PEDIATRIC RHEUMATOLOGY

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PReS-FINAL-2108: Long-term outcome of 114 adult JIA patients in a non-pediatric rheumatology institute in Japan

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Introduction

The transition of adult patients with childhood-onset rheumatic disorders from pediatric to non-pediatric healthcare systems has received attention in Japan. However, the clinical course of patients transferred to non-pediatric rheumatologists has not been adequately communicated to pediatric rheumatologists.

Objectives

To evaluate the long-term outcome of patients with juvenile idiopathic arthritis (JIA) using data from a large cohort database, IORRA (Institute of Rheumatology, Rheumatoid Arthritis), managed by Tokyo Women's Medical University in Japan.

Methods

Of 182 patients identified from the IORRA database from 2000-2013, 114 were verified as having JIA based on the ILAR classification criteria. The transition of medical care, disease activity and health-related quality of life at the latest examination, and the contributions of biological disease-modifying antirheumatic drugs (DMARDs) were evaluated retrospectively.

Results

The mean age of the 114 patients at the latest examination was 36.6 ± 13.3 years; there were 21 males and 93 females (81.6%). The mean age at disease onset was 11.6 ± 3.4 years, and disease duration was 25.0 ± 13.3 years. Of the 114 individuals, 106 (93.0%) had poly- or oligoarthritis; the others had systemic JIA (sJIA). Forty-five of 105 JIA patients (43%) visited non-pediatric rheumatologists from disease onset, and only one-fourth were transferred from general pediatricians or pediatric rheumatologists at a median age of 20 years. Interestingly, 26 of 105 (25%) reached transient remission in adolescence. Polyarticular JIA patients with negative rheumatoid factor (RF) showed a higher probability (41.7%) of obtaining a transient remission compared with RF-positive polyarticular JIA patients (17.8%). Disease activity assessed with DAS28 was significantly lower when disease onset was more recent (3.9 ± 1.3 for onset in the 1960s vs. 2.2 ± 1.1 for onset in the 2000s, $p = 0.04$), with similar results shown on the SDAI, and the CDAI. The Japanese version of the Health Assessment Questionnaire (J-HAQ) also showed improvement for those with more recent onset (1.8 ± 1.1 for onset in the 1960s vs. 0.2 ± 0.4 for onset in the 2000s, $p<0.01$). The induction ratio of biological DMARDs has increased for patients with more recent disease onset, with a shorter period from disease onset to induction (16.7% in the 1970s, with 27.3 ± 2.1 years to induction vs. 80.0% in the 2000s, with 5.6 ± 2.3 years to induction). Additionally, the percentage of patients requiring orthopedic surgery has decreased (53.8% before the 1970s vs. 10.0% in the 2000s). Two deaths, with causality attributed to the primary disease, occurred in sJIA patients who died from renal and/or cardiac failure due to amyloidosis at the ages of 27 and 38.

Conclusion

From the viewpoint of pediatric rheumatologists, there are few opportunities to follow children beyond adolescence. The importance of transitioning care to non-pediatric rheumatologists with sufficient medical information is confirmed by the existence of a population with transient

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remission in adolescence and changes in their prognosis, with progress in rheumatology represented by biological DMARDs.

Disclosure of interest

None declared.

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