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Fuchs' heterochromic uveitis and sarcoidosis

Editor—Richard Goble and Philip Murray provide further interest in the possible cause(s) of Fuchs' heterochromic uveitis (FHU), in reporting five patients with suggested sarcoidosis, including four with raised serum angiotensin converting enzyme (ACE). In patients with sarcoidosis, increased production of ACE is attributed to activated cells within granuloma. In 'granulomatous' uveitis it is reasonable, even in the absence of systemic symptoms, to investigate for the possibility of sarcoidosis. However, it is rarely appreciated that ocular sarcoidosis is a possibility for this purpose. We therefore rely on indirect methods of diagnosis.

Weinreb1 measured ACE levels in normal controls and found that 4.2% had significantly raised levels. By comparison, those with 'granulomatous' uveitis but without evidence of systemic sarcoidosis, 44% had raised levels. His conclusion, that 'ocular sarcoidosis' may be diagnosed in the absence of systemic evidence, is tenuous, though unproved, and would explain a large subset of idiopathic uveitis. However, to extend this group to include forms of uveitis which are untypical of sarcoid related uveitis is mere speculation.

Fuchs' recognised feature of FHU, yet their appearance (small, dome-shaped, multiple, and translucent) and position (on the anterior iris surface, mostly peripupillary, scattered symmetrically) differentiate them from nodules seen in granulomatous disease (usually larger, fewer, often irregular in shape, sometimes buried within the stroma). Their presence in FHU cannot per se make a convincing case for a granulomatous aetiology. Indeed, Rothova et al1 in reporting four black patients with FHU and iris nodules, investigated for sarcoidosis and found no evidence (including normal ACE levels in all four cases). There is no patient with systemic sarcoidosis in the 184 strong Manchester cohort of FHU patients (Jones NP, unpublished data). Also, mutton fat keratic precipitates as described in two of Goble and Murray's patients are not considered to be an accepted part of the FHU spectrum and their appearance should lead one to reconsider the diagnosis.

The evidence for the relevance of raised ACE levels in a small number of patients with possible FHU is therefore unconvincing. The test has significant problems with both specificity and sensitivity, and raised levels are reported in as many as 17%1 in a population of non-sarcoid uveitis. The significance of raised ACE levels in four patients with possible FHU should therefore be statistically justified in the context of the authors' group of patients. Even should this reach statistical significance, the assumption that this represents a form of sarcoidosis is speculative.

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Determining the importance of eye diseases in Africa

Editor.—In Africa the public health importance of trachoma and xerophthalmia is often underestimated when based on routine surveillance data and even data from population based surveys of low vision and blindness. Surveillance data may under-represent occurrence because both diseases are prevalent in children who rarely complain of it and health personnel select samples so that they do not have an eye complaint. Population based surveys may under-represent occurrence if cluster sampling is used as this is a weak technique for detecting diseases with focal distribution. These problems are highlighted below using experiences on estimating the importance of these diseases in Ethiopia.

In 1978–80 the Ethiopian Nutrition Institute and the WHO conducted a nationwide assessment on the reporting of xerophthalmia in health centres and hospitals. The study concluded that the condition was rarely recorded.1 In the early 1980s two foci of vitamin A deficiencies were detected in famine-free areas in Arsi, Bale, and Gamu Gofa provinces.2 3 Trachoma was also heavily under-reported. In a study of eye conditions at three health centres, where all children under 10 years of age attending the centres for any reason were examined for eye diseases, prevalence of trachoma was 10-fold higher than previously suggested by hospital records.

In 1981 a population based survey of blindness was undertaken.4 The survey found a blindness prevalence of between 1.35% and 1.5% and trachoma was found to be the major cause. However, the survey failed to detect a high prevalence of xerophthalmia in the country. By chance the xerophthalmia foci were not selected when the random sample of clusters were drawn.

Because of the limitation of the methods discussed above health authorities should identify areas where the population is likely to be at high risk, because of the presence of known risk factors for that condition, and then undertake a sample survey of the children within the high risk areas. This should provide a more realistic insight into the magnitude of the problem in specific high risk areas and direct planning for targeted intervention.