harm reduction interventions. Our study introduces a novel methodology that may be used to contribute to research in the field of dermatology. Further studies are needed to confirm these findings.

Bez Toosi, MD
Sunil Kalia, MD, MHSC, FRCPC

Author Affiliations: Department of Dermatology and Skin Science, University of British Columbia, and Photomedicine Institute, Vancouver Coastal Health, Vancouver, Canada.

Corresponding Author: Bez Toosi, MD, Dermatology and Skin Science, University of British Columbia, 833 W 10th Ave, Vancouver, BC VSZ 4E8, Canada (toosi@alumni.ubc.ca).

Accepted for Publication: August 16, 2015.


Author Contributions: Both authors had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Both authors.

Acquisition, analysis, or interpretation of data: Both authors.

Drafting of the manuscript: Both authors.

Critical revision of the manuscript for important intellectual content: Kalia.

Statistical analysis: Authors.

Administrative, technical, or material support: Both authors.

Study supervision: Both authors.

Conflict of Interest Disclosures: None reported.


Nevus Anemicus and Bier Spots in Tuberous Sclerosis Complex

Vascular lesions, such as nevus anemicus and Bier spots, are benign functional abnormalities.1-3 Four patients described herein with tuberous sclerosis complex (TSC) had nevus anemicus or Bier spots.

Methods | A retrospective descriptive analysis was performed of skin signs in 29 sequential patients with TSC who were examined by the same dermatologist (D.L.) over 10 years. All patients had a definite diagnosis of TSC according to criteria from the 2012 International Tuberous Sclerosis Complex Consensus Statements.4 A detailed and complete dermatological examination was performed at least once in all patients. This type of study that does not involve invasive investigation but relies on a clinical examination performed during a regular consultation does not need the approval of an institutional review board under French law.

Results | Classic dermatological findings of TSC were observed in 29 patients (Table). The following 4 patients had nevus anemicus of Bier spots.

Patient 1. A woman in her 30s with renal cysts had angiofibromas, shagreen patches, and ungual fibromas. In addition, she manifested 2 subependymal nodules, cortical dysplasia, and renal angiomyolipomas, and she was found to have a TSC1 (OMIM 605284) mutation. Dermatological examination also revealed a nevus anemicus on the thorax.

Patient 2. As a young girl, this patient was thought to have TSC because she had epilepsy, cortical dysplasia, and hypomelanotic macules. She was first examined in the Clinic Dermatologique, Hôpitaux Universitaires de Strasbourg, when she was in her early 20s. Angiofibromas, 2 ungual fibromas, hypomelanotic macules, 2 shagreen patches, and dental enamel pits were noted, as was a left thoracic nevus anemicus (Figure). She also had subependymal nodules, renal cysts, and renal angiomyolipomas.

Patient 3. A 5-month-old boy with a history of cardiac rhabdomyolipomas found on antenatal ultrasonography and West syn-
drome had multiple retinal hamartomas, cortical dysplasia, a subependymal giant cell astrocytoma, and renal angiomylipomas. He was found to have a TSC2 (OMIM 191092) mutation. On dermatological examination, he had angiofibromas, 2 ungual fibromas, 2 shagreen patches, multiple hypomelanotic macules of the limbs and trunk, and dental enamel pits. Bier spots were noted on the upper limbs.

**Patient 4.** A young patient having TSC with angiofibromas and epilepsy had cortical dysplasia and renal angiomylipomas. On dermatological examination at age 18 years, he manifested angiofibromas, dental enamel pits, and hypomelanotic macules, as well as pale macules of the limbs, especially on the forearms, which were noted to be Bier spots.

**Discussion** | In this series, 4 of 29 patients with TSC (14%) had nevus anemicus or Bier spots. Nevus anemicus has been reported in patients with type 1 neurofibromatosis, phakomatosis pigmentovascularis, and port-wine stains. Bier spots are a common insignificant finding. These vascular manifestations could be minor cutaneous markers of TSC, occurring in a subgroup of patients with the disease. Compared with the aesthetically disfiguring facial angiofibromas, these minor skin signs may go unnoticed and are usually of no concern to the patient. Future research is needed to determine if these signs are significant within the context of TSC.

Chloé Sachs
Dan Lipsker, MD, PhD

**Author Affiliations:** Faculté de Médecine, Université de Strasbourg, Strasbourg, France (Sachs, Lipsker); Clinique Dermatologique, Hôpitaux Universitaires de Strasbourg, Strasbourg, France (Sachs, Lipsker).

**Accepted for Publication:** August 29, 2015.

**Corresponding Author:** Dan Lipsker, MD, PhD, Clinique Dermatologique, Hôpitaux Universitaires de Strasbourg, 1 Place de l’Hôpital, F-67091 Strasbourg CEDEX, France (dan.lipsker@chru-strasbourg.fr).

**Published Online:** November 18, 2015. doi:10.1001/jamadermatol.2015.3999.

**Analysis of Online Ratings of Dermatologists**

Online physician rating sites (PRSs) allow patients to recommend, grade, and publicly comment on physician performance. In 2015, PRSs experienced up to 6.4 million hits. Despite increases in the popularity of PRSs, little information exists regarding the online ratings of dermatologists. We investigated the patterns of ratings of dermatologists on commonly used PRSs to better understand the information available to patients online. We hypothesized that the mean online ratings for dermatologists are high, consistent with ratings reported in the literature for other subspecialties.

**Methods** | One hundred dermatologists were randomly selected from August 2 to 28, 2015, from a public list of 11,848 members of the American Academy of Dermatology. Institutional review board approval was not obtained because no patients were involved, data were obtained from public sources, and data are presented in aggregate. Five popular websites were searched for physician ratings: ZocDoc.com, Yelp.com, RateMDs.com, Vitals.com, and Healthgrades.com. Mean overall ratings (all websites used a 5-star scale), total number of ratings, and the number of negative comments were recorded for each dermatologist per website. A repeated-measures design was used to determine if mean 5-star ratings were consistent across different websites, and unpaired 2-sided t tests were used to analyze whether sex or subspecialty training had effects on ratings. The numbers of negative written comments were compared using a χ² test (critical value, 7.82; α = .05) to determine if certain websites had significantly fewer negative comments than other websites. Data analysis was conducted from August 19 to October 10, 2015.

**Author Contributions:** Both authors had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

**Study concept and design:** Lipsker.

**Acquisition, analysis, or interpretation of data:** Both authors.

**Drafting of the manuscript:** Both authors.

**Critical revision of the manuscript for important intellectual content:** Lipsker.

**Administrative, technical, or material support:** Lipsker.

**Study supervision:** Lipsker.

**Conflict of Interest Disclosures:** None reported.