Pimecrolimus in atopic dermatitis: consensus on safety and the need to allow use in infants.

Atopic dermatitis (AD) is a distressing dermatological disease, which is highly prevalent during infancy, can persist into later life and requires long-term management with anti-inflammatory compounds. The introduction of the topical calcineurin inhibitors (TCIs), tacrolimus and pimecrolimus, more than 10 yr ago was a major breakthrough for the topical anti-inflammatory treatment of AD. Pimecrolimus 1% is approved for second-line use in children (>=2 yr old) and adults with mild-to-moderate AD. The age restriction was emphasized in a boxed warning added by the FDA in January 2006, which also highlights the lack of long-term safety data and the theoretical risk of skin malignancy and lymphoma. Since then, pimecrolimus has been extensively investigated in short- and long-term studies including over 4000 infants (<2 yr old). These studies showed that pimecrolimus effectively treats AD in infants, with sustained improvement with long-term intermittent use. Unlike topical corticosteroids, long-term TCI use does not carry the risks of skin
atrophy, impaired epidermal barrier function or enhanced percutaneous absorption, and so is suitable for AD treatment especially in sensitive skin areas. Most importantly, the studies of pimecrolimus in infants provided no evidence for systemic immunosuppression, and a comprehensive body of evidence from clinical studies, post-marketing surveillance and epidemiological investigations does not support potential safety concerns. In conclusion, the authors consider that the labelling restrictions regarding the use of pimecrolimus in infants are no longer justified and recommend that the validity of the boxed warning for TCIs should be reconsidered.