



POSTER PRESENTATION

Open Access

Does childhood health assessment questionnaire can predict outcome of patients with juvenile idiopathic arthritis?

G Susic^{1*}, R Stojanovic¹, I Soldatovic², N Damjanov¹, G Radunovic¹

From 18th Pediatric Rheumatology European Society (PREs) Congress
Bruges, Belgium. 14-18 September 2011

Aim

To assess the ability of Childhood Health Assessment Questionnaire (CHAQ) in predicting outcome of patients with juvenile idiopathic arthritis (JIA).

Method

87 pts. (f 69%, m 31%) average age 14,1 yrs. disease duration 5,2 yrs., were follow up for 3,7 (2-5) yrs. Parents/patients over 12 yrs. completed CHAQ at the beginning and at the end of study and disability index (DI) was calculated. CHAQ DI=0 was considered as normal, 0,125-0,5=mild, $\geq 0,6$ =moderate/severe disability. Fifty nine (67,8%)pts. were treated with methotrexate, 42 (52,8%)pts. with etanercept. Outcome was defined as active disease or remission (Wallace criteria) [1]. We used regression models for the assessment predictive strength of CHAQ.

Results

CHAQ DI at the baseline was 0,541, at the end of follow up 0,398 ($p < 0,05$). Number of patients with moderate/severe disability decreased from 29 to 18 (33,3% vs. 20,7%, $p < 0,01$). Number of patients in remission increased from 15 to 47 (17,2% vs. 54,0%, $p < 0,001$). Seventy (80,6%)pts. with normal CHAQ DI at baseline, were in remission at the end of study, while 66 (75,9%) pts. with moderate/severe CHAQ DI at the beginning had active disease at the last visit. CHAQ showed good predictive ability for the disease outcome (71,3%). Odds ratio for having active disease for patients with mild CHAQ DI was high (OR 3,33, CI=1,034-10,746, $p = 0,044$), for patients with moderate/severe CHAQ DI was very high (OR 13,095, CI=3,821-44,882, $p < 0,001$),

compared to patients with normal CHAQ value. Patients with moderate/severe CHAQ DI had hazard ratio for the active disease 4,959 (CI=1,855-11,385, $p < 0,001$).

Conclusion

CHAQ demonstrated good ability in predicting outcome of the disease. Due to its simplicity and accessibility it is useful in everyday clinical practice for identifying patients with poor prognosis.

Author details

¹Institute of Rheumatology Belgrade, Serbia. ²Medical Statistics, School of Medicine, University of Belgrade, Serbia.

Published: 14 September 2011

Reference

1. Wallace CA, et al: Preliminary criteria for clinical remission for select categories of juvenile idiopathic arthritis (JIA). *J Rheumatol* 2004, **31**:2290-94.

doi:10.1186/1546-0096-9-S1-P160

Cite this article as: Susic et al: Does childhood health assessment questionnaire can predict outcome of patients with juvenile idiopathic arthritis? *Pediatric Rheumatology* 2011 **9**(Suppl 1):P160.

**Submit your next manuscript to BioMed Central
and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



¹Institute of Rheumatology Belgrade, Serbia
Full list of author information is available at the end of the article