Expression profiling of radiation-induced genes in radiodermatitis of hairless mice

Radiation induces various cellular events leading to radiodermatitis. Lee et al. have established a radiodermatitis model using experimental animals and have examined the expression profile of radiation-induced genes. After microarray analysis, 130 genes that showed upregulation by radiation were selected and organized into four different clusters, depending on the time-kinetics pattern. Their results demonstrate the complexity of the transcriptional profile of the radiation response, providing important clues on which to base further investigations of the molecular events underlying radiodermatitis. Br J Dermatol 2006; 154:829–38.

Eruptive benign melanocytic naevi induced by biological response modifiers

Suddenly arising naevi have been associated with several conditions, such as internal disease, dermatological disorders, medication use, and ultraviolet exposure. Bovenschen et al. report three patients with de novo eruptive naevi during immunosuppressive therapy including the biological agents infliximab, etanercept, and alefacept. Treatment with these agents, which are increasingly being prescribed for skin diseases such as psoriasis, might be associated with the formation of eruptive naevi. Hence, this phenomenon is of direct relevance to dermatologists. Alertness to the development of naevi in patients using biologicals is indicated, although the risk of progress to malignant melanoma in these patients is unknown. Br J Dermatol 2006; 154:880–4.

Bone mineralization in children with epidermolysis bullosa

Bone mass was measured in 39 children with different types of epidermolysis bullosa (EB). Children with recessive dystrophic and junctional EB had low bone mass after adjusting for their smaller size, which may put them at risk for fragility fractures. Low bone mass was best predicted by the level of mobility, raising the hypothesis that improving activity or bone-loading may be a potential preventive intervention in these children. However, as low bone mass may be multifactorial in these children, more detailed investigation of potential aetiological factors is required before interventions are planned. Br J Dermatol 2006; 154:959–62.

Photodynamic therapy of acne vulgaris

Inflammatory acne vulgaris is a very common condition, and new effective and well-tolerated treatments are needed. Photodynamic therapy (PDT) is a new treatment for skin cancer and may be efficient in treatment of acne by selectively damaging the pilosebaceous unit and killing Propionibacterium acnes. Twelve patients with moderate to severe facial acne vulgaris had two full-face PDT treatments, which resulted in a 68% decrease in inflammatory acne lesions 12 weeks after treatment compared with no change in the non-treatment control group. The treatment was associated with severe pain during illumination and severe erythema after treatment. Br J Dermatol 2006; 154:969–76.