



POSTER PRESENTATION

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PReS-FINAL-2150: Antiocular antibodies in children with juvenile idiopathic arthritis-associated uveitis

K Walscheid^{1,2*}, M Hennig³, C Heinz¹, D Bauer³, M Dietzel¹, M Busch³, S Wasmuth³, D Foell², C Deeg⁴, A Heiligenhaus¹

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Introduction

Juvenile idiopathic arthritis (JIA) is the most common disease associated with uveitis of childhood. The pathogenesis of JIA-associated uveitis (JIAU) is undefined, although there is evidence for a B-cell-mediated autoimmune process with a probably pathogenetic role for autoantibodies.

Objectives

This study intended to analyze the antiocular autoantibodies in serum and their correlation with disease course.

Methods

Serum samples from children with JIAU (n = 47), JIA without uveitis (n = 67), idiopathic anterior uveitis (IAU, n = 12) and healthy controls (n = 52) were collected. The binding patterns of serum antibodies to ocular cryosections from swine eyes were analyzed by indirect immunohistochemistry, and were correlated to epidemiological, clinical and laboratory test results.

Results

The patient groups differed with respect to their presence of antibody-binding to the sections: JIAU (94%), JIA (75%), IAU (75%), and healthy controls (29%) to uveal and/or retinal structures. Serum antibodies of JIAU patients predominantly bound at iris (74%) and ciliary body (cb, 79%). Iris/cb positive staining correlated with the presence of uveitis complications ($p < 0.005$) in JIAU patients, but not with positivity for serum anti-nuclear antibodies (ANA), rheumatoid factor (RF) or HLA-B27, and was independent from uveitis activity or type of anti-inflammatory treatment.

Conclusion

In JIAU patients, anti-ocular serum antibodies can be detected more frequently than in control groups. Binding patterns to ocular tissue correlate with complicated uveitis course but not with uveitis activity and anti-inflammatory treatment. Antibody-binding is not specific for this uveitis entity, and does not correlate with ANA-positivity.

Disclosure of interest

None declared.

Authors' details

¹Department of Ophthalmology, St. Franziskus-Hospital Muenster, Muenster, Netherlands. ²Department of Pediatric Rheumatology and Immunology, University Hospital Muenster, Muenster, Netherlands. ³Ophtha-Lab; Department of Ophthalmology, St. Franziskus-Hospital Muenster, Muenster, Netherlands. ⁴Department of Animal Physiology, Ludwig Maximilians University Munich, Munich, Germany.

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¹Department of Ophthalmology, St. Franziskus-Hospital Muenster, Muenster, Netherlands

Full list of author information is available at the end of the article