testosterone and estradiol. Further research is needed on the subset of men who may be susceptible to 5α-reductase inhibitors.

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Comparative Prevalence of Complementary and Alternative Medicine Use Among Outpatients in Dermatology and Primary Care Clinics

Previous studies suggest that people with skin diseases use complementary and alternative medicine (CAM); however, it is not known whether CAM was used specifically to treat their skin disease. We conducted a survey to determine differences in CAM use for skin diseases between patients attending dermatology clinics and those attending primary care clinics.

Methods | Research participants were recruited from 1 outpatient dermatology clinic and 1 outpatient family practice clinic at the University of California, Davis, Medical Center from November 1, 2010, to March 31, 2011. A total of 217 respondents participated in the anonymous survey, and the response rate was estimated at 62%. The study and the survey were approved by the University of California–Davis Institutional Review Board for Human Subjects Research, and all respondents provided written informed consent.

Univariate and multivariate analyses were performed with the primary outcome of CAM use among the participants. All covariates were included in all univariate and

Table 2. Semen Characteristics

<table>
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<tr>
<th>Participant</th>
<th>Concentration, Million/mL</th>
<th>Motility, %</th>
<th>Morphology, % of Normal</th>
<th>Volume, mL</th>
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</table>

Abbreviation: LLRR, lower limit of the reference range.

a Abnormal values are boldfaced within the table cells.

The numbers 1 and 2 indicate first and second analyses, but not all participants underwent 2 analyses for all semen characteristics.

No morphology results were reported for participant 5.
multivariate models. In multivariate analyses, certain subcategories within a covariate factor were collapsed to preserve the degree of freedom and model stability. Statistical significance was set at $P < .05$. All analyses were performed using Stata, version 11 (StataCorp LP).

Results | The demographics of those who took the survey are outlined in Table 1. Overall, 13.4% and 39.2% of the respondents reported CAM use for skin-related and non–skin-related conditions, respectively. Univariate analysis for the use of CAM for skin-related conditions (Table 2) revealed no difference in CAM use between the dermatology and primary care clinics (odds ratio [OR], 1.44; 95% CI, 0.74-2.78, $P = .28$). Those of white ethnicity were less likely to use CAM compared with those of nonwhite ethnicity (OR, 0.19; 95% CI, 0.09-0.38, $P < .001$). Respondents having completed a college degree were less likely to use CAM for a skin-related condition (OR, 0.41; 95% CI, 0.20-0.87, $P = .02$) (Table 2 and eTable 1 in the Supplement).

Herbal therapies were the most commonly used CAM (eTable 2 in the Supplement) for both skin-related (58.6%) and non–skin-related (51.8%) conditions. For skin-related conditions, 82.6% of respondents noted improvement, 17.2% noted no change, and none reported worsening. For non–skin-related conditions, 90.7% of respondents noted improvement, 7.0% noted no change, and 2.3% of respondents noted a worsening with CAM use.

Discussion | This study compares CAM use patterns for skin-related conditions between dermatology and primary care outpatient clinics. Previous studies have inferred skin-related CAM use patterns based on subanalyses of broader surveys or direct measurement of CAM use among only dermatology outpatients. Here, we show that skin-related
CAM use is similar among those who do and do not attend dermatology outpatient clinics.

Our results suggest that CAM is used more often in chronic skin conditions (eg, acne and eczema) rather than in acute skin conditions. Herbal therapies are the most commonly used CAM and may reflect that CAM therapies typically rely on herbal treatments.

There are several limitations to this study. Our survey was limited to English, and the respondents were predominately of white ethnicity. Complementary and alternative edicine use is more prevalent among those who are nonwhite, and this may explain why our prevalence rates are lower than studies that have examined a more general US population. Our sampling is representative of Sacramento, California. Broader studies involving other regions are needed before drawing conclusions that would be relevant to a more general population. Because we conducted the survey anonymously, self-reported diagnoses could not be verified.

Physicians need to be aware that their patients may be engaged in CAM use for skin-related conditions, such as acne and eczema. Further clinical and basic science studies are needed to better understand their efficacy and mechanisms of action.

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Author Contributions: Drs Sivamani and Armstrong 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: Sivamani, Armstrong.
Acquisition, analysis, or interpretation of data: All authors.
Drafting of the manuscript: All authors.
Critical revision of the manuscript for important intellectual content: Sivamani, Armstrong.
Statistical analysis: Sivamani, Armstrong.
Administrative, technical, or material support: Sivamani, Armstrong.
Study supervision: Armstrong.

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**DIFFERENTIAL RADIATION DERMATITIS IN NATIVE SKIN AND AN AUTLOGOUS TRANSPLANTED MYOCUTANEOUS FLAP**

Differential Radiation Dermatitis in Native Skin and an Autologous Transplanted Myocutaneous Flap

In this case, radiation dermatitis (RD) is characterized by a differential response in 2 developmentally equivalent tissues from distinct anatomic locations.

**Report of a Case** | A man in his 50s presented with a gradually enlarging erythematous patch on the upper chest overlaying an area of surgery performed 12 years before for the removal of a neurotropic basal cell carcinoma (Figure A). Computed tomographic–positron emission tomographic scans revealed an infiltrative mass (10 cm) invading the osseous structures of the anterior chest wall and soft tissues of the neck, which prompted their radical resection. This was followed by reconstruction with an autologous myocutaneous free flap harvested from the anterolateral thigh (Figure B). After an uncomplicated 3-month postoperative course and flap “take,” a cumulative radiation therapy (RT) dose of 66 Gy (33 fractions) was delivered over 6.6 weeks.

During RT, the patient reported a pruritic, erythematous eruption outside the flap, but within the RT target volume. The eruption conspicuously spared the skin of the free flap. At an RT dose of 56 Gy in 23 fractions (5.6 weeks from start of RT), the patient developed a grade 2 RD outside the flap (Figure C). A grade 1 RD was noted over the flap, consisting of faint erythematous papules. In vivo dosimetry of sites exhibiting the differential pattern (Figure C, inset) excluded inconsistent dosing. Cultures from outside the flap in areas with erythema and pustules grew methicillin-sensitive Staphylococcus aureus. A 5-day course of oral antibiotics and topical corticosteroids improved the symptoms, with complete resolution by 12 weeks without recurrence.

**Discussion** | The reasons for RD relatively “sparing” skin within the transplanted flap are unknown. In a small series, the response of autologous split- and full-thickness grafts to RT ranged from pronounced radiosensitivity to relative radioresistance; fresh grafts (<3 months old) were prone to developing brisk and more vigorous reactions than normal skin, while older grafts (>1 year old) tended to be relatively radioresistant. The tolerance to RT was similar in grafts that were 3 months to 1 year old, and differential reaction patterns were not described. It was noted that recovery from RD may be delayed in fresh grafts or absent in old grafts.

Similar studies involving flaps are sparse. Wang et al found that the rate of acute toxic effects in some reconstructed...