SHOULD RHEUMATOID ARTHRITIS PATIENTS BE SYSTEMATICALLY SCREENED FOR THE PRESENCE OF OTHER AUTOIMMUNE DISEASES?

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For the sake of simplicity clinicians often include Rheumatoid Arthritis (RA) under the unspecific umbrella of «autoimmune diseases». But what is the evidence that RA shares, in fact, the behaviour of classic autoimmune diseases such as Systemic Lupus Erythematosus (SLE), where a panoply of clinically relevant autoimmune manifestations frequently occurs? Apart from secondary Sjögren's Syndrome (SS) are there any other autoimmune diseases that occur more frequently in RA than in the general population? Should we systematically screen RA patients for those diseases?

There might be a trend towards a higher prevalence of thyroid autoantibodies and autoimmune thyroiditis in RA. In fact, in a comparison of 383 RA patients with 409 osteoarthritis (OA) patients a significantly higher prevalence of circulating thyroid autoantibodies was detected (9.1% versus 3.7%, p = 0.0016).[1] In addition, in another 2 smaller studies, involving, respectively, 25[2] and 20[3] RA patients, similar results were obtained, although this association with thyroid autoantibodies was clearly more frequent in SLE patients.[3] Accordingly, thyroid dysfunction appears to have also a higher frequency in RA, as verified in 30% of 91 RA patients studied, in comparison with 11% of 93 OA and fibromyalgia controls.[4] However, again, the prevalence of thyroid dysfunction is higher in SLE (50%) than in RA[3] and, if the analysis only includes clinically significative thyroid dysfunction, its prevalence in RA (5,1% of 295 patients evaluated) is similar to the one observed in OA (4,6% of 307 patients evaluated).[5]

On the other hand, there is also some speculation about a possible association between type 1 Diabetes Mellitus (DM) and RA. In accordance with this hypothesis, one study found that 13% of the 295 RA patients evaluated had a first-degree relative with type 1 DM.[5] On the contrary, another study that characterized a cohort of 1460 hospitalized RA patients found a prevalence of type 1 DM similar to the observed in the general population.[6]

Regarding the possible association between Coeliac Disease (CD) and RA some preliminary reports suggested an increased prevalence of anti-tissue transglutaminase antibodies (anti-tTG IgA) in RA.[7,8] In this issue of Acta Reumatologica Portuguesa Nisiahara RN et al show that there was no association between RA and IgA anti-endomysial antibodies (EmA-IgA) in 85 RA patients.[9] This is in accordance with another recent publication where the same lack of association was depicted in 160 RA patients.[10] These antibodies have a high specificity and sensitivity for the diagnosis of CD and their titter correlates with the degree of intestinal villous atrophy and symptom severity[9]. The results of these 2 studies clearly do not support an association between CD and RA.

Apart from the more prevalent autoimmune diseases some reports have also proposed hypothetical associations between several relatively rare autoimmune diseases and RA. For instance, immune thrombocytopenic purpura and autoimmune haemolytic anaemia have been described in association with RA in several case reports but are exceedingly rare and other causes for anaemia or thrombocytopenia should be always sought in a RA patient.[11] In addition, patients with myasthenia gravis have a clearly increased prevalence of coexistent SLE (8,3%) and autoimmune thyroiditis (10,4%).[12] Interestingly, the prevalence of RA (4,2%) in these patients appears to be also increased, although to a lesser degree than for the case of SLE.[12,13]

The study presented by Nisiahara RN et al[9] in Acta Reumatologica Portuguesa calls our attention for the possible clustering of several autoimmune diseases in the same patient, which is a particularly pertinent issue in patients with SLE but probably a very rare event in RA patients. That is to say, for

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practical purposes, there is no argument favouring the systematic screening of autoimmune diseases in RA patients. However, a question remains to be answered: Why does a disease characterized by circulating autoantibodies and by immune mediated pathologic mechanisms lack a clear-cut association with other autoimmune diseases? Probably the answer relies on the peculiar behaviour of the rheumatoid synovial tissue, which is responsible, at the same time, for the destruction of joints but also for the confinement of the immune and inflammatory processes to this compartment.

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