



POSTER PRESENTATION

Open Access

Trends in paediatric rheumatology referral times and disease activity indices over a ten-year period among children with juvenile idiopathic arthritis: results from the childhood arthritis prospective study

Flora Mcerlane^{1,2*}, Helen E Foster³, Roberto Carrasco², Eileen Baildam⁴, SE Alice Chieng⁵, Joyce Davidson⁶, Yiannis Ioannou⁷, Lucy R Weddurburn⁸, Wendy Thomson², Kimme L Hyrich²

From 21st European Pediatric Rheumatology (PReS) Congress
Belgrade, Serbia. 17-21 September 2014

Introduction

The medical management of children and adolescents with juvenile idiopathic arthritis (JIA) has advanced significantly over the past ten years. The UK BSPAR Standards of Care (2009) stipulate that children with JIA should see a paediatric rheumatology team (PRh) within ten weeks of symptom onset and within four weeks of referral. It is not known how often these standards are met or whether they have impacted on outcomes.

Objectives

To describe trends in referral times, baseline disease severity, treatment times and one-year outcomes over a ten-year period among children with new-onset JIA.

Methods

The Childhood Arthritis Prospective Study is a prospective inception cohort of children with new-onset inflammatory arthritis recruiting from seven UK PRh centres. This analysis included all children recruited between 2001 and 2011 with at least one year of follow-up. The cohort was divided into four groups by year of diagnosis and baseline referral times, disease pattern, disease activity indices, time

to first definitive treatment and proportion achieving minimal disease activity (MDA) (Magni-Manzoni, 2008) were determined for each group. Values across the four groups were compared using linear and logistic regression, adjusting for PRh centre and disease pattern.

Results

Table 1.

Conclusion

Approximately half of children with new-onset JIA were not seen within four weeks of referral, with only 20% within ten weeks of symptom onset. The reasons for the former may be related to PRh service pressures, with the latter relating to both public and physician education. Although it is encouraging to see more rapid introduction of treatment, further research is necessary to understand why approximately one-third of children have active disease at one year. Delay in access to definitive treatments may impact on outcomes.

Disclosure of interest

None declared.

¹Paediatric Rheumatology, Great North Children's Hospital, Newcastle upon Tyne, UK

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

Table 1

	2001-2004	2005-2006	2007-2008	2009-2011	P value
N (1066)	285	265	306	210	–
Time between symptom onset and 1 st PRh, weeks	22.7 (11.9, 40.1)	23.5 (12.1, 52.7)	24.7 (12, 58.2)	23.1 (13.2, 50.1)	0.28
% seen within 10 weeks	20.5%	21%	20%	19%	0.66
Time from referral to 1 st PRh appointment, weeks	3.4 (1.2, 7.9)	4 (1.4, 7.3)	4.7 (1.4, 8)	4.3 (1.6, 8.7)	0.61
% seen within 4 weeks	58%	55%	49%	50%	0.02
AJC	2 (1, 4)	2 (1, 6)	2 (1, 5)	2 (1, 5)	0.82
JADAS	10.8 (7, 16.2)	12.1 (7.2, 20.2)	9.3 (4.4, 18.4)	10.4 (4, 10.6)	0.60
CHAQ	0.8 (0.1, 1.5)	0.9 (0.3, 1.5)	0.6 (0.1, 1.4)	0.6 (0.1, 1.3)	0.045
Oligoarticular pattern: Time (days) from 1 st PRh to 1 st IA steroid, median (IQR)	25.5 (9,65)	25 (7, 49)	19 (8, 48)	19 (9, 48)	0.04
% in MDA at 1 year	62	66	66	67	0.87
Time (days) from 1 st PRh to 1 st methotrexate, median (IQR)	27 (1, 79)	17 (1, 43)	5 (0, 17)	11 (0, 84)	0.03
% in MDA at 1 year	39	56	50	59	0.07
Time (days) from 1 st PRh to 1 st methotrexate, median (IQR)	37 (14, 78)	14 (9, 25)	15 (6, 24)	15 (13, 26)	0.07
% in MDA at 1 year	64	50	75	57	0.85

Authors' details

¹Paediatric Rheumatology, Great North Children's Hospital, Newcastle upon Tyne, UK. ²Arthritis Research UK Epidemiology Unit, University of Manchester, Manchester, UK. ³Rheumatology, Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK. ⁴Paediatric Rheumatology, Alder Hey Children's Hospital, Liverpool, UK. ⁵Paediatric Rheumatology, Royal Manchester Children's Hospital, Manchester, UK. ⁶Paediatric Rheumatology, University of Glasgow, Glasgow, UK. ⁷Rheumatology, University College London, UK. ⁸Rheumatology Unit, UCL Institute of Child Health, London, UK.

Published: 17 September 2014

doi:10.1186/1546-0096-12-S1-P13

Cite this article as: Mcerlane *et al.*: Trends in paediatric rheumatology referral times and disease activity indices over a ten-year period among children with juvenile idiopathic arthritis: results from the childhood arthritis prospective study. *Pediatric Rheumatology* 2014 **12**(Suppl 1):P13.

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

