FRI0128 THE AGE DISTRIBUTION OF THE FOCAL HYPERINTENSITIES IN BRAIN MR IN PATIENTS WITH NEUROPSYCHIATRIC LUPUS

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Background

Objectives The authors determined the extent of central nervous system affection in patients with systemic lupus erythematosus (SLE) by the means of brain magnetic resonance (MR). The results were correlated with the controls and the results were compared statistically.

Methods Brain MR investigation was made by the routine protocol (T1 and T2 weighted images, FLAIR mode, transversal and sagittal scans) in 1.5T MR machine. 60 patients of all 3 groups (SLE, MS and controls) were investigated. The patients were divided into 3 groups due to the age distribution: 18–39, 40–49, 50 and more years.

Results In the patients with neuropsychiatric lupus the focal white matter hyperintensities in FLAIR mode were the most common findings. Their distribution was most often present in frontal and parietal lobes, where the average numbers of foci were 9.8, resp. 8.4. While in occipital and temporal lobes the average numbers of foci were significantly lower, it appeared 2.2, resp. 2.3. Among SLE patients aged from 50 to 59 years the focal hyperintensities were the most common (the average number of foci was 8.4), which was statistically significant in comparison with both other age groups of patients. The distribution of focal hyperintensities in control group appeared different.

Conclusion MR method is the most sensitive method for establishing the central nervous system involvement in SLE patients. The number of focal hyperintensities was determined to be statistically different between SLE controls in all three age groups.

REFERENCES

- 1 Dostál C, Peterová V, Paleková A. *et al.* Cerebral disease in SLE: selected autoantibodies and major central nervous system disorders. *Lupus* 1996;**5**:44
- 2 Hachulla E, Michon Pasdurel U, Leys D, *et al.* Cerebral magnetic resonance imaging in patients with or without antiphospholipid antibodies. *Lupus* 1998;**7**:124–31
- 3 Kent L, Hayner DR, Longstreth WT, *et al.* The clinical efficacy of magnetic resonance imaging in neuroimaging. *Ann Intern Med.* 1994;**120**:856–61
- 4 Peterová V, Dostál C, Obenberger J, *et al.* MRI findings in patients with lupus erythematosus. *Eur J Neurol.* 1997;**4**:123
- 5 Peterová V, Dostál C, Seidl Z, *et al.* Postžení mozku u nemocných se SLE (Popis 2 případů). *Ceská Revmatologie* 1998;**275**:178–81
- 6 Rovaris M, Viti B, Ciboddo G, *et al.* Brain involvement in systemic immune mediated diseases: magnetic resonance and magnetisation transfer imaging study. *J Neurol Neurosurg Psychiatry* 2000;**68**:170–7

FRI0129 LUPUS AND PURE RED CELL APLASIA

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Background Pure Red Cell Aplasia (PRCA) is characterised by normochromic normocytic anaemia, reticulocytopenia and aplasia or severe hypoplasia of the red cell line with normal white cell and megakaryocyte lines in the bone marrow.¹ PRCA may be associated with other conditions,² but the association with systemic lupus erythematosus (SLE) is rare. Here we summarise

our case and the previous cases of PRCA and SLE reported in the English literature.

Objectives To evaluate the clinical and laboratory features of all the patients reported with both SLE and PRCA.

Methods In addition to case, cases were identified from the English literature through a search using the Medline from the year 1966 till December 2000, and also through references of relevant publications.

Results Twenty-four cases, including our case were identified. The association between SLE and PRCA is relatively rare. However it may be underdiagnosed. In most of the cases SLE was diagnosed prior to or concomitantly with the diagnosis of PRCA. The clinical and laboratory features relevant to SLE in our patients are similar to the general patients of SLE, except for significantly less pleuritis and a trend for less nephritis, hallucinations, thrombopenia and leukopenia. Most of the patients had no clinical or laboratory activity at the time of PRCA diagnosis. In some patients as in the general patients with PRCA, inhibitory effect of the patient's serum against erythroid progenitor cells and against erythropoietin (EPO) were identified. In most of the patients PRCA responded to corticosteroid (CS) treatment, and in some of the non-responders other modalities of treatment like intravenous gammaglobulins and even EPO were helpful.

Conclusion The association between PRCA and SLE is relatively rare. The clinical and laboratory features relevant to SLE in our patients are similar to the general patients with SLE, and the spectrum of inhibitory effect on the erythroid progenitor cells and EPO are similar to the general patients with PRCA. Most patients had favourable response to CS treatment.

REFERENCES

- 1 Schmid JR, Kiely JM, Pease GL, Hargraves MM. Acquired pure red cell aplasia. *Acta Haematol.* 1963;**30**:325
- 2 Amus SS, Yunis AA. Acquired pure red cell aplasia. *Am J Med.* 1987;**24**:311–26

FRI0130 RELATIONSHIP BETWEEN PRESENCE OF NEUROLOGICAL SYMPTOMS AND ACTIVITY OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Background According to many authors presence of neurological symptoms are features of disease activity in patients with systemic lupus erythematosus. Clinical observations very often do not confirm this hypothesis.

Objectives To assess if neurological symptoms correlate with disease activity in patients with systemic lupus erythematosus.

Methods The study was performed on 83 patients with SLE (77 women and 6 men), age 17–63 years mean age 33.8 yrs), disease duration was 1–30 years (mean 9.05 yr). Every subject was assessed at least two times by rheumatologist and neurologist during different stages of SLE activity. SLE activity was assessed according to SLEDAI scale. Haematological, biochemistry and coagulation tests were performed for everyone. In some cases histopathological assessment of tissue samples were done. Electrophysiological tests (EEM, EMG, BAEP, VEP) and cerebral CT, MRI and SPECT scans were performed in subjects with neurological symptoms. All the subjects were tested for the presence of antinuclear antibodies, (ANA), anticardiolipin antibodies (aCL), anti-B2-glycoprotein antibodies and antiendothelial