

ATHEROSCLEROSIS IN RHEUMATOID ARTHRITIS : A CROSS SECTIONAL STUDY

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ABSTRACT

Background:

Rheumatoid arthritis (RA) is chronic inflammatory disease characterized by symmetric polyarthritis. Although primarily considered a disease of joint, it is also associated with abnormal systemic immune vasculitis, nodules, lung involvement, pericarditis, peripheral neuropathy, hematologic abnormalities and accelerated atherosclerosis. The most common cause of death in patients with RA is cardiovascular disease. Accelerated atherosclerosis in RA has been attributed to inflammation, increased homocysteine levels, imbalance in homeostasis, immobility, decreased antioxidants level, side effects due to medications, and abnormal lipid levels. In RA patients, there is indirect evidence of accelerated atherosclerosis and is obtained from measurement of carotid artery intima media (CIMT) thickness, it acts as a marker of atherosclerotic burden and cardiovascular risk. Increased atherosclerosis in carotid arteries is an indicator of atherosclerosis in other various arterial bed, which includes coronary arteries. Therefore, measurement of CIMT acts as an surrogate marker for increased cardiovascular risk.

Method:

In this background, cross sectional study for assessment of CIMT with ultrasound in 46 cases of Rheumatoid arthritis patients of various age groups and duration of symptoms was conducted in northeast Indian patients, in the state of Assam, who were attending Department of Medicine, Gauhati Medical College and Hospital, Guwahati.

Result:

In our study , out of total of 46 cases there were 14 males and 32 females. Among these patients, 5 were <30 years age, 16 were between 32-40 years, 12 were between 41-50, 12 were between 51-60, and 1 person of above 60 years of age. Patients were grouped according to duration of symptoms in to three groups: 1)Group 1 comprising duration of symptoms <2 years: 9 patients ;2) Group 2 comprising duration of symptoms 2-5 years: 28 patients;3) Group 3 comprising duration of symptoms >5 years: 9 patients . According to disease activity as per DAS28 score patients were divided into three groups:1) LOW: 6 cases ; 2) MODERATE: 24 cases ;3) HIGH: 16 cases .

Conclusion:

CIMT was found to be significantly higher in RA patients compared to healthy population of same age and sex . CIMT was also found to be increasing with duration of disease and significantly higher with higher disease activity .Therefore, atherosclerosis can be considered one of the important extraarticular manifestation in RA and its early identification is very important in management of RA as well as to take appropriate measures to prevent cardiovascular complications.