Lymphatic Mapping

Hama and colleagues synthesized IgG-conjugated near-infrared optical probes to map converging lymphatic drainage systems and image sentinel nodes. Using mouse models, they mapped lymphatic drainage patterns within axillary nodes draining both the breast and the upper extremity, cervical nodes draining both the ear and the upper extremity, and sentinel lymph nodes draining different anatomic locations. Separately and simultaneously visualizing drainage patterns from two separate lymphatic vessels may have implications for preoperative lymph-node mapping before resection, and it may reduce the risk of lymphedema after surgery for melanoma and other cancers. See page 2351

β-Galactosidase Staining in Nevi

Cotter and co-workers investigated the expression of senescence-associated β-galactosidase (SA-β-gal) in nevi from 17 adults that included congenital, common, and dysplastic histologic subtypes. The SA-β-gal (pH 6) staining protocol was used, as well as pH 4 (which optimally detects lysosomal β-gal) and pH 5. Although every specimen showed some positivity at pH 4, no specimen showed β-gal staining at pH 6. More specific and biologically relevant markers of senescence in vivo are needed to further test the hypothesis that melanoma may arise, in part, from either an escape from or failure to develop a senescent phenotype in nevomelanocytes. See page 2469

Multiple Self-Healing Squamous Epitheliomata

The great majority of cases of multiple self-healing squamous epithelioma (MSSE) have been attributed to a founder mutation that occurred in Scotland in the 18th century. Nine Scottish MSSE families have been identified as carrying the at-risk haplotype. D’Alessandro and colleagues performed haplotype analysis on MSSE patients of non-Scottish origin whose clinical phenotype was indistinguishable from Scottish MSSE. None of the tested family members shared the haplotype found in the original Scottish families. The authors conclude that MSSE is not caused solely by a founder mutation and may be less rare than originally thought. See page 2336

Culture Counts

Nijsten and colleagues used differential item functioning to study the effect of cultural background on the Dermatology Life Questionnaire Index (DLQI) and Skindex, the dermatology-specific quality of life (QOL) instruments most commonly used in international surveys and clinical trials. Data from 450 psoriasis patients who attended in- and outpatient dermatology centers in five European countries and the United States suggest that patients from different countries respond differently to a substantial proportion of DLQI and Skindex items despite having the same level of underlying QOL impairment. See page 2315

Nonmelanoma Skin Cancer Mortality Rates

Lewis and Weinstock analyzed U.S. mortality rates for nonmelanoma skin cancers (NMSCs) between 1969 and 2000; a total of 73,572 deaths were attributed to NMSC. The age-adjusted mortality rate arising on nongenital skin was 0.69/10^5/year and was twice as high among men as women. The mortality rate among white men exceeded that of black men by a factor of 2; mortality rates were also higher among white women than black women. Mortality rates for malignancies arising from genital skin were higher in women (0.54) than in men (0.30). See page 2323

Journal of Investigative Dermatology (2007) 127, 2289. doi:10.1038/sj.jid.5701075