

## Letter to the Editor

### Ear involvement in systemic lupus erythematosus patients: a comparative study. *J Laryngol Otol* 116:103–7

Dear Sir,

We read with interest the article by Kastanioudakis *et al.* about the sensorineural hearing loss (SNHL) in systemic lupus erythematosus (SLE).<sup>1</sup> We have had a similar experience in a prospective study made in our lupus cohort. Between 1995 and 1998 we enrolled consecutively 91 SLE patients fulfilling four or more criteria of the American College of Rheumatology, from our Systemic Auto-immune Diseases Unit (Service of Internal Medicine, ‘Virgen de las Nieves’ University Hospital, Granada, Spain). In these patients we carried out a complete clinical (including the activity index, SLEDAI<sup>3</sup>), immunologic, audiometric and otolaryngologic assessment. Eighty-seven out of 91 SLE patients were women (ratio 12:1), the mean age was  $40.6 \pm 13.9$  (range: 17–68), the mean disease duration was  $96.2 \pm 58.6$  months (range: 20–240). They had a wide variability of activity index (range: 0–24), although in the majority of them was small (SLEDAI = 0 in 50.5 per cent; SLEDAI  $\leq 4$  in 78 per cent). A control group consisting of 87 sex and age-matched healthy subjects recruited from a consulting room of General Internal Medicine were included. SNHL of unknown origin was found in 14 SLE patients (15.4 per cent) and in two healthy subjects (2.35 per cent);  $p < 0.01$ . In SLE patients, the SNHL was bilateral in nine patients and unilateral in five and, in agreement with other authors, affecting mainly the high and middle frequencies.<sup>1,4</sup> SLE patients with SNHL, compared with SLE patients without SNHL, took a lesser accumulative dose of prednisone ( $p < 0.01$ ), but no differences were found with regard to age, disease duration, clinical manifestations, other drug therapy use, autoantibody profile and activity index. In conclusion, the frequency of SNHL of unknown origin in our SLE patients was mainly higher than in the control group and slightly lower than that reported by Kastanioudakis *et al.*<sup>1</sup>

After finishing this study, a 58-year-old woman having SLE five year ago suffered a unilateral sudden hearing loss coinciding with a clinical worsening of lupus. Five weeks later on an increased prednisone dose (60 mg/day), no improvement has been obtained. Similar cases of sudden SNHL has been described in the literature,<sup>5,6</sup> occasionally as a

first manifestation of SLE and often in association with anticardiolipin antibodies.<sup>7,8</sup> This syndrome, that includes acute or subacute onset of SNHL, is often accompanied by vertigo and tinnitus, and it may occur as a primary disorder in which no other organ involvement is evident. Besides SLE, it may complicate certain systemic disorders, including Wegener’s granulomatosis, polyarteritis nodosa and Cogan’s syndrome. In any case, the mechanism by means of ear is damaged in SLE patients remaining unknown,<sup>9</sup> and further studies are needed in order to elucidate its pathogenesis.

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