16687

The economic value of dermatology resident consultations: A retrospective multi-institutional evaluation of hospital-based consultation

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Medicare funding for graduate medical education has been threatened, despite the important role residents play in academic medical centers. We sought to characterize the total amount and type of consultation work performed by dermatology residents, and compare that with the amount of Medicare funding hospitals receive for training residents. Hospital-based consults provided by Harvard dermatology residents at Brigham and Women's Hospital and Massachusetts General Hospital from March 1 to May 31, 2018 were reviewed. Procedures were coded according to the Current Procedural Terminology and converted into work relative value units (wRVUs), which were multiplied by the 2018 rate of $35.999. This value was then multiplied by 4 to generate annual estimates. The annual amount was divided by the number of residents on call, and compared with the Medicare Graduate Medical Education funding of $117,000/resident/year. There were 754 encounters on 389 patients from March 1 to May 31, 2018. The total wRVU during the 3-month period was 1094.9 which represented $40,014.29. For the whole year, the extrapolated wRVU was 4379.6 and corresponding value was $160,057.16. The most common payers were private insurance (48.5%), Medicare (33.2%), and Medicaid (13.9%). The overall financial value generated per resident was $80,028.58, which represented 68.4% of the Medicare stipend. This study suggests that hospital consult services led by residents may substantially offset costs associated with resident training. Future prospective studies may provide additional insight into total economic value generated by dermatology residents on call and underscore the importance of continuing to fund robust graduate medical education programs.

Commercial disclosure: None identified.

16709

Pyoderma gangrenosum: A report on clinical experiences of 22 cases treated at a tertiary referral center

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We report on the experience of 22 cases of pyoderma gangrenosum (PG) treated at the University of Arkansas for Medical Sciences from early 2014 to August 2019. The demographics and comorbidities of our patients are broadly in agreement with previous studies. Patients were predominately female (68%) with an average age of first diagnosis of 50 years. 36% had inflammatory bowel disease (IBD), either Crohn disease (18%) or ulcerative colitis (18%). Another 5% had a coincident diagnosis of primary biliary cholangitis (PBC) or primary sclerosing cholangitis (PSC). 5% had autoimmune hepatitis. 41% had a diagnosis of rheumatoid arthritis, psoriatic arthritis, or systemic lupus erythematosus. We report on treatments, paying special attention to treatment outcomes and adverse events. We observed a large variation in treatment outcomes between patients with comorbid gastrointestinal disease (IBD, autoimmune hepatitis, PSC, and PBC), a group in which 70% of lesions resolved by the end of the study period, versus those without comorbid gastrointestinal disease, a group in which only 17% of lesions resolved by the end of the study period ($P < .03$). The time elapsed between the last major onset of a PG and resolution (or last clinic visit if unresolved) was 19.6 months in patients with comorbid gastrointestinal disease versus 24.7 months in patients without comorbid gastrointestinal disease.

Commercial disclosure: None identified.

16725

Improving awareness of sun-related risks: An evaluation of UV light pervasiveness

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Introduction: Americans spend ~80% of their days inside. Being indoors may give patients a false sense of protection from UV rays, as not all glass windows filter ultraviolet A (UVA) light entirely. Therefore, this study sought to evaluate UV light exposure in indoor locations.

Methods: A UV light meter was used to measure UV exposure during peak sun hours (10am-4pm) in indoor locations around New Orleans, Louisiana. Data was collected from 25 locations: coffee shops, hospitals, public libraries, public buses, and streetcars. At each location, five measurements were taken from seating options next to a window. In addition, one measurement was taken from outside each location for a control, giving a total of 150 values.

Results and Discussion: 80% of the 25 locations had UVA exposure indoors, with the percentage of UVA measurements indoors ranging from 0.39% to 20.00% with an average of 4.59%. Only 5 locations had 0.00% UVA detection indoors. These results demonstrate that being indoors does not spare one from UV light damage, particularly UVA radiation. Health behaviors like sunscreen application may not account for this largely unrecognized risk. Patients may feel protected while indoors, leading to extended unprotected periods of time. This may affect patients who are photosensitive due to medications or conditions, or simply want to minimize their sun exposure to prevent malignancies or for cosmetic concerns. Therefore, we hope this information on UV light exposure indoors can help both physicians and patients be better informed and take preventative measures to mitigate this risk.

Commercial disclosure: None identified.

16742

Depression as a risk factor for the development of psoriasis

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Background: Depression has been linked to increased levels of inflammatory cytokines including TNF-α and IL-6, sharing some inflammatory cytokines associated with psoriasis. Moreover, depression is an independent risk factor for developing psoriatic arthritis in psoriasis patients, suggesting that depression may influence the disease course of psoriasis. Our study investigated whether depression increases the risk of developing psoriasis in the first place.

Methods: We conducted a retrospective cohort study using The Health Improvement Network database. Incident depression and general population cohorts were followed until the development of psoriasis, death, transfer out of practice or end of the study period (1986-2012). Observations were censored when psoriasis was not recorded during the study period. Cox proportional-hazards models were used to estimate the risk of psoriasis among patients with depression, adjusting for age, sex, comorbidities, socioeconomic status, alcohol use, smoking, obesity and antidepressant use.

Results: The incident depression cohort comprised 398,180 patients and the general population cohort contained 5,712,221 patients. After adjusting for all covariates, patients with depression had a 76% increased risk of developing psoriasis compared with the general population (HR 1.76, 95% CI 1.68-1.85, $P < .001$). Antidepressants were protective, where 1.38% of patients with depression who used antidepressants developed psoriasis compared with 2.10% of depression patients not using antidepressants ($P < .001$).

Conclusions: Depression is a significant risk factor for the development of psoriasis. This risk is mitigated by antidepressant use, though the exact mechanisms remain unknown. Healthcare providers should be aware of the influence of mental health on the development of dermatologic disease including psoriasis.

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