382 Utilization of dermatologic care by patients with advanced melanoma after initiation of immunotherapy and targeted therapy: A retrospective cohort analysis

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Patients with stage III and IV melanoma are living longer with the introduction of immunotherapy and targeted therapy. Despite National Comprehensive Cancer Network (NCCN) guidelines recommending regular patient follow up with dermatology for skin checks and modal assessments, little is known about actual health service use in survivors. This study aims to evaluate the utilization of dermatologic care by advanced melanoma patients focusing on employment of dermatologic services in order to determine areas of improvement. A retrospective cohort analysis of stage III and IV melanoma patients with age greater than 18 at the start of follow-up (immunotherapy / targeted therapy usage) was conducted at the Emory Clinic at the Winship Cancer Institute from January 1st, 2011 to September 14, 2020 was done. Data was collected from the Emory Healthcare Clinical Data Warehouse and then validated using manual chart review. Primary outcome is the number of visits to Dermatology clinic per year. Descriptive statistics were done in SPSS. Frequency distributions were determined from 77 patients who met study criteria. The majority of patients exclusively received immunotherapy (58%) while the minority were exclusively treated with targeted therapy (9%) or both (10%). The mean age at first dermatology follow up visit was 57.8 years old. The study population included 54.5% males and 45.5% females. The vast majority (90.9%) of patients were Caucasian or White. The mean number of dermatology visits per person-year was 1.9 visits. This did not statistically significantly differ (p=0.107) between patients treated exclusively with immunotherapy (1.8) and targeted therapy (2.4). Limitations include the fact that many patients obtained their dermatologic care at an outside clinic. Future research should examine optimal dermatologic follow up frequency for patients with advanced stage melanoma after immunotherapy and targeted therapy initiation.

384 Differences in musculoskeletal impact on health among patients with psoriasis based on disease type, disease severity and undiagnosed psoriatic arthritis (Psa)

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The National Psoriasis Foundation conducted a survey within a stratified sample of 1,405 patients with psoriatic disease in the United States. Participants provided demographics and were asked about a provider diagnosis of psoriasis, PsA, or both. All participants completed the IDQPs Psoriasis Musculoskeletal (MSK) Symptoms Impact of Disease Questionnaire. Pso severity was assessed using the Patient Reported Extent of Psoriasis Involvement (PREPI). Participants were screened for undiagnosed PsA using the Psoriasis Epidemiological Screening Tool (PEST). Analysis of variance was used to assess differences in MSK impairment over time from 3.5 months to 1 year among all patients, independently of diagnosis, while undiagnosed PsA and severity of Pso among patients with PsO only. Post-hoc tests were conducted to assess difference in MSK impact on health between individuals with Mild PsO (BSA < 3%), Moderate PsO (BSA = 3% - 10%) and Severe PsO (BSA > 10%). Among the 1,405 respondents, 662 (45.7%) had PsO only, 86 (6.1%) had PsA only and 677 (48.2%) had PsA and PsO. Of those with PsO only, 326 (50.8%) reported having Mild PsO (BSA < 3%), 215 (31.5%) reported having Moderate PsO (BSA = 3% - 10%) and 101 (15.7%) reported having Severe PsO (BSA > 10%). 201 (31.3%) of the PsO only patients had a PEST score ≥ 3, indicating the presence of undiagnosed PsA. Among participants with PsO only, psoriasis severity was not associated with having a PEST score ≥ 3 (p=0.381), based on results from a chi-square test for independence. Analysis of variance revealed that great MSK impact was associated with having PsA, having more severe PsO and having undiagnosed PsA.

386 Incidence, co-morbidity burden and resource utilization of psoriasis hospitalization has increased in the last decade: A 11-year longitudinal study of the national inpatient sample

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This study aims to study longitudinal trends of hidradenitis suppurativa hospitalizations over time in the United States (US) using national population data. Data were obtained from the National Inpatient Sample (NIS) database. Data analysis was conducted using R Studio version 1.3.1093. We identified 69,391 psoriatic patients treated between 1/1/1990 and 10/1/2020. Patients with prior cancer history or a competing autoimmune indication for immunosuppression were excluded. A principal or secondary diagnosis of hidradenitis suppurativa was assigned to patients, whether they used biologic therapy only (TNF-a, IL-12,23, or IL-17 inhibitors, n=1,427), nonbiologic systemic therapy only (n=2,739), or any combination of the two (n=1,859). A Cox Proportional Hazards model was used to analyze the association between hospitalization and select comorbidities relative to patients not receiving systemic treatment (n=51,022). Treatment with only biologic therapy resulted in a significant reduction in non-cutaneous cancer (HR 0.41 [0.32-0.53], p<0.001). A protective effect was also observed with excluding solid organ cancer (HR 0.64 [0.47-0.87], p<0.001), non-skin cancer (HR 0.99 [0.51-0.70], p<0.001). A similar pattern was observed with cutaneous malignancies, with greater protection observed in patients receiving biologic (HR 0.56 [0.43-0.71], p<0.001) vs. non-decide (HR 0.76 [0.64-0.88], p<0.001) or mixed regimens (HR 0.63 [0.52-0.76], p<0.001). Overall, our study suggests that systemic immunomodulation may reduce cancer incidence in psoriatic patients, particularly in the biologics only group.

387 Biologic and nonbiologic systemic treatment of psoriasis are protective against solid organ, hematologic, and cutaneous cancer in a large multi-institution cohort

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This study aims to study longitudinal trends of psoriasis hospitalizations over time in the United States (US) using national population data. Data were obtained from the National Inpatient Sample (NIS) database. We performed a retrospective 11-year longitudinal trend analysis of NIS 2008-2018 databases. We searched for hospitalizations for patients aged 18 years with a principal or secondary diagnosis of HS using ICD codes for the corresponding year. Multivariate logistic and linear regression was used to calculate adjusted p-trend for categorical and continuous outcomes, respectively. The incidence of adult HS hospitalizations in the US increased from 34 per 100,000 persons in 2008 to 52 per 100,000 persons in 2018 (adjusted p-trend<0.001), while that of blacks increased from 42.6% in 2008 to 47.7% in 2018 (adjusted p-trend<0.014). The proportion of Hispanics and Asians also increased from 7.1% & 2.5% in 2008 to 9.9% & 1.1% in 2018 (adjusted p-trend<0.001 & 0.003) respectively. The proportion of patients with Charleston co-morbidity index (CCI) score ≥ 2 reduced from 68.9% in 2008 to 76.2% in 2018, while those with CCI score of ≥ 3 increased from 11.1% in 2008 to 23.8% in 2018 (adjusted p-trend<0.0001). Inpatient mortality ranged from 0.3% to 0.6% across the years (adjusted p-trend<0.0001). The incidence and co-morbidity burden of hospitalizations of HS patients in the US has increased in the last decade. The proportion of hospitalized whites has reduced, with an increase in minorities such as blacks, Hispanics, and Asians. This may be due to minorities having less access to outpatient specialist care, hence increasing their rate of hospitalization. An inter disciplinary approach is essential in managing HS patients.