: hemat-o-oncology 1,505 (20.7%), infections 1,590 (19.1%), cardiovascular 795 (10.9%), respiratory 515 (7.1%), and gastrointestinal 400 (5.5%). The top 5 most common specific principal diagnosis of CTL hospitalizations in descending order of frequency were sepsis from unspecified organism, admission for antineoplastic chemotherapy, CTL, acute kidney injury, and pneumonia from unspecified organism.

Conclusion: Patients with CTL are most likely to be hospitalized because of infections and their underlying hemat-o-oncologic disorders. Infection prevention/-control, and more focused hemat-o-oncology outpatient follow up for their underlying hemat-o-oncologic disorders are important in reducing the likelihood of hospitalization.

Commercial Disclosure: None identified.

Alopecia areata and risk of cancer varies based on type of malignancy

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Introduction: Alopecia areata (AA) is an autoimmune skin disorder characterized by patchy hair loss, most often on the scalp. Defects in the immune system and various autoimmune disorders have been shown to be associated with malignancy. However, the association between AA and cancer is not extensively studied.

Objective: To determine if an association exists between AA and various malignancies.

Methods: A systematic search of Pubmed, MEDLINE, Embase and the Cochrane Library was conducted. Case-control or cohort studies that assessed the association between AA and malignancy were included. DerSimonian and Laird random-effects models were used to calculate the pooled prevalence and odds ratios.

Results: After systematic search, 8 studies were identified and included for meta-analysis. AA was associated with reduced odds of nonmelanoma skin cancers (OR 0.61, P < .00001) but no association with melanomas. AA was also associated with reduced risk of gastric cancers (OR 0.70, P = 0.4), hepatobiliary and pancreatic cancers (OR 0.85, P = 0.4), and uterine and cervical cancer (OR 0.92, P = 0.5). AA was associated with increased risk of prostate cancer (OR 1.26, P < 0.0001) and thyroid cancer (OR 1.31, P = 0.008). No significant association was found between AA and oral, nasopharyngeal/esophageal, breast, colorectal, lung, kidney, connective tissue, or hematological malignancies, including lymphoma, leukemia, or multiple myeloma.

Conclusions: The risk of cancer in AA varies according to subtype of malignancy. AA appears to have decreased risk of a number of cancers by an unclear mechanism, possibly due to the negative effect of autoimmune diseases on carcinogenesis.

Commercial Disclosure: None identified.

Carbon dioxide laser excision for hidradenitis suppurativa patients—Healing, complications, and recurrence in patients with diabetes mellitus and history of smoking

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Introduction: Hidradenitis suppurativa (HS) is often refractory to medical and surgical interventions. Carbon dioxide (CO2) laser excision has demonstrated promising results for HS treatment.

Objective: We characterized the efficacy and safety of CO2 laser excision for HS in smokers and diabetics.

Methods: On initial data pull, 72 patients were identified. This number was reduced to 58 patients by including HS patients with all data points at Henry Ford Hospital who underwent CO2 laser excision between August 2014 to May 2017. Data were obtained from medical charts including healing and recurrence rates, complications, smoking status, and history of diabetes mellitus.

Results: The average age of our cohort was 37.5 years and mean BMI was 34.9. In total, 3 patients had recurrence at a mean of 6 months following the procedure. Postoperative complications included infection (n = 2), contracture (n = 2), dehiscence (n = 2), and paresthesia (n = 1). Patients with dehiscence were not smokers or diabetics. Two patients were smokers, and 26 patients were nonsmokers. The mean healing time in both smokers and nonsmokers was 6 months. Nine patients had a history of diabetes mellitus (DM), and 29 patients were not diabetic. The mean healing time was not significantly prolonged in diabetics compared to nondiabetics and was 7.5 months and 5.4 months, respectively.

Conclusion: Both smokers and nonsmokers demonstrated similar healing time, recurrence rates, and postoperative complications. Patients with DM had prolonged healing times when compared to those without DM. Our study identifies important characteristics that clinicians should consider when assessing HS patients for CO2 laser excision.

Commercial Disclosure: None identified.