SERUM AND SYNOVIAL SURVIVIN ARE ASSOCIATED WITH EROSION IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a progressive debilitating autoimmune disease that leads to cartilage and bone destruction caused by insufficient apoptosis in the inflamed RA synovium. Survivin is a proto-oncogene biomarker known for its anti-apoptotic and cell cycle regulating properties and has been linked to the long-term severity of RA.

Objectives: The aim of this study is to measure the serum and synovial levels of survivin and clarify their relationship to disease activity, functional capacity and radiographic damage in RA patients.

Methods: This study was carried out on 50 RA patients (M:F=39:11) with a mean age of 46.4±10.94 years and 30 subjects of matched age and sex with a mean age of 46.03±10.53 years and F:M (23:7) as a control group. All patients were subjected to full history taking, thorough clinical examination, assessment of disease activity by DAS-28 score and functional capacity and using Health assessment Questionnaire (HAQ). Plain x-ray radiographs of both hands and feet were done, scored and graded by Larsen score. Surivin levels in all studied subjects sera and the synovial fluid aspirated from 18 RA patients presented with knee effusion at the time of examination were measured by enzyme-linked immunosorbent assay (ELISA).

Results: The mean serum survivin level was highly significantly elevated (p<0.001) in the RA patients sera than in the controls’ sera being 47.91±52.68 (pg/ml) and 239.1±115.15 (pg/ml) respectively. Synovial survivin levels ranged between 420–575 pg/ml with a mean of 479.6±52.68 (pg/ml) and was significantly higher than in the RA patients’ sera (p<0.001). RA patients were divided into survivors –ve group included 21/50 (42%) and survivin +ve group included 29/50 (58%), the serum survivin cut off point (67.4 g/ml) was selected at the mean plus 3 SD for the inflamed RA synovium. Survivin is a proto-oncogene biomarker known for its anti-apoptotic and cell cycle regulating properties and has been linked to the long-term severity of RA.

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Disclosure of Interest: None declared.


INTERSTITIAL LUNG DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS OF A COHORT TREATED WITH METHOTREXATE MONOTHERAPY

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Background: Diffuse interstitial lung disease (ILD) is a common extra-articular manifestation of rheumatoid arthritis (RA) and an important cause of morbidity and mortality in this patient population. The predisposing and prognostic factors of this complication are a matter of debate.

Objectives: To determine the characteristics associated with the development of ILD in a cohort of patients with RA who received Methotrexate (MTX) monotherapy.

Methods: Case-control study in a cohort of patients with RA who had received MTX monotherapy, being cases those who developed ILD and controls, those who did not develop it.

Results: The cohort consisted of 301 patients (67% women), with a mean age of 49.6 (±13.2) years and a follow-up of 135.8 (±93.5) months. There were 15 (5%) cases of ILD, classified by high resolution chest CT as usual interstitial pneumonitis (UIP), nonspecific interstitial pneumonitis (NSIP) and chronic interstitial bronchiolitis (CIB). The distribution by sex was 8 ILD among 202 women (3.9%) and 7 ILD among the 99 men (7.1%). All had RA and/or ACPA positive. ILD was associated with longer duration of the disease (p<0.05), exposure to DMARDs prior to MTX (OR=3.3, p<0.05), history of chronic lung disease (OR=6.5, p<0.01) and coexistence with secondary Sjögren syndrome (OR=3.2, p<0.05). We did not find significant differences in mean values of age, RA duration of the disease, exposure to DMARDs prior to MTX, smoking, functional capacity, presence of erosions. MTX response and toxicity. The predictive factors in the logistic regression were the history of chronic pneumonia, extra-articular involvement, time of evolution and basal biological activity (CRP) of the disease. Of the 12 patients with ILD, 5 (33.3%) had a good response (DAS28-3.2) with MTX and remained on monotherapy, another 3 continued with MTX combined with another DMARD and 7 (46.7%) discontinued MTX. In addition, 8 of these 10 patients received a biological therapy. Eleven patients died during follow-up, 3 (20%) cases (ILD) and 8 (2.8%) controls (p<0.01).

Conclusions: ILD is a frequent and serious complication in RA. It appears more frequently in patients with previous pneumonia and long-term disease and with extra-articular involvement of RA.

Disclosure of Interest: None declared


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