Dermatology visits account for a majority of dermatologic diagnoses: A representative sample of U.S. outpatient visits

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Given their prevalence, skin diseases are an important public health issue. In 2013, over 25% of the US population was impacted by dermatologic diseases, resulting in $75 billion in direct healthcare costs. Through 2010, non-dermatologists diagnosed a majority of skin diseases in outpatient visits. We sought to assess whether this was still true in 2016 and determine the most common dermatologic diagnoses seen in dermatology and non-dermatology practices. We assessed visits in the 2016 National Ambulatory Medical Care Survey, an annual representative survey of visits to U.S. outpatient physicians. We analyzed all diagnosis codes reported at visits with dermatologists and non-dermatologists to determine the most common dermatologic diagnoses. Observed visits were weighted to obtain a nationally representative estimate of all visits in the U.S. There were an estimated 49.9 million visits to dermatologists with 106 million dermatology diagnoses. The top 5 diagnoses for dermatologists were actinic keratosis, seborrheic keratosis, acne vulgaris, unspecified melanocytic nevi, and unspecified external cause. The top 5 dermatology diagnoses for non-dermatologists were unspecified dermatitis, rash and other non-specific skin eruption, unspecified viral infection, unspecified atopic dermatitis, and unspecified chalazion. Seborrheic keratosis, malignant neoplasm of the skin, melanin hyperpigmentation, melanocytic nevi, and actinic keratosis were the most commonly referred diagnoses to dermatologists. In 2016, dermatologists diagnosed a majority (50.2%) of skin diseases in the outpatient setting. The skin conditions most commonly seen by non-dermatologists differ from those seen by dermatologists. These differences as well as the top diagnoses for referrals can be used as a foundation for tailoring dermatology training for non-dermatologists.

Characterizing risk factors for hospitalization for psoriasis patients

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Psoriasis is a chronic autoimmune disease with a large economic impact. The objective of this retrospective study was to characterize patients who are hospitalized for psoriasis, and differentiate features for patients with a single hospitalization from those who are hospitalized multiple times during the study period. Hospitalized psoriasis patients were identified from an inpatient database at a single academic institution. Differences between psoriasis patients with one hospitalization and those with multiple hospitalizations were characterized, as were differences between patients who were hospitalized primarily for psoriasis and those who were admitted primarily for other reasons. Participants had 1378 hospitalizations of which 662 (47.4%) were their first hospitalization. Length of hospitalization was a median (IQR) of 9 days (6, 13) for 1-st hospitalization and 9 days (6, 13) for >1 hospitalization. Hospitalizations of patients with primary hospitalization were statistically different from those with multiple hospitalizations with patients with >1 hospitalization having a longer duration of hospitalization (P < 0.05) and being hospitalized for a longer median number of hospital days (15 days vs. 8 days). However, these differences were not statistically significant. Patients who were primarily hospitalized for psoriasis had a lower mean Charlson comorbidity score (1.5 vs. 3.4, P < 0.05), shorter hospitalizations (0.4 days vs. 3.1 days, P < 0.05) and a lower death rate (0% vs. 4.7%, P < 0.05) than those hospitalized for other reasons. Patients with a primary discharge diagnosis of psoriasis also had a trend toward lower average income by zip code, though this value was not statistically significant. Our findings affirm the importance of regular dermatologic care for psoriasis patients in preventing hospitalizations. Dermatologists should be aware of the risk factors for hospitalization for psoriasis patients and work to mitigate them, as well as encourage patients to seek dermatologic care.

Evaluating clinical features and the presence of eosinophilia in pityriasis rubra pilaris

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Pityriasis rubra pilaris (PRP) is a rare disease presenting with orange to salmon-colored folliculocentric papules on the trunk and extremities, waxy palmoplantar keratoderma, and hyperkeratotic nails. PRP literature remains limited, and its pathogenesis remains unclear, often resulting in missed or delayed diagnosis. Further, although a case study found eosinophilia in a PRP patient, hematologic abnormalities have not been extensively examined, sparking the interest to evaluate for an association between eosinophilia and PRP to enhance diagnosis. PRP patients from 1980-2020 at Mass General Brigham were identified. Demographics, disease presentation, and laboratory and pathology data were recorded. This study was approved by the Brigham and Women’s Hospital IRB. Student t-test and chi-square analysis were conducted to evaluate for differences; p≤0.05 was considered significant. 142 PRP patients were identified (55% male, 85% white); 82% were categorized as Type 1. 19% had had eosinophils in their PRP. Age at presentation for PRP was 40.3 years old, eosinophilia was 60.8±14.6 and 53.1±19.7, respectively (p≥0.03). Preventing symptoms included pruritus (13%), ocular dryness (4%), and hair thinning (4%). Lesions were present in the extremities (44%), face (33%), and head (29%), and head and face. Common biopsy findings included sparse superficial dermal perivascular lymphohistiocytic infiltrate (39%) and alternating ortho-/parakeratosis (37%). There were no significant differences in patient sex, race, disease presentation, or biopsy findings between the eosinophilic and non-eosinophilic cohorts. Mean eosinophil count in PRP patients with eosinophilia was 1195 cells/μl. There were 309 mean Charlson comorbidity score (1.9 vs. 2.8, P<0.05) and a lower death rate (0% vs. 4.7%, P<0.05) than those hospitalized for other reasons. Patients with a primary discharge diagnosis of psoriasis also had a trend toward lower average income by zip code, though this value was not statistically significant. Our findings affirm the importance of regular dermatologic care for psoriasis patients in preventing hospitalizations. Dermatologists should be aware of the risk factors for hospitalization for psoriasis patients and work to mitigate them, as well as encourage patients to seek dermatologic care.