bidity (n=13), 10% reporting 2 (n=7), and 3% reporting 3 comorbidities (n=2).

Fatigue was the most frequently experienced symptom (n=41; 55%) (Table), followed by pain (n=24; 32%) and itch (n=16; 22%). Forty-six patients experienced at least 1 of the 3 symptoms (62%), while 27 patients reported at least 1 severe symptom (VAS >50 mm) (36%). Most patients with generalized morphea (n=15; 94%) and eosinophilic fasciitis (n=9; 75%) reported fatigue. Pain and itch were experienced most often by patients with eosinophilic fasciitis.

Fatigue, itch, and pain were significantly related to a lower disease-related quality of life (r=0.62, r=0.44, and r=0.43, respectively) (P<.01). Fatigue and pain, but not itch, were significantly associated with greater self-reported disease severity (r=0.39 and r=0.37, respectively) (P<.01). Fatigue was significantly related to a shorter duration since diagnosis of the sclerotic disease (r=0.27) (P<.05).

Comment. Fatigue, pain, and/or itch were experienced by 62% of patients (n=46). Fatigue was the most commonly reported symptom. Correlations with the DLQI, disease severity, and duration indicate that the physical symptoms were consequences of skin disease and might be particularly relevant in the early stages. Most patients with generalized morphea and eosinophilic fasciitis reported fatigue, and a substantial proportion of patients noted severe fatigue. Patients with eosinophilic fasciitis particularly reported pain and itch. In eosinophilic fasciitis, the sclerosis is more extensive and deeper than in localized morphea, and it is associated with peripheral eosinophilia. These facts may explain why patients with eosinophilic fasciitis experienced more pain and itch than other patients.

The study has several limitations, such as absence of a control group and small sample sizes, thus limiting comparison possibilities. Also, more detailed assessments of comorbidities and medications would be worthwhile. The disease severity was based on patient assessment rather than physician assessment. The questionnaires were not necessarily completed during a stage of active disease; thus, the presence and severity of symptoms might have been underestimated.2

This study describes the high impact of fatigue, pain, and to a lesser extent itch in patients with localized scleroderma and eosinophilic fasciitis. Physicians should be encouraged to assess these symptoms and, where appropriate, focus treatment on them.

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Analysis and interpretation of data: Kroft, de Jong, and Evers. Drafting of the manuscript: Kroft, de Jong, and Evers.

Critical revision of the manuscript for important intellectual content: Kroft, de Jong, and Evers.

Statistical analysis: Kroft. Administrative, technical, and material support: Kroft, de Jong, and Evers.

Study supervision: Kroft, de Jong, and Evers.

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YouTube as a Source of Information on Tanning Bed Use

YouTube is a free online video streaming service that allows users to view and share videos as well as post comments in a threaded discussion format. Since its creation in 2005, YouTube has grown immensely in popularity, currently offering over 59 million videos.1 YouTube is an ideal place to broadcast information and has increasingly become a public forum, hosting major events such as the CNN/YouTube presidential debates in 2007 and 2008.

Any user may post videos regardless of the message contained; this may be a source of medical misinformation. Two recent articles have found that YouTube has misinformation regarding immunization safety and utility,2 while another article found both positive and negative views on tobacco use.3 We thought that this might also be true of information on tanning bed use. Therefore, we undertook a search of YouTube for videos pertaining to tanning bed use, specifically on the safety, risks, and benefits of tanning.

Methods. On December 19, 2007, we searched http://www.YouTube.com for the following individual phrases: tanning bed, tanning booth, tanning salon, and tanning parlor. Videos were included in the study only if they commented on the pros or cons of tanning. Videos that appeared under more than 1 search phrase were reviewed once. Most videos reviewed were judged to be irrelevant to the study.

Videos were assigned to 1 of 3 groups based on overall tanning message: positive (described mostly the benefits or safety of tanning), negative (described mostly the risks and adverse effects of tanning or discouraged patients from tanning), or neutral. If specific benefits and risks of tanning were mentioned, that was also recorded. We also made note of whether the video appeared to be professionally made or amateur. All video...
results were viewed conjointly by both of us, but we independently assessed and categorized them. In cases of disagreement, final categorization of the video was made after a brief discussion and eventual agreement.

**Results.** All video results for each search phrase were reviewed by both authors (N=534). Seventy-two videos were relevant to the study. Of these, 39 were professionally made videos (54%), and 33 were amateur videos (46%).

Forty-nine videos took an overall positive position on tanning (68%) and 17 were negative (24%). Six videos were neutral, all of them discussing sunless tanning without mentioning tanning bed use (8%).

Of the tanning benefits cited in the 49 positive videos, 47 included appearance (96%). Two videos mentioned vitamin D as another benefit of tanning (4%).

The most common adverse events mentioned were burns (53%; n=9) and skin cancer (47%; n=8). Other adverse effects cited were wrinkles (18%; n=3); lack of cleanliness of tanning salons, booths, and/or beds (18%; n=3); and detriment to appearance (6%; n=1).

Twenty-five videos were advertisements for specific tanning salons (35%), while another 10 were advertisements for apartments or condominiums that had an onsite tanning bed (14%). We reviewed 1 American Academy of Dermatology–sponsored video that specifically mentioned skin cancer, burns, and wrinkling as adverse effects of tanning bed use.

**Comment.** Ultraviolet radiation is a known carcinogen; a recent systematic review linked ever-use of tanning beds with risk of melanoma and squamous cell carcinoma. Furthermore, tanning beds cannot be recommended to enhance vitamin D levels. Despite this information, our study showed that most of the videos on YouTube portrayed tanning positively and that most videos appealed to appearance. There were more advertisements for tanning salons than total number of videos surveying the dangers of tanning. Tanning salon owners have been aggressive in their marketing and have more rapidly adopted YouTube than has the dermatology community. Our search found but one video sponsored by the American Academy of Dermatology. Making additional videos to post on YouTube would be inexpensive, and exposure would be instantaneous. This may be an effective and economical way to broadcast accurate information and educate the public regarding the dangers of tanning.

It is important to recognize the Internet and Web sites such as YouTube as increasingly important and readily available sources of information to the public. Our patients may be using YouTube or other unreliable sources of information about tanning bed use. The dermatology community may be able to use these venues for broadcasting safer skin practices.

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**VIGNETTES**

**Efalizumab-Associated Guillain-Barré Syndrome**

We report a case of Guillain-Barré syndrome associated with efalizumab therapy for chronic plaque psoriasis.

**Report of a Case.** A 31-year-old Hispanic man with a medical history significant for psoriasis, Down syndrome, hypertension, and adult-onset insulin-dependent diabetes mellitus presented with lower extremity weakness of approximately 2 weeks’ duration, urinary incontinence, and a recent fall associated with the subsequent inability to either stand or ambulate. The patient had begun efalizumab treatment approximately 2 years prior to presentation to treat worsening plaque psoriasis in the absence of arthritic symptoms. His treatment regimen was continuously maintained at a dose of 1 mg/kg/wk with significant improvement of his psoriasis. Other medications regularly taken prior to admission included risperidone, insulin, metformin, lisinopril, sucralfate, and pantoprazole. The patient’s last dose of efalizumab was approximately 4 days prior to the onset of his neurologic signs and symptoms. Significantly, neither the patient nor his family reported any recent upper respiratory tract or gastrointestinal infections, vaccinations, or surgical procedures. There was neither a personal nor family history of neurologic disorders, including multiple sclerosis.

On physical examination, marked lower extremity weakness and positive bilateral Babinski signs were noted. The patient remained able to raise his upper extremities. Magnetic resonance imaging of the thoracic and lumbar spine revealed T6/T7 and T7/T8 disc herniations. A computed tomographic scan of the cervical spine showed no evidence of cord compression or disc herniation. A demyelinating process was suspected. Examination of the

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