CORRELATIONS BETWEEN THE LEVELS OF RADIOLOGICAL SCORES AND THE CLINICAL, HEMATOLOGICAL AND BONE DENSITOMETRY PARAMETERS IN RHEUMATOID ARTHRITIS

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Abstract

Introduction: Rheumatoid arthritis is a disease characterized by chronic inflammation of di-arthrodial joints. The cause, probably multifactorial, is still unknown. More often in women, this disorder raised the role of endocrine factors in disease pathogenesis. Regarding the role of genetic factors, types DR3 and DR4 are found more commonly associated with rheumatoid arthritis. Among the most important environmental factors are those of infectious origin.

Material and method:
The clinical study was conducted over a period of two years at the Emergency County Hospital "St.Spiridon" Iasi, on a group of 50 patients with rheumatoid arthritis in various stages of evolution of the disease. The criteria for positive diagnosis were:
- Clinical: NAD, NAT, DAS28 score, VAS, HAQ;
- Para- clinical: ESR, CRP, rheumatoid factors;
- Radiological: Sharp radiographic scores for narrowing and erosion, respectively the total Sharp score;
- Osteodensitometry: determining BMD and calculating T score.

Results:
The number of painful joints (NAD) is statistical directly dependent on Sharp scores values for narrowing and erosion.
DAS28 score directly correlates with both Sharp score for narrowing ($r = 0.21$) and for erosion ($r = 0.32$) - but the correlations are weak.
HAQ score correlates also on a direct manner with Sharp erosion score ($r = 0.54$).
The T score levels correlates indirectly, in a significant manner, with the radiological parameters: the less T scores are, the higher are the values of Sharp scores for narrowing and erosion respectively.

Conclusion:
Determination and analysis of the Sharp score values for narrowing and erosion represents a reliable assessment of cartilage destruction in rheumatoid arthritis.

Key words. Rheumatoid arthritis, DAS28, VAS, NAD, NAT, BMD, HAQ.