Research Snippets

Retinoic acid suppresses telomerase activity in HSC-1 human cutaneous squamous cell carcinoma

Activation of telomerase is crucial for the continued growth and progression of cancer cells. Because retinoic acid (RA) plays an important role in the growth and differentiation of keratinocytes and since RA has some preventive and therapeutic effects on human skin cancers, Kunisada et al. examined the effect of RA on telomerase activity of HSC-1 human cutaneous squamous cell carcinoma cells. From this study, treatment of HSC-1 cells with all-trans RA significantly suppressed their telomerase activity and phosphorylation of ERK and AKT. They indicate that RA is effective in inhibiting telomerase activity in HSC-1 cells and suppression of ERK and AKT activation is presumed to be involved in this inhibitory pathway. Kunisada M, Budiyanto A, Bito T et al. Retinoic acid suppresses telomerase activity in HSC-1 human cutaneous squamous cell carcinoma. Br J Dermatol 2005; 152:435–443.

 Longer term reassurance for the Ukrainian President, Viktor Yushchenko

This study, undertaken nearly 20 years after the July 1976 Seveso, dioxin poisoning industrial accident looked for long-term medical effects of its action. Plasma dioxin was strongly associated with chloracne, characterized by pale-yellow keratin cysts and larger and prominent comedones. Though several medical conditions have been reported in such chloracne cases, in this study their frequency and type did not significantly differ over controls. The latter will give some comfort to the recently elected Ukrainian Presidential candidate, Viktor Yushchenko, who on 5 September 2004, fell ill after having dinner with Ukrainian Security Services. Despite developing bad chloracne, his long-term health may be better prognosis than was earlier speculated. Baccarelli A, Pesatori AC, Consonni D et al. Health status dioxin levels in chloracne cases 20 years after the Seveso, Italy accident. Br J Dermatol 2005; 152:459–465.

Predictions of skin cancer incidence in the Netherlands up to 2015

Skin cancer is a growing clinical and public health problem, placing a heavy burden on dermatologists and general practitioners. Between 2000 and 2015, an 80% increase in the number of incident skin cancers is expected in the Netherlands, due to further increases in incidence rates and demographic changes. Strong increases in incidence rates of basal cell carcinoma (BCC) and melanoma are expected, also in young age groups. BCC is expected to increase on the trunk and limbs and to stabilise in the head and neck region. Without changes in current exposure, increases in skin cancer will continue after 2015.


Clinicopathological features of cutaneous lesions of adult T-cell leukaemia/lymphoma

Adult T-cell leukaemia/lymphoma is associated with human T-cell leukaemia virus type I (HTLV-I) can be diagnosed based on clinicopathological findings and the presence of monoclonal integrated HTLV-I provirus in the DNA of tumour cells. The cutaneous lesions in 80 patients with serum anti-ATL antibody, to clarify the correlation between macroscopic/histopathological findings and prognosis. The median survival time of patients with monoclonal proviral DNA integration in cutaneous lesions was 14 months, which was markedly shorter than that of patients negative for proviral DNA integration (72 months). Patients with papules and nodules had poorer prognosis than those with erythema. Histopathologically, the prognosis was poorer in patients with nodular or diffuse infiltration of medium-sized to large lymphoma cells, compared with those with perivascular infiltration of small to medium-sized lymphoma cells. Yamaguchi T, Ohshima K, Karube K et al. Clinicopathological features of cutaneous lesions of adult T-cell leukaemia/lymphoma. Br J Dermatol 2005; 152:76–81.

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