

Poster presentation

The value of antibodies against mutated citrullinated vimentin in juvenile idiopathic arthritis

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Background

Antibodies against cyclic citrullinated peptid (anti-CCP) and mutated citrullinated vimentin (anti-MCV) have been extensively studied as an early diagnostic and prognostic markers in rheumatoid arthritis (RA), however there is little data available on the role of anti-MCV in Juvenile idiopathic arthritis (JIA).

Objectives

To detect significance of anti-MCV in children with JIA.

Materials and methods

We analysed 41 patients with newly diagnosed JIA (25 RF negative polyarthritis, 10 oligoarthritis, 5 undifferentiated and 1 psoriatic arthritis). To evaluate disease activity, clinical (disease type, number of active and inactive joints) and laboratory (CRP, ESR, TNF alfa, ANA titer, HLA B 27 antigen) data were recorded. The level of anti-MCV in the sera of JIA patients and 21 controls (healthy children with no family history of any rheumatological disease) was measured using ELISA method (Orgenetic Diagnostica, GbmH, Germany). For statistical analysis we used T test and Mann-Whitney test.

Results

Although mean anti-MCV level in the JIA group was higher (3.73 U/ml, range 2 – 10 U/ml), then in the control group (3.14 U/ml, range 2 – 9 U/ml), these results are not statistically significant ($p > 0.05$). Evaluating disease activity, we found a positive correlation of anti-MCV with CRP

($p < 0.05$) and serum amiloid A (SAA) ($p < 0.01$) level. SAA has a positive predictive value for anti-MCV.

Conclusion

Anti-MCV can't serve as an early JIA diagnosing marker. There is a direct correlation between anti-MCV level and acute inflammatory markers and anti-MCV can be used as a disease activity marker.

References

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