

control of HIV viremia as well as by an immune restoration syndrome. This lag can last several months, during which the patient endures a dermatosis with intense pruritus as well as disfiguring facial lesions. These symptoms may severely affect quality of life and sometimes lead to the patients' experiencing a greater difficulty in accepting and continuing HAART. We would like to emphasize that such a relatively simple, topical treatment as 0.1% tacrolimus therapy can improve HIV-EF in a relatively short time. Topical tacrolimus therapy often improves pruritus in patients with HIV-EF in less than 1 week, and skin lesions improve in approximately 4 weeks, clearly much faster than with HAART alone. Furthermore, to our knowledge, our article is the first to report on the efficacy of topical tacrolimus therapy for HIV-EF. A few case reports describe the efficacy of topical tacrolimus in Ofuji disease (eosinophilic pustular folliculitis) in patients who do not have HIV,²⁻⁴ but it is still controversial whether HIV-EF is the same entity as eosinophilic pustular folliculitis in patients without HIV.⁵ Finally, we agree with Colebunders and colleagues that a randomized clinical trial should be performed in a large cohort of patients to confirm that there is an improvement in the control of HIV-EF with HAART and 0.1% tacrolimus when compared with HAART alone.

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1. Toutous-Trellu L, Abraham S, Pecheur M, et al. Topical tacrolimus for effective treatment of eosinophilic folliculitis associated with human immunodeficiency virus infection. *Arch Dermatol.* 2005;141:1203-1208.
2. Dale S, Shaw J. Clinical picture: eosinophilic pustular folliculitis. *Lancet.* 2000; 356:1235.
3. Hara D, Kuroda K, Mieno H, Tajima S. Treatment of eosinophilic pustular folliculitis with tacrolimus ointment. *J Am Acad Dermatol.* 2004;51(suppl):S143-S145.
4. Kawaguchi M, Mitsuhashi Y, Kondo S. Successful treatment of eosinophilic pustular folliculitis with topical tacrolimus. *Int J Dermatol.* 2004;43:608-610.
5. Tang MB, Tan E, Chua SH. Eosinophilic pustular folliculitis (Ofuji's disease) in Singapore: a review of 23 adult cases. *Australas J Dermatol.* 2003; 44:44-47.

Red Hairs, Number of Nevi, and Risk of Cutaneous Malignant Melanoma: Results From a Case-Control Study in Italy

Red-haired subjects have increased risk of cutaneous malignant melanoma (CMM). A meta-analysis of 46 epidemiologic studies published before September 2002 reports that red-haired subjects were at higher risk of melanoma than dark-haired ones, the pooled relative risk being 3.64 (95% confidence interval [CI], 2.56-5.37).¹ Higher nevus count is another well-established risk factor for CMM, regardless of hair color; however, Dellavalle et al² report that red-haired children had fewer nevi than children with other hair colors (mean count, 2.1 vs 6.1). Thus, the risk of CMM in red-haired subjects seems to be associated with some factor other than nevus count.

Data from a case-control study on CMM based on 542 cases and 539 controls were used to analyze the association between hair color, nevus count, and risk of melanoma. The proportion of red-haired subjects was 1.7% among cases and 0.7% among controls, and in this adult population, all red-haired subjects (n=13) had freckles. The mean number of melanocytic nevi was significantly lower among red-haired people than among those with other hair colors (6.2 vs 17.4).

Our data confirm that the risk of CMM was higher in red-haired subjects than in subjects with other color hairs, despite the lower number of nevi. Compared with subjects with all other hair colors, red-haired subjects had an odds ratio (OR) of 1.9 (95% CI, 0.5-6.9) after adjustment for sex, age, education, body mass index, solar lentiginos, propensity to sunburn, sunburn episodes, and tobacco smoking (adjusted), and an OR of 1.8 (95% CI, 0.5-6.7) after further adjustment for eye and skin color (fully adjusted) (Table). We repeated the analysis comparing red-haired subjects with black- and brown-haired subjects only, and the corresponding ORs were 3.0 (95% CI, 0.7-12.7) for the adjusted model and 2.7 (95% CI, 0.6-11.3) for the fully adjusted model (Table).

The population attributable risk³ for red hair was, however, less than 1% in this Italian population.

Risk of skin cancers, including melanoma, has been associated with several factors related to the so-called red-hair color (RHC) phenotype that implies red hair, fair complexion, inability to tan, and the tendency to freckle. On one side, red hair melanin is characterized by high ratio of pheomelanin to eumelanin,⁴ and it is well known that pheomelanin is a risk factor for skin cancer.⁵ A British study based on 20 subjects from the United Kingdom, Southeast Asia, and India revised this hypothesis and reported that susceptibility to UV radiation may be determined by factors other than the amount of pheomelanin or the ratio of pheomelanin to eumelanin in skin and hairs.⁶ On the other side, some variants of the human melanocortin 1 receptor (MC1R) gene that has a crucial role in determining human pigmentation were associated with increased melanoma risk.⁷ Three of these

Table. Distribution and Risk of Cutaneous Malignant Melanoma vs Controls by Hair Color

Characteristic	Hair Color		
	Red	Other Than Red	Black or Brown
Cases, No.	9	534	275
Controls, No.	4	533	325
Nevi, mean No. (95% CI)	6.2 (2.3-10.0)	17.4 (15.9-18.9)	15.7 (13.9-17.5)
OR (95% CI)			
Adjusted*	1.9 (0.5-6.9)	Reference	NA
Fully adjusted†	1.8 (0.5-6.7)	Reference	NA
Adjusted*	3.0 (0.7-12.7)	NA	Reference
Fully adjusted†	2.7 (0.6-11.3)	NA	Reference

Abbreviations: CI, confidence interval; NA, not applicable; OR, odds ratio.
*Adjusted for sex, age, education, body mass index, solar lentiginos, propensity to sunburn, sunburn episodes, and tobacco smoking.
†Adjusted as above with further adjustment for eye and skin color.

variants (called RHC variants) were associated with fair skin and red hair and also with melanoma risk independently of phenotypes, nevus count, and UV exposure.⁷ A study of 20 French melanoma-prone families found that RHC variants showed significantly increased penetrance of CDKN2A, the germline mutations of which predispose also to melanoma.⁷

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1. Gandini S, Sera F, Cattaruzza MS, et al. Meta-analysis of risk factors for cutaneous melanoma, III: family history, actinic damage and phenotypic factors. *Eur J Cancer*. 2005;41:2040-2059.
2. Dellavalle RP, Johnson KR, Hester EJ, et al. Children with red hair have more freckles but fewer melanocytic nevi: results from a cohort study of 280 three-year-olds. *Arch Dermatol*. 2005;141:1042-1043.
3. Bruzzi P, Green SB, Byar DP, Brinton LA, Schairer C. Estimating the population attributable risk for multiple risk factors using case-control data. *Am J Epidemiol*. 1985;122:904-914.
4. Naysmith L, Waterston K, Ha T, et al. Quantitative measures of the effect of the melanocortin 1 receptor on human pigmentation status. *J Invest Dermatol*. 2004;122:423-428.
5. Chin L. The genetics of malignant melanoma: lessons from mouse and man. *Nat Rev Cancer*. 2003;3:559-570.
6. Hennessy A, Oh C, Diffey B, Wakamatsu K, Ito S, Rees J. Eumelanin and pheomelanin concentrations in human epidermis before and after UVB irradiation. *Pigment Cell Res*. 2005;18:220-223.
7. Chaudru V, Laud K, Avril MF, et al. Melanocortin-1 receptor (MC1R) gene variants and dysplastic nevi modify penetrance of CDKN2A mutations in French melanoma-prone pedigrees. *Cancer Epidemiol Biomarkers Prev*. 2005;14:2384-2390.

In reply

We thank Naldi et al for examining their data for relationships between red hair color, freckles, nevus count, and melanoma risk.

When we submitted our finding to the ARCHIVES 1 year ago that young children with red hair have more freckles but fewer melanocytic nevi than those with other hair colors, a reviewer claimed that this relationship has been known for 20 years. As our requests for data supporting this statement went unanswered, we take this opportunity to ask any

one aware of the reference (or name of the investigator) that established this knowledge 20 years ago to please bring this information to our attention.

While we are pleased to see our results replicated and extended by examining the relationship in a case-control study that looks at risk of melanoma, we would be remiss to not mention another study failing to find the same association between redheads and mole counts that we reported.¹ That study of 193 Australian children aged 1 to 3 years failed to show a significantly lower nevus count in 13 redheaded participants (rate ratio of nevus count associated with red hair, 0.8; 95% CI, 0.5-1.3).

We agree that the relationship between red hair color, nevus count, and melanoma risk is complex and merits further investigation, including the molecular characterization of the melanocortin-1 receptor and other melanoma risk biomarker gene status in study participants with red hair.

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1. Whiteman DC. Melanocytic nevi in very young children: the role of phenotype, sun exposure, and sun protection. *J Am Acad Dermatol*. 2005;52:40-47.

VIGNETTES

Septic Vasculitis From a Femoral Artery Catheterization

Septic endarteritis following femoral arterial catheterization for intravascular procedures has a reported frequency of less than 1%.¹⁻³ Risk factors for septic endarteritis include repeat puncture, indwelling sheath for more than 24 hours, and hematoma formation after a procedure.² Patients can present from 2 to 14 days after a procedure with systemic manifestations of infection (fever, chills, and malaise) and commonly localizing symptoms (pain, erythema, edema, and purulent exudate).² However, early in the course, symptoms can be nonspecific.⁴ We describe herein a fatal case of septic endarteritis associated with a pseudoaneurysm of the femoral artery that occurred after a cardiac catheterization.

Report of a Case. A 77-year-old white man presented with painful, purpuric macules and papules on his right foot (**Figure 1**). The patient had recently undergone cardiac catheterization via his right femoral artery. He had no other complaints, was afebrile, and generally felt well.

The clinical impression was cholesterol emboli or vasculitis. A 4-mm punch biopsy specimen was obtained. Histopathologic analysis showed a vasculitis with many basophilic organisms, consistent with bacteria present within the vascular spaces. There was a perivascular infiltrate consisting of lymphocytes and neutrophils (**Figure 2A**). Gram stain revealed gram-positive cocci (**Figure 2B**). The clinician was immediately notified, and the patient was admitted to the hospital. Blood cultures