The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
Published: January 31, 2021 | **Pages:** 179-182
Doi: https://doi.org/10.37547/TAJMSPR/Volume03Issue01-28

IMPACT FACTOR
2021: 5. 64
OCLC - 1121105510

Characteristics Of Articulate Syndrome In Patients With Reactive Arthritis

Khalmetova F.I.
Tashkent Medical Academy, Uzbekistan

Akhmedov K.S.
Tashkent Medical Academy, Uzbekistan

ABSTRACT

In many countries and in our country reactive arthritis (RA) is a topical rheumatologic problem requiring early and individual therapy. Recently in the diagnostics of RA there is an active search of early biomarkers (BM) of articulate structures damage, which provide revealing of the symptoms of lesion of articulate soft tissues elements at the early stages of the disease. It can also help to assess the stage of lesion and prognosis of the disease. Later it will assist to prescribe adequate therapy according to the stage of the pathological process and perform monitoring of the therapy [1].

KEYWORDS

Subchondral, pathogenetic, arthrosis, chronic arthritis, postenterocolitis.

INTRODUCTION

Until now the problem of early pathogenetic mechanisms of inflammatory-destructive alterations is disputable, as, according to the references the process can primarily involve both subchondral bone and the tissue of articulate cartilage [2]. There are data, that alterations revealed on x-ray images of the damaged joints in RA are not specific and can be revealed in other rheumatologic pathologies. Scheel A.K. et al. showed that, the

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
Published: January 31, 2021 | **Pages:** 179-182
Doi: https://doi.org/10.37547/TAJMSPR/Volume03Issue01-28

IMPACT FACTOR
2021: 5. 64
OCLC - 1121105510

most important shortcoming of x-ray in the diagnostics of lesions of joints was that it can demonstrate early alterations (para-articular osteoporosis, narrowing of articulate clefts, cyst-like whitening of bone tissue) not earlier than 3-6 months from the start of the disease; in its turn lesions of tendon-ligament apparatus are not identified; bone ankylosis can be determined only in 4-5 years after the start of arthritis; erosive lesions, which reliably confirm the disease, are determined in x-ray images not earlier than 12-18 months after start of the disease [3].

Thus, in the modern time there is work on BM, which can provide quantitative assessment of joint remodeling and progression of articulate pathology, and one of them cartilage BM - cartilage oligomer matrix protein (COMP).

Many literature references confirm, that serum COMP present important information about metabolic alterations occurring in cartilage matrix in case of pathologies of skeletal-muscle system. These researches show, that serum COMP correlate with cartilage degradation and serves to be a potential prognostic marker of inflammatory diseases of joints [4].

Rise of cartilage oligomer matrix protein concentration (COMP) in blood serum indicates a current destruction of cartilage tissue in case of arthrosis, chronic arthritis; it provides assessment of cartilage destruction stage. Simultaneous identification of cartilage destruction markers and inflammatory markers provides adaptation of the therapy of articulates pathologies taking into account the variation of the lesion and the speed of articulate cartilage destruction.

The objective: to perform a comparative analysis of cartilage oligomer matrix protein concentration in blood serum of patients with RA and healthy people.

MATERIAL AND METHODS

Sixty five patients with RA were enrolled to the study and divided to two groups: I group with urogenital form and the II group with postenterocolitis RA. Twenty men and women of the same age group without articulate pathologies were taken as a control group.

Laboratory tests were performed in "GENOTEXNOLOGIYA" molecular genetics laboratory. For the definition of COMP serum samples were taken into appendorf test-tube, frozen and kept in -400C for a year. Sampling lasted a year. The study was performed with the help of HumaReader HS HUMAN semiautomatic analyzer. In case of detection of analysis variables dependence we applied classic correlation analysis. Results were considered to be statistically significant with reliability $p \leq 0.05$.

RESULTS

On the basis of the obtained results it was revealed that only rise of COMP in blood serum of the patients with RA was reliably higher than in healthy subjects ($p < 0.05$) and was average equal to 8.6±4.8 in the I group and 3.3±3.3 in the II.

Results of x-ray imaging of the patients with RA showed alterations in joints (erosive lesions, narrowing of joints clefts) with the rise of COMP in blood serum average to 37.1±8.3 among the patients of the I group and 23.3±7.9 in the II group.

Analysis of ESR and COMP concentration in serum revealed mean values of 22.9±7.2 in the I and 13.3±6.3 in the II group.

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
Published: January 31, 2021 | **Pages:** 179-182
Doi: https://doi.org/10.37547/TAJMSPR/Volume03Issue01-28

IMPACT FACTOR
2021: 5. 64
OCLC - 1121105510

Definition of RA infectious agent and rise of serum COMP concentration was revealed average in 14.3±6.0 patients of the I and 6.7±4.6 patients of the II group. These data show the following:

Table 1.1.

Clinical laboratory tests	I group (n=35)		II group (n=30)		Control group (n=20)		p
	abs	%	abs	%	abs	%	
COMP	3	8.6±4.8	1	3.3±3.3	5	25.0±9.9	p<0.05
COMP + x-ray alterations	13	37.1±8.3	7	23.3±7.9	-	-	p>0.05
COMP + CBA alterations	8	22.9±7.2	4	13.3±6.3	-	-	p>0.05
COMP + definition of the infection	5	14.3±6.0	2	6.7±4.6	-	-	p>0.05

Detailed study of the value showed that with available symptoms of destructive alterations in RA patients COMP concentration was 66% higher than in the control group.

Thus, summarizing all the obtained results it can be concluded, that cartilage oligomer matrix protein can serve to be a cartilage destruction diagnostic method more sensitive than x-ray alterations.

REFERENCES

1. Starodubtseva I.A., Vasilyeva L.V. Comparative analysis of cartilage oligomere matrix protein in blood serum of patients with skeletal system pathologies [Sravnitelniyanalizurovnyaoligometrnogo metriksnogoproteina vsivorotkekrovipatsientovszabolevaniya mikostnomishechnoysistemi]// Clinical laboratory diagnostics. 2016. V.61. № 2 . p. 83-86. (in Russian)
2. Pilipovich A.A. Osteoarthrosis: pathogenetic and therapeutic aspects [Osteoartrozpatogeneticheskiyeiterapevticheskiyeaspekti]// Russian medical journal. 2016. № 7. p. 464–468. (in Russian)
3. Sirotko O.V. Problems of instrumental diagnostics of reactive arthritis [Voprosiinstrumentalnoydiagnostikireaktivnogoartrita] // VSMU Bulletin. 2016. V.15. № 4. p. 33-39. (in Russian)
4. Tseng S., Reddi A.H., Di Cesare P.E. Cartilage oligomeric matrix protein

The American Journal of Medical Sciences and Pharmaceutical Research
(ISSN – 2689-1026)
Published: January 31, 2021 | **Pages:** 179-182
Doi: https://doi.org/10.37547/TAJMSPR/Volume03Issue01-28

IMPACT FACTOR
2021: 5. 64
OCLC - 1121105510

(COMP): a biomarker of arthritis. Biomark. Insights. 2009. 17 (4). P. 33–44.