

Auxological features in patients with Juvenile Idiopathic Arthritis (JIA) treated with biologic therapy preliminary study data



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INTRODUCTION

Juvenile idiopathic arthritis (JIA) is a heterogeneous group of diseases associated with an increase of inflammatory cytokines that may influence child growth. However this is already known, to date auxological data published of JIA patients during biologic treatment are incomplete and very heterogeneous.

OBJECTIVES

To evaluate the auxological features in a selected cohort of patients with JIA treated with biologic drugs.

RESULTS

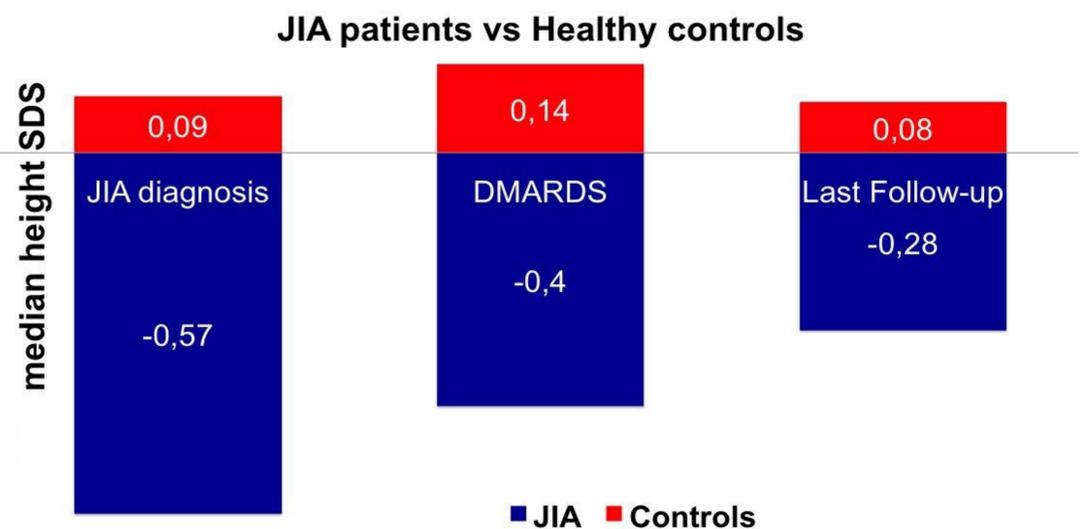
The median height SDS at JIA diagnosis was $-0,57 \pm 0,80$ vs. $0,09 \pm 0,84$ SDS of controls ($p < 0,0001$). The target height SDS was not statistically different ($0,02 \pm 0,66$ vs. $0,05 \pm 0,79$ SDS). After disease modifying antirheumatic drugs (DMARDs) and at biologic therapy onset the height was $-0,4 \pm 0,98$ SDS vs. $0,14 \pm 0,86$ of controls ($p < 0,005$) ($-0,37 \pm 0,95$ SDS ($p < 0,05$) for oligoarticular and $-0,43 \pm 1,03$ SDS ($p < 0,05$) for polyarticular).

After a follow-up of $7,61 \pm 2,43$ yrs height SDS was $-0,28 \pm 1,02$ vs. $0,08 \pm 0,81$ SDS ($p < 0,05$) ($-0,19 \pm 0,96$ SDS ($p = \text{NS}$) for oligoarticular and $-0,37 \pm 1,09$ SDS ($p < 0,05$) for polyarticular).

The Δ height during biologics treatment was statistically significant considering the all JIA group and oligoarticular ($p < 0,0001$) but not polyarticular onset vs. controls and between oligoarticular and polyarticular onset ($p < 0,0001$)

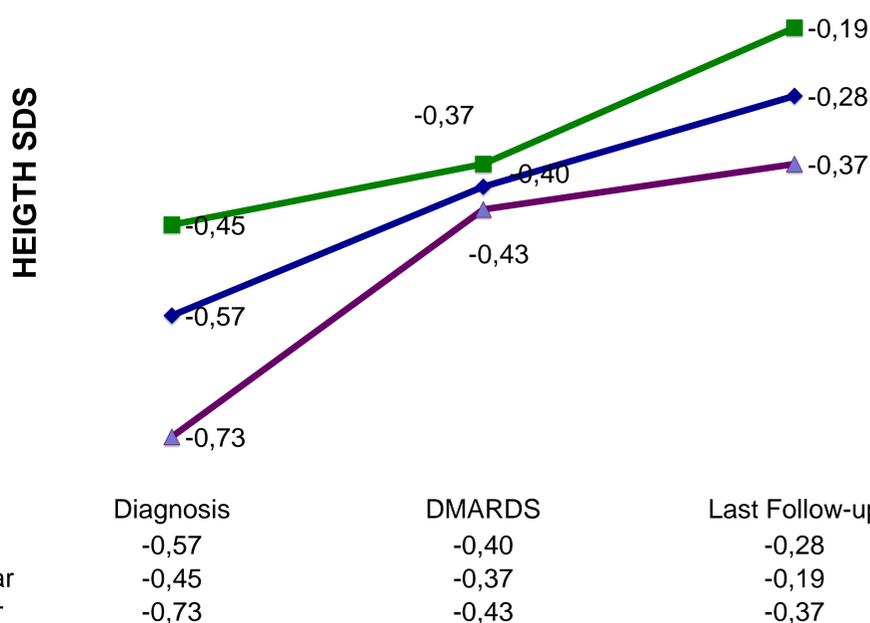
METHODS

This single-center retrospective study have evaluated 43 children (22 with polyarticular and 21 with oligoarticular JIA onset) long-term treated with biologics and compared with 86 age and sex-matched healthy controls.



Graphic 1: median height SDS of JIA patients vs healthy controls at different time points

JIA CATEGORIES



Graphic 2: trend of median height SDS of JIA patients at different time points

CONCLUSIONS

Long-term biologic treatments may cause a significant increase of height SDS in JIA patients. However, polyarticular onset JIA may not ameliorate their height SDS despite the obvious clinical improvement of the disease.