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INCIDENCE OF UVEITIS AND UVEITIS RELATED COMPLICATIONS IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS: RESULTS FROM THE CHILDHOOD ARTHRITIS PROSPECTIVE STUDY

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Introduction: Juvenile idiopathic arthritis (JIA) is the most prevalent inflammatory rheumatic disease in children and young people (CYP) (1, 2). Uveitis, or intraocular inflammation, is the most common extra-articular manifestation of JIA. If JIA-uveitis (JIA-U) is not diagnosed early and thus left untreated, major ocular complications such as cataracts, glaucoma, and blindness can occur (1, 2, 3).

Objectives: To describe the incidence and characteristics of JIA-U among a representative inception cohort of CYP with JIA enrolled in the Childhood Arthritis Prospective Study (CAPS).

Methods: CAPS, a prospective inception cohort study, recruited CYP aged <16 years with newly diagnosed inflammatory arthritis across seven UK rheumatology centres between January 2001 (4) and July 2019. Analysis included descriptive statistics of all children recruited from the five centres at which ophthalmic data were available. Detailed ophthalmic data were extracted from clinical records by a paediatric ophthalmologist and comprised visual acuity, date of detection of uveitis, inflammation severity at onset, ophthalmic treatment use, and the presence of and date of detection of ocular structural complications.

Results: Ophthalmic information was available for 1169 (66%) CYP with JIA recruited to CAPS, of whom 158 (14%) were identified as having uveitis. Most patients with JIA-U (N=158) were female (72%), of white ethnicity (76%), had oligoarticular JIA (58%), and had a history of a positive ANA blood test result (69%). The median time from JIA diagnosis to JIA-U diagnosis was 0.9 years [IQR: 0, 2.5] and the median age at JIA-U diagnosis was 5.7 years [IQR: 3.7, 8.8].

Of the 158 patients reporting uveitis, 94% had anterior uveitis and 6% had anterior and intermediate uveitis at presentation. Disease presented bilaterally in 107 children (68%), and of the 51 with initially unilateral disease, seven progressed to having bilateral disease. At detection of uveitis, complications (cataract, glaucoma, macular oedema, posterior synechiae, band keratopathy and or visual impairment) were present in 23 children (15%) and a further 30% (48/158) went on to develop complications [follow up range 2-10 years, IQR 5, 10]; 8 of these patients had complications at both baseline and follow-up.

Conclusion: This is the first analysis on ophthalmic data collected by the CAPS study and provides an opportunity to examine the characteristics of JIA-U in JIA patients in greater detail, with 40% of children with uveitis having sight-threatening complications.

Patient Consent: Not applicable (there are no patient data)

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