

Alpha-fodrin autoantibodies are reliable diagnostic markers for juvenile and adult Sjogren's syndrome

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Sjogren's syndrome (SS) is like other systemic autoimmune diseases, characterized by a large number of autoantigens and autoantibodies and infiltration of glandular tissue by predominantly CD4 T lymphocytes. The presence of certain autoantibodies is required for the diagnosis to be made, especially Anti-Ro/SSA and anti-La/SSB. The aim of this study is to investigate the prevalence of anti-alpha fodrin and its association with anti-Ro and anti-La in juvenile and adult SS. Thirteen cases with juvenile SS and 11 old SS patients were examined. Selection and classification of the patients was based on the revised European Community Criteria. The Juvenile SS group included 10 girls and 3 boys, their age ranged from 7 to 14 years. Adult SS group included 2 males and 9 female, their age ranged from 21 to 54 years. Blood samples were subjected to Erythrocyte sedimentation rate (ESR) mm/1 degree h, Complete blood count (CBC), Latex agglutination test for estimating rheumatoid factor (RF) and antinuclear antibodies (ANA), and assessment of Anti-alpha Fodrin IgG/IgA, anti-Ro and anti-La using ELISA. The two groups were matched for sex ratio. There was a significant difference of age (10.1 +/- 2.4 vs 35.1 +/- 9.3 yr) between both groups ($P < 0.05$). There was no statistically significant difference of levels of ESR, ANA and anti-Ro, anti-La and anti-alpha fodrin IgG/IgA autoantibodies concentration in the sera of SS patients in both groups ($P > 0.05$) although their levels were elevated. The percentage of detection of anti-Ro, anti-La and anti-alpha fodrin IgG and IgA antibodies in the sera of Juvenile SS was 61.5%, 53.8%, 53.8% and 61.5% respectively, while in adult SS was 63.6%, 45.5%, 45.5% and 81.8%, respectively. Anti alpha fodrin IgA and IgG were positively detected in SS patients who had negative anti-Ro and/or anti-La. The anti-alpha fodrin IgG and IgA antibodies did not significantly correlated with antibodies against Ro and La, ESR and ANA ($r < 0.25$, $P > 0.05$). The detection of anti-alpha fodrin antibodies may prove to be a useful sensitive marker for SS. Routine screening of alpha fodrin antibodies is a valuable tool for the diagnosis of SS.