In the United States (U.S.) data on keratinocyte carcinoma (KC) epidemiology has been derived from the Medicare population1 or regional data2. In Medicare patients, the ratio of BCC:SCC in 2012 was approximately 1:1 in patients aged 18-39, 40-64, and greater than 65 years old, the respective BCC to SCC ratios for 1,307,214 KCs, including 845,164 (64.65%) BCCs and 462,050 (35.35%) SCCs. For 1,053 unweighted psoriatic patients were identified from 2007 to 2015, of whom 259 had depression (24.6%). This amounted to 1,479,018 yearly weighted psoriatic patients (95% CI 1,321,254-1,636,781), of whom 365,091 had depression (24.7%, 95% CI 294,040-346,143). Compared to psoriatic patients without comorbid depression, psoriatic patients with depression were more likely to be female (p<0.001), had lower BMIs (mean 24.8, p=0.006) than patients who did not mean age 26 and mean BMI 26.6. Patients with acne prior to MI4 initiation were more likely to develop moderate or severe acne (p=0.013) No other clinical or demographic characteristics were found to be independent predictors of acne diagnosis or severity.

400 Rates of BCC relative to SCC are higher in younger patients, especially females


In a retrospective cohort study using medical records from a community health center which provides care to the LGBTQIA+ population for transgender patients treated with masculinizing hormone therapy, we examined the incidence of developing BCCs in the 5 years following hormone initiation. We sought to examine the incidence and severity of acne in patients treated with MHT and factors which may predict development of acne. We conducted a retrospective cohort study using electronic medical records from a community health center which provides care to the LGBTQIA+ population for patients who started MHT between 2014 and 2017 (n=1,054). Acne severity was categorized as severe if treated with isotretinoin, moderate if treated with oral antibiotics, and mild if treated with topical and/or no prescription treatments. Clinical and demographic factors including BMI, age, smoking status, testosterone levels, race, sexual orientation, employment, and comorbid disorders were tested for an effect on acne diagnosis and severity. Chi-square analysis, Fischer's exact test, independent samples t-tests, and subgroups were then assessed. A logistic regression model was performed for all factors p<0.05 to identify independent predictors of acne. 1,054 patients were included in the analysis. Overall prevalence of acne was 145/1054 (32.7%), including 280 patients (26.6%) who developed acne after MHT initiation, with an incidence of 12.4% within the first 6 months of MHT 20.9% within the first year and 21.6% within the first two years. Patients who developed post-MHT acne were younger (mean age 23 years, p=0.0003) and had lower BMIs (mean 24.8, p=0.006) than patients who did not mean age 26 and mean BMI 26.6. Patients with acne prior to MI4 initiation were more likely to develop moderate or severe acne (p=0.013) No other clinical or demographic characteristics were found to be independent predictors of acne diagnosis or severity.

402 Framing application site discomfort as an efficacy signal improves willingness to continue use of topical medications

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While the association between psoriasis and depression is well-established, studies investigating the impact of depression on health care expenditures are limited to adult psoriasis patients with commercial insurance or Medicare. We hypothesize that psoriatic patients with depression have higher health care expenditures than psoriatic patients without depression. This retrospective cross-sectional study pooled data from the Medical Expenditure Panel Survey (MEPS), a nationally representative sample of the non-institutionalized United States population, from 2007 to 2015. Patients with one or more psoriasis conditions were identified by a 3-digit ICD code (696). Demographics and health care expenditures were compared between psoriatic patients with and without comorbid depression using Rao-Scott chi2 and designs. Ishikawa Wallis, chi2 test, and framed the medication as working (C). Willingness to continue use of the medication was assessed using a 9-point Likert scale with 1 as “strongly not willing” and 9 as “strongly willing to continue use of the medication.” Physicians identified a clear drug culprit in 9 cases (18%), relying mostly on the clinical deterioration, intensity of symptoms, and the time delay between the start of the drug and the first signs of SJS/TEN. Physicians’ ability to determine culprit drug in SJS/TEN and areas for improvement are discussed.

404 Physicians’ ability to determine culprit drug in SJS/TEN and areas for improvement

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In the United States (U.S.), psoriasis is associated with multiple comorbidities and treated with systemic therapies that may increase the risk of serious infections. Our objective was to determine whether patients with psoriasis have a higher risk of hospitalization due to infection. We performed a cohort study of adult patients (≥18 years of age) with psoriasis delineated from the UK Clinical Practice Research Datalink (CPRD GOLD) and linked to Hospital Episode Statistics (HES) and national mortality records between 01/04/2003 and 31/12/2016. Each patient with psoriasis was matched to up to 6 individuals without psoriasis on age, sex, and primary care practice. Hospitalization due to infection was ascertained in the linked HES records. Unadjusted and adjusted stratified Cox proportional hazard models were estimated, with the adjusted model inclusive of potential confounders such as lifestyle factors and comorbid conditions. 69,312 patients with psoriasis and 318,589 matched controls were followed up for a median of 4.9 years (IQR 5.9) and 5.1 (IQR 6.3) years respectively. Patients with psoriasis had a higher incidence rate of serious infection (20.5/1000 person-years, 95% CI 20.0-21.0) compared with those without psoriasis (16.1/1000 person-years, 95% CI 15.9-16.3, p=0.001). The unadjusted hazard ratio for serious infection in patients with psoriasis was 1.46 (95% CI 1.42-1.50), and the adjusted hazard ratio was 1.36 (95% CI 1.31-1.40). Psoriasis is associated with an increase in the risk of serious infection. Further research is needed to understand the mechanism by which psoriasis predisposes to a higher risk of infection.

401 Health care expenditures of psoriatic patients with and without comorbid depression

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Physicians are more likely to have higher health care expenditures than psoriatic patients without depression ($6,707, 95% CI $5,164-$8,249) was significantly higher than psoriatic patients without depression ($3,184, 95% CI $2,778-$4,590, p<0.001). As comorbid depression in adults with psoriasis is associated with higher health care expenditures, identification and management of depression in psoriasis-related visits may improve treatment and reduce cost.