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Letter to the Editor

Tuberculosis of the ear and a Nepalese experience

The resurgence of tuberculosis in general, and as it may affect the ear, has been attracting a great deal of attention. The success of antibiotic treatment has promised total conquest and eradication of tuberculosis.

Alas, contrary to expectations, tuberculosis has not been eliminated and great concern has been expressed at the increasing rate of new cases worldwide (Davies *et al.*, 1996). The so-called developing countries have been worst affected but the developed countries have not escaped either. Drug resistance (Drobniewski and Yates, 1997) and the rising cost of treatment have aggravated the worsening situation.

About 180 papers on tuberculosis mastoiditis of the ear had been published in the period of 1966–1997. Some of these papers and/or the relevant chapters of textbooks have contained periodic reviews of the literature (Jeanes and Friedmann, 1960; Friedmann, 1974; Windle-Taylor and Bailey, 1980; Friedmann and Arnold, 1993). There have been historical reviews tracing the ancient history and subsequent development of our knowledge of tuberculosis (Sekula, 1995). The paper by Ferrugia *et al.* (1997) is of considerable timely interest reminding us of the familiar diagnostic difficulties: the clinical presentation disguising the underlying mycobacterial cause of 'chronic otitis media'.

The 'Britain-Nepal Otology Service (BRINOS)', on two recent expeditions, led by Neil Weir, had collected 33 specimens from 31 patients, examined and treated there, for histopathological investigation performed at the Department of Cell Pathology (Dr A. B. Price) of Northwick Park Hospital, Harrow. Briefly summarized, we have diagnosed: epidermoid cholesteatoma in eight patients; cholesterol granuloma in two patients; tuberculosis of the ear in one patient. The majority of the specimens showed microscopical signs of chronic infection with aural polyps, non-specific granulations predominating. There were two cases of granulomatous myringitis.

The tuberculous patient was a Nepalese man, 55 years of age, who had been treated as a case of necrotizing external otitis disguising the true nature of his disease. Extensive surgical excision by the BRINOS surgeons provided a large amount of affected tissue and necrotic bone which was fixed in 10 per cent buffered formal-saline provided by the Department of Cell Pathology. Microscopy of the sections showed tuberculous granulation tissue with confluent tubercular nodules containing many Langhans type giant cells, and on special staining, numerous acid-alcohol fast bacilli considered to be *Mycobacterium tuberculosis*. On specific treatment the patient has been making steady progress. This case confirms the diagnostic difficulties involved and the widespread nature of tuberculosis.

The age of the patient may be of some interest, although no age group is safe. In the series (Jeanes and Friedmann, 1960; Friedmann *et al.*, 1993) the patients' age ranged from two to 74 and the two patients with tuberculous mastoiditis described by Buchanan and Rainer (1988) were a 53-year-old man and a 63-year-old English lady. The diagnosis of TB was delayed in the man by 25 years. The history of a recent patient (from Greece) confirms the diagnostic difficulties. This is a lady of over 50 years of age suffering from a discharging left ear for several months treated unsuccessfully as a simple otitis media. A biopsy, the sections of which we have received, showed florid tuberculous granuloma, with multiple tubercular nodules containing large numbers of Langhans type giant cells surrounded by epitheloid cells and an outside ring of lymphocytes. The patient has commenced specific anti-tuberculous treatment (by courtesy of Mr John B. Booth, Consultant ENT Surgeon). Utmost vigilance is required by surgeon and pathologist alike in the assessment of suspected cases of tuberculosis of the ear. (Hadfield *et al.*, 1995).

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