Polymorphisms of the VDR gene are associated with presence of solar keratoses on the skin

Vitamin D has a range of biological effects including antiproliferative functions that are mediated through its receptors, encoded by the VDR gene. Polymorphisms within the VDR gene were investigated for association with solar keratosis (SK). One hundred and ninety people with SKs and 190 without were genotyped for Apal, TaqI and FokI polymorphisms. There was a significant difference in genotype frequency of the TaqI polymorphism between affected and unaffected populations (P = 0.008). The TT/tt genotype group was associated with a twofold increase in odds of being affected by one or more SKs. Individuals with fair skin and TT/tt genotypes had about a sevenfold increase, whereas fair-skinned people with the TI genotype had a fourfold increase in odds of being affected by SK. Individuals with TT/tt genotypes who were prone to burn and not tan on acute sun exposure had about a sixfold increase in odds of SK. Fair-skinned people with VDR-Apa AA/aa genotypes had about an eightfold increase in odds of being affected by SK compared with a fivefold increase in individuals with the Aa genotype and fair skin. The trend for homozygote genotypes to increase the odds of SK suggests that intermediate VDR activity may be important in photoprotection. Br J Dermatol 2008; 159:804–10.

Does autonomic dysfunction play a role in atopic dermatitis?

Atopic dermatitis (AD) is characterized by excessive skin dryness. The factor most commonly blamed for the pathogenesis of skin dryness is impaired barrier function of the stratum corneum. For all that, Cicek et al. found significantly prolonged sympathetic skin response latency and amplitude at the upper extremity in patients with AD. These findings demonstrate that the sudomotor activity controlled by the sympathetic nervous system is affected in patients with AD, and suggest that the involvement of sudomotor activity may be one of the causes that lead to dysfunction in sweat glands and skin dryness. Br J Dermatol 2008; 159:834–8.

Fractionated ALA–PDT vs. surgical excision in nodular BCC

To investigate the efficacy of 5-aminolaevulinic acid (ALA)–photodynamic therapy (PDT) vs. surgical excision (SE) in nodular basal cell carcinoma (nBCC) a randomized controlled trial was performed. In total, 171 primary nBCCs in 149 patients were treated with either fractionated ALA-PDT on the same day following tumour debulking (n = 83) or with SE (n = 88). Intention-to-treat analysis was performed. At 3 months, complete response rates were 94% (ALA-PDT) vs. 98% (SE) (P = 0.27). Cumulative failure at 3 years was 30.3% for ALA-PDT and 2.3% for SE (P < 0.001). In primary nBCC, SE is therefore preferred over ALA-PDT following this treatment regimen. Br J Dermatol 2008; 159:864–70.

Incidence of risk factors for myocardial infarction and other vascular diseases in patients with psoriasis

Recent studies have reported increased prevalence of diabetes and other risk factors for cardiovascular disease among patients with psoriasis. However, time relationships between onset of psoriasis and various risk factors have been unclear. Using the General Practice Research Database, Kaye et al. found that diabetes and other risk factors for heart disease develop more frequently than expected after an initial diagnosis of psoriasis (Figure). The incidence of myocardial infarction was also higher among patients with psoriasis than the general population. Although causes are uncertain, closer monitoring of patients with psoriasis for development of cardiovascular risk factors and disease may be warranted. Br J Dermatol 2008; 159:895–902.

Incidence of skin cancers in 3867 patients treated with narrow-band ultraviolet B phototherapy

Does narrow-band ultraviolet B (NB-UVB) phototherapy increase the risk of skin cancer? The effect of NB-UVB exposure treatment numbers on the risk of developing skin cancer was studied. Of 4690 records reviewed, 3886 records were linked with the cancer registry and 3867 followed up for at least 6 months before 31 December 2002. The median number of NB-UVB treatments was 29, with 352 patients receiving ≥ 100 treatments. The study gave 24 753 person-years of follow up. First skin cancers recorded in study patients were 27 basal cell carcinomas (BCCs), seven squamous cell carcinomas and six melanomas. There was no significant association between NB-UVB treatment and any skin cancer. There was a small increase in BCCs among those treated also with PUVA. These reassuring results do not demonstrate the early increase in skin cancers that was found to be associated with PUVA treatment. Br J Dermatol 2008; 159:931–5.