iasis, but is also associated with vitiligo, lichen planus and viral warts among other conditions. It may also occur at pressure points and in recent scars, but is not commonly associated with sarcoidosis.[3,4]

More noteworthy, perhaps, is the occurrence of 'scar sarcoid' in which cutaneous lesions of sarcoidosis have been observed in long-standing scars, often on the knees. Scar sarcoidosis typically presents with purplish-red skin lesions which fade and become brown. It may be observed in the acute eruptive phase of sarcoidosis, following erythema nodosum or in scars following biopsy taken at that time. It may also occur in the later stages of the disease.[5] The scar, in our patient, had been present for more than 20 years and, unlike the typical appearance of cutaneous sarcoidosis, presented as a greyish swelling which subsequently became crusted in the later stages.

Unfortunately, there are no absolute diagnostic criteria for sarcoidosis and its aetiology remains obscure.[6] A diagnosis is therefore based on clinical findings, demonstration of non-caseating granulomata on biopsy and the exclusion of other granulomatous diseases. Systemic examination and chest radiograph in our patient proved negative.

Other useful tests include serum angiotensin converting enzyme, lysozyme and calcium metabolism, but are unlikely to be positive in a patient who has sarcoidosis with limited organ involvement. The Kveim test is infrequently performed nowadays, because the sarcoid antigen is not readily available and the test carries the risk of transmitting hepatitis B virus and human immunodeficiency virus to the patient. Its usefulness is also limited by the false positive and false negative results which may occur.[7]

Furthermore, most patients with sarcoidosis do not require treatment, and even those with extensive systemic and immunological abnormalities have only a minimal reduction in long-term survival[6]

Hanada and associates[8] described a patient who developed uveitis and symptoms similar to systemic sarcoidosis following extensive tattooing. The patient was extensively investigated, and lung specimens revealed the presence of red tattoo granules on electron microscopy, suggesting that certain tattoo pigments could be responsible for the systemic sarcoidal reaction.

Tattoo granulomata are relatively rare, and in previous years approximately 10 patients were seen annually in the United Kingdom. However, with the recent trend towards body tattooing being regarded as highly fashionable, there may well be an increase in tattoo-related pathology in the future, and uveitis associated with skin tattoos may become a more clearly defined entity.

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*References*

1. Mansour AM, Chan C-C. Recurrent uveitis preceded by swelling of skin tattoos. Am J Ophthalmol 1991; 111:515–6.
2. McElvanney AM, Sherriff SMM. Uveitis and skin tattoos. Eye 1994;8:602–3.
3. Champion RH, Burton JL, Ebling FJG, editors. Textbook of dermatology. Vol 2. Oxford: Blackwell Scientific, 1993;19:778.
4. Fitzpatrick TB, Eisen AZ, Wolff K, Freedberg IM, Austen KF, editors. Dermatology in general medicine. Vol 1. New York: McGraw-Hill, 1993;4:45–6.
5. Champion RH, Burton JL, Ebling FJG, editors. Textbook of dermatology. Vol 4. Oxford: Blackwell Scientific, 1993;57:2390–7.
6. Bresnitz EA, Strom BL. Epidemiology of sarcoidosis. Epidemiol Rev 1983;5:124–56.
7. Sheppard JD, Nozik RA. Practical diagnostic approach to uveitis. In: Tasman W, Jaeger EA, editors. Duane's clinical ophthalmology. Vol 4. Philadelphia: Lippincott, 1994;33:5.
8. Hanada K, Chiyoya S, Katabira Y. Systemic sarcoidal reaction in tattoo. Clin Exp Dermatol 1985;10:479–84.

# ERRATUM

**S. G. Levy, C. M. Kirkness, J. Moss, L. Ficker and A. C. E. McCartney. On the pathology of the iridocorneal–endothelial syndrome: the ultrastructural appearances of 'subtotal-ICE'. Eye 1995;9:318–323.**

In the Discussion section of this paper the first sentence of the third paragraph (p. 22, right-hand column, line 5) should read:

Normal endothelial cells were often damaged or necrotic at the boundary zone, suggesting that ICE-cells may have a toxic effect on neighbouring normal endothelial cells.