We do feel, however, that their conclusion that early treatment of streptococcal sore throat may be beneficial for patients with chronic psoriasis is somewhat premature without a randomized controlled prospective study to support this assertion. We feel that a conclusion calling for further study in this area (as the authors have done for the effects of tonsillectomy) would be more appropriate.

The streptococcal M protein hypothesis is well-established and supports the link between streptococcal infection and a psoriatic flare. However, it has not been established that antibiotic intervention at an early stage of infection can abort the cross-reaction between M protein and human epidermal keratin and the ensuing T-cell activation which is strongly implicated in the pathogenesis of psoriasis.

In our systematic review of antistreptococcal interventions for guttate and chronic plaque psoriasis[2] we also postulated that antistreptococcal treatment may be beneficial in the treatment of both chronic plaque psoriasis and guttate psoriasis but stated that there is no good evidence to support this hypothesis. Equally there is no good evidence of lack of benefit and we would like to take this opportunity to call again for further study in this important area.

*Department of Dermatology, Burnley General Hospital, Burnley, and *Dermatology Centre, University of Manchester, Hope Hospital, Salford, Manchester, U.K.*
E-mail: carolineo@doctors.org.uk

C.M.OWEN
R.J.G.CHALMERS*
C.E.M.GRIFFITHS*

References

1 Gudjonsson JE, Thorarinsson AM, Sigurgeirsson B *et al.* Streptococcal throat infections and exacerbation of chronic plaque psoriasis: a prospective study. *Br J Dermatol* 2003; **149**: 530–4.
2 Owen CM, Chalmers RJ, O'Sullivan T, Griffiths CE. A systematic review of antistreptococcal interventions for guttate and chronic plaque psoriasis. *Br J Dermatol* 2001; **145**: 886–90.

Streptococcal infection may make psoriasis worse but do antibiotics help?: reply from authors

DOI: 10.1111/j.1365-2133.2004.06064.x

SIR, We thank Owen and colleagues for their constructive comments on our paper reporting exacerbation of chronic plaque psoriasis after streptococcal throat infections.[1] We certainly agree with them that a controlled prospective study is required for evaluating the effect of an early antistreptococcal treatment on patients with psoriasis. This is in fact what we intended to state in the last paragraph of our paper where we conclude 'that an early treatment of streptococcal sore throat *may* be beneficial for patients with chronic psoriasis' and 'a controlled trial for assessing the effects of tonsillectomy on patients with severe psoriasis should also be considered'. We are grateful to Owen and colleagues to give us the opportunity to reiterate more lucidly our view on this important issue.

*Department of Internal Medicine, University of Michigan Health System, Ann Arbor, MI 48109, U.S.A. and *Department of Immunology, Landspitali University Hospital, Reykjavik, Iceland*
E-mail: johannng@med.umich.edu; helgiv@landspitali.is

J.E.GUDJONSSON
H.VALDIMARSSON*

Reference

1 Gudjonsson JE, Thorarinsson AM, Sigurgeirsson B *et al.* Streptococcal throat infections and exacerbation of chronic plaque psoriasis: a prospective study. *Br J Dermatol* 2003; **149**: 530–4.

Granuloma annulare restricted to Becker's naevus

DOI: 10.1111/j.1365-2133.2004.06049.x

SIR, Granuloma annulare is a benign inflammatory skin disease usually localized to the distal extremities, although generalized, perforating and subcutaneous variants have also been identified. Becker's naevus is a common benign epidermal naevus, present in about 0·5% of young men. There have been rare reports of inflammatory dermatoses occurring solely within a Becker's naevus, including lichen planus[1] and acneiform lesions.[2–5] We report the first case of granuloma annulare occurring solely within a Becker's naevus, with no involvement of the remainder of the skin.

A 25-year-old man presented with a papular eruption on his left upper extremity. The eruption had started 3 weeks previously, with an increase in the number of lesions over that time. He had no symptoms of pain or pruritus. The patient also noted that this eruption occurred exclusively in an area of the left upper extremity which had developed darker pigmentation and excessive hair growth during adolescence.

On physical examination, there were multiple flesh-coloured 2–3 mm papules on the medial aspect of the left upper extremity. In addition, there was a large area of macular brown pigmentation with hypertrichosis, consistent with a Becker's naevus. The Becker's naevus extended from the left axilla to below the elbow, mostly on the medial aspect of the arm. The flesh-coloured papules were located exclusively within the Becker's naevus (Fig. 1). The remaining skin, nails, and mucous membranes were normal. A punch biopsy was obtained from a papular lesion. Histological examination of this specimen displayed a palisaded granulomatous dermatitis, with zones of mucinous necrobiosis of collagen, surrounded by mononuclear cells. The findings were diagnostic for granuloma annulare.

Reports of inflammatory dermatoses restricted to Becker's naevus are rare.[1–5] Terheyden *et al.*[1] reported the occurrence of lichen planus restricted to a large Becker's naevus, in a 50-year-old man with a Becker's naevus involving the right lower abdomen, thigh, leg and genitalia. The authors concluded that the occurrence of lichen planus entirely