Title: Barriers to Follow-up Adherence for Patients with Juvenile Idiopathic Arthritis Associated Uveitis at a Tertiary Care Center

Authors: Krishna Mallem[1], Rayna Marshall[1], Camellia Edalat[1], Paulina Liberman[2], Bryn Burkholder[2], Jennifer Thorne[2], Meghan Berkenstock[2]

Affiliations: [1] Drexel University College of Medicine, Philadelphia, PA; [2] Division of Ocular Immunology, Wilmer Eye Institute, Johns Hopkins School of Medicine, Baltimore, MD

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Abstract

Introduction: Juvenile idiopathic arthritis (JIA) is the leading systemic disease causing uveitis in childhood. Systemic immunosuppressive treatment needs to be added early to prevent ocular complications. Regular, long-term monitoring is needed given a higher risk of intraocular pressure rises with corticosteroid use and the risk for amblyopia with cataract formation. We assessed the correlation of demographic factors with follow-up adherence in treated patients with JIA-associated uveitis.

Methods: This was a retrospective chart review of patients with at least 2 appointments for JIA-associated uveitis who were taking topical corticosteroid and/or immunosuppressive therapy seen at the Wilmer Eye Institute Division of Ocular Immunology between August 1984 and October 2022. Patient ophthalmic history, demographics, insurance type, distance traveled to clinic, and the recommended follow-up time and actual duration between visits were recorded. Follow-up adherence was defined as the compliance of patients with the recommended intervals for follow-up appointments. A buffer period—2 weeks for a 1-month follow-up and 4 weeks for a 3-month follow-up—was added to these intervals to accommodate scheduling variations. Patients were considered adherent if they attended their appointments within this adjusted time frame; attending beyond this period was classified as non-adherence. The generalized estimating equation and odds ratios were used to assess for significance defined as p<0.05.

Results: There were 106 patients with a median age of 16 years. Most patients were female (72%) and Caucasian (82%). The total number of patient visits was 3,169 with the total time of follow-up of 899.4 years (mean 8.6 years). Sixty-nine patients had at least one late visit

(88.46%). The mean distance from the clinic in on-time patients was 122.3 miles and late patients was 179.2 miles (p<0.01). The odds of being late were 0.04% higher for every 10-mile increase in distance from the patient's residence to the clinic (p=0.02). Finally, patients with military insurance, were statistically significantly associated with being late to their appointments (p<0.01).

Conclusions: Patients living farther from the clinic and those with military insurance were found to be more likely to be late to follow-up. These findings can help clinicians identify patients at risk for follow-up non-adherence.