

Letters

Epilepsy: an early symptom of systemic lupus erythematosus

Sir: Epilepsy is an important feature of patients with systemic lupus erythematosus. Many early reports described fits in patients terminally ill with systemic lupus erythematosus, although some reported the presence of epilepsy in milder cases. A few noted that, in occasional patients, seizures occurred before the onset of other features of the disease.¹ We have been impressed by the number of systemic lupus erythematosus patients whom we have seen who give a past history of epilepsy. We therefore studied the case notes of 161 consecutive patients with systemic lupus erythematosus seen recently in our unit in order to determine the percentage who had had epilepsy at some stage, and the proportion of those who had had seizures before any other manifestation of the disease. All patients fulfilled the revised ARA criteria.²

Our results are shown in the table. Sixteen (10%) of the patients had epilepsy at some stage of whom seven (4.4%) had their first fit before the onset of other features of systemic lupus erythematosus, and eight (5%) afterwards. In the former group petit mal and grand mal seizures occurred in approximately equal proportion, while in the latter group grand mal fits predominated. The figure expresses these time relationships graphically. It can be seen that epilepsy presented as early as twenty to thirty years before the onset of other systemic lupus erythematosus features in some patients (that is in childhood). There was a cluster of first fits in the three years following the onset of other features of sys-

temic lupus erythematosus. Fifteen of the patients are still alive; epilepsy did not occur during the terminal illness of the one who died.

The prevalence of idiopathic epilepsy in the United Kingdom has been estimated at around 0.55%.³ The apparent eightfold increase in this figure to 4.4% in our "pre-morbid" systemic lupus erythematosus patients supports the notion that epilepsy (whether petit or grand mal) which antedates the onset of definitive systemic lupus erythematosus may in some cases represent a first manifestation of their connective tissue disease. A parallel may be drawn with past histories of "rheumatic" or "glandular fever" reported by some of our patients.⁴ All of our sixteen patients were positive for antinuclear factor and antibodies to double-stranded DNA. Twelve (75%) had antibodies to extractable nuclear antigens (ENA) of whom six (38%) had antibodies to Ro (SSA). Ten out of 15 (67%) had antibodies to phospholipid demonstrated by solid phase radioimmunoassay; this figure corresponds well with an increased reported incidence of neurological disease in systemic lupus erythematosus patients with anti-phospholipid antibodies.⁵ We were unable to obtain serum dating from before the onset of systemic features of systemic lupus erythematosus in any of our patients. Only by prospective autoantibody testing will it be possible to determine the proportion of individuals with "idiopathic" epilepsy who will subsequently develop recognisable systemic lupus erythematosus.

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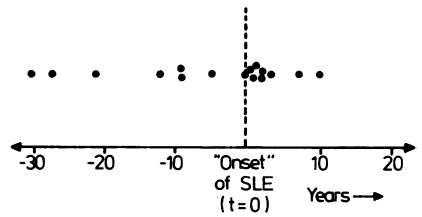


Fig Time of onset of epilepsy (in years) in relation to the onset of other manifestations of systemic lupus erythematosus ($t = 0$).

References

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Table

Category of Patient	Number	%	Mean Age at $t = 0^*$ (yr)	Mean Age at onset of fits (yr)	Type of epilepsy	APA pos+	ENA pos+	Ro pos+
Epilepsy at any time	16	100	28.9	24.0	{ Petit mal 4 Grand mal 10 Focal: 1 }	10 15	12	6
First Fit before $t = 0$	7	44	31.2	15.8	{ Petit mal 4 (one changing) grand mal 3 to grand mal }	5	4	1
First Fit at $t = 0$	1	6	25.0	25.0	Grand mal	†	—	—
Fist Fit after $t = 0$	8	50	27.3	31.0	{ Grand mal 7 Focal: 1 }	5	8	5
Total Number of Patients Studied	161							

* $t = 0$ refers to the time at which clinical features of SLE other than epilepsy first appeared.

†number of patients positive for antiphospholipid antibodies (APA) and antibodies against ENA and Ro (SSA) respectively. fassay not performed.