Correspondence on 'Cardiovascular effects of biological versus csDMARD therapy in treatment naive, early rheumatoid arthritis'

We have read with interest the article by Plein *et al* that has been published recently in the Annals of Rheumatic Diseases. The article deals with the cardiovascular (CV) effects of biological disease-modifying antirheumatic drugs (DMARDs) versus conventional synthetic (cs) DMARD therapy in early naïve rheumatoid arthritis (RA) patients.[1] The authors compared etanercept (ETN) plus methotrexate (MTX) treatment versus MTX treat-to-target (TT) approach in patients with early RA (ERA), without CV disease and maximum one traditional risk factor. All patients underwent CVMR at baseline and after 1 and 2 years thereafter. At diagnosis, patients with ERA had reduced vascular distensibility, evidence of myocardial fibrosis and reduced left ventricular mass. The study revealed the presence of CV damage at the earliest stage of the disease course and the ability of early intervention to improve vascular stiffness. However, after 1 and 2 years of treatment, ETN+MTX was not superior to MTX-TT therapy.[1]

The evaluation Of CV dysfunction and early treatment in newly RA patients merits special consideration. Indeed, the results of the above study are not surprising, as nowadays the concept of TT and tight control monitoring represents a therapeutic paradigm of modern rheumatology.[2] Regarding the methods used to evaluate CV dysfunction in ERA patients carotid ultrasonography (CU) represents the method of choice.[3 4] We investigated the lipid profile and the intima–media thickness (IMT) measurement in the common carotid artery (CCA) and their modifications after early intervention with MTX and prednisolone in naive ERA patients. More specifically, 58 ERA and 63 healthy individuals without CV diseases and CV risk factors were investigated in a prospective controlled study. At disease diagnosis ERA patients had dyslipidaemia and high atherogenic ratio as well as higher IMT values of the CCA than controls. After 1 year of treatment, the lipid profile normalised and the IMT values reduced significantly.[5 6] Thus, in every day clinical practice, an ERA intervention starts with MTX. Additionally, MTX can be combined with other csDMARDs and steroids in a TT approach or/and with bDMARDs.[2 7] It has been demonstrated that combination csDAMRDs therapy has beneficial effects not only to control disease activity and inhibiting structural damage progression, but also to reduce morbidity and mortality in ERA patients.[8] It has been also shown that combination csDMARDs therapy was not inferior to bDMARDs+MTX therapy to control RA disease activity and was less expensive.[9 10]

Regarding CV dysfunction, the last years new imaging modalities have been emerged for the detection of CV abnormalities. Between them CT angiography, is a new method to detect atherosclerotic lesions (plaques, stenosis, obstructions) of the coronary arteries in RA patients.[11] On the other hand CVMR can detected and visualise early and silent heart abnormalities in RA patients.[12] However, until now the lack of interaction between cardiologists, radiologists and rheumatologists, the lack of experts in the field, the high cost and the time-consuming procedure, have limited both methods to be adapted in every day clinical practice. Nowadays, CU is an easy, non-invasive, non-expensive and more sensitive method to evaluate CV dysfunction in ERA patients.[13]

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