

## Sensitivity and Specificity of Anti- $\alpha$ -Fodrin Antibodies in Primary Sjögren's Syndrome

To the Editor:

We read with interest the report by Ruffatti, *et al*<sup>1</sup>, whose results correspond to our recent findings suggesting a low sensitivity and a high specificity of IgA and IgG-type anti- $\alpha$ -fodrin antibodies.

In 1998, at the Department of Clinical Immunology, University of Debrecen, we investigated anti- $\alpha$ -fodrin antibodies in 67 patients with primary Sjögren's syndrome (SS), 20 with rheumatoid arthritis (RA), 21 with systemic lupus erythematosus (SLE), 20 with secondary SS associated with RA, and 17 with secondary SS associated with SLE, and in 30 healthy blood donors. Autoantibodies against class IgA and IgG-type  $\alpha$ -fodrin were detected by the same commercial ELISA kit used by Ruffatti, *et al*. In the year 1998, European Community Study Group criteria<sup>2</sup> were used to diagnose SS. The sensitivity for IgA and IgG anti- $\alpha$ -fodrin for SS was 37.3% and 38.8%, respectively. The specificity was 93.3% for both isotypes<sup>3</sup>.

In 2003, we repeated the measurement of anti- $\alpha$ -fodrin in the sera of 46 patients with SS and healthy blood donors, using the American-European Consensus criteria<sup>4</sup> for SS and using the same ELISA kit for detection of antibodies. The sensitivity for IgA and IgG anti- $\alpha$ -fodrin was 17.3% and 28.2%, the specificity 93.3% and 100%, respectively.

Similarly to Ruffatti, *et al* we also concluded that the antibodies against anti- $\alpha$ -fodrin are not sufficiently sensitive for diagnostic markers for SS, especially after the diagnostic criteria have been made more rigorous. Interestingly, we did find correlation between the presence of anti-SSA and IgG-type anti- $\alpha$ -fodrin autoantibodies, and we suggest using anti- $\alpha$ -fodrin autoantibodies in screening patients followed serologically and clinically for early diagnosis of SS.

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## Dr. Ruffatti, *et al* reply

To the Editor:

We thank Dr. Szántó and colleagues for their interest in our article<sup>1</sup>. The results they report<sup>2</sup> confirm low sensitivity of IgA and IgG anti- $\alpha$ -fodrin antibodies for primary Sjögren's syndrome (SS) using ELISA. Indeed, we found a similar low prevalence for both IgA and IgG anti- $\alpha$ -fodrin antibodies in primary SS sera: 32.5% vs 37.3% and 21.1% vs 38.8%, respectively. These findings are in keeping with other recent studies<sup>3,4</sup>, which appeared while our report was being evaluated for publication, that reported a low fre-

quency of anti- $\alpha$ -fodrin antibodies in primary SS patients on the basis of various techniques including immunoprecipitation, immunoblotting, and ELISA. On the other hand, we observed specificity of both IgA and IgG anti- $\alpha$ -fodrin antibodies lower than that reported by Szántó, *et al*<sup>2</sup>: 68.1% versus 93.3% and 79% versus 93.3%, respectively. This difference could be due to a variation in the number of control subjects. Moreover, the specificity of anti- $\alpha$ -fodrin antibodies for primary SS presently is debatable, probably because the numbers of patients with connective tissue diseases reported in the control groups were not homogeneous<sup>1-4</sup>.

Most studies showing a high prevalence of anti- $\alpha$ -fodrin antibodies in primary SS<sup>5-8</sup> utilized the European Community Study Group criteria<sup>9</sup> for classification. Using the same criteria we observed a low prevalence of anti- $\alpha$ -fodrin antibodies in patients with primary SS, in agreement with Szántó, *et al*. When antibody frequency in primary SS patients classified according to the European criteria was compared with that in patients classified according to the San Diego criteria<sup>10</sup> a higher antibody prevalence was found in the latter group<sup>3,11</sup>. The difference, however, was statistically significant in only one of the 2 studies<sup>11</sup>. According to Szántó, *et al*, a low prevalence of IgA and IgG anti- $\alpha$ -fodrin antibodies was recently reported<sup>4</sup> in primary SS patients meeting the American/European Consensus criteria<sup>12</sup>.

Due to the low sensitivity of anti- $\alpha$ -fodrin antibodies confirmed by recent reports<sup>2-4</sup> and by our experience<sup>1</sup>, we are doubtful about the use of these antibodies as a diagnostic marker. On the basis of Ulbricht's study<sup>13</sup> describing normalization of anti- $\alpha$ -fodrin antibodies after 3 months of successful therapy and a correlation between antibody concentration and the degree of lymphocytic infiltration in the salivary glands, it remains to be seen if anti- $\alpha$ -fodrin antibodies may be considered an early marker for disease activity of primary SS.

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