Introduction

Acitretin is a retinoid licensed for psoriasis, although it is also used in other skin conditions such as lichen planus, ichthyosis, Darier’s disease, cutaneous lymphomas, lupus erythematosus, granuloma annulare, keratoderma, pityriasis rubra pilaris and prevention of cutaneous malignancy in solar damage. Known side effects are teratogenicity, hyperlipidaemia, hepatitis, dryness of the skin and the mucosa, hair loss, arthralgia and myalgia, premature epiphyseal closure in children, headache or non specific symptoms such as malaise, nausea or sweating. Cutaneous bruising is another possible side effect that has not been previously reported.

Case description

We present a 58-year-old female patient with histologically proven Frontal Fibrosing Alopecia, who developed severe spontaneous bruising to minimal trauma on her face and arms after commencing acitretin two months earlier. (Figs 1 and 2). She is otherwise fit and well, takes no other medications and has no relevant medical history or family history.

The patient was also applying clobetasol propionate 0.05% ointment to her scalp, however she developed bruising in areas where she had never used topical steroids.

She had normal platelet count, coagulation screen and porphyria screen. Anti-thrombin III, protein C levels and lupus anticoagulant were all normal. Von Willbrand factor and factor VIII were also normal. Platelet function was assayed using aggregometry with platelet rich plasma. A panel of five agonists at varying concentrations were used and a normal response was obtained with all of them. The platelet nucleotide content and ratio were also normal.

The easy bruising gradually resolved 3 years after discontinuation of acitretin.

Discussion

Retinoids have shown to stimulate the synthesis and release of tissue-type plasminogen activator by cultured human synovial fibroblasts, suggesting a potential for increased fibrinolytic activity in vivo. Studies in normal human volunteers, following a single oral dose of etretinate, failed to show any influence on the fibrinolytic system. In the literature, there is one case of acitretin-induced subungual hemorrhage in a patient treated for palmoplantar keratoderma. In addition, another case of rectal bleeding associated with acitretin has been published. To the best of our knowledge, cutaneous bruising due to acitretin has not been reported before.

Conclusion

In conclusion, we report a patient who developed purpura after starting acitretin for Frontal Fibrosing Alopecia. We suggest that acitretin was the most likely cause and, to our knowledge, this is the first case report of such a complication.

References