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THE EPIDEMIOLOGY AND RISK FACTORS FOR THE PROGRESSION OF SYMPATHETIC OPHTHALMIA IN THE UNITED STATES: AN IRIS® REGISTRY ANALYSIS

Oral

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Purpose:

To investigate the demographic and clinical characteristics of patients with sympathetic ophthalmia (SO) and define the risk factors for its development following trauma and ophthalmic procedures.

Methods:

This is a retrospective study. Patients in the American Academy of Ophthalmology's IRIS® Registry (Intelligent Research in Sight) diagnosed with SO between January 1st, 2013 and December 31st, 2019 were included (n=2,429). Multiple demographic and clinical factors were collected, descriptive statistics and prevalence were calculated, and multivariate linear regression models were fit to the data. Outcomes were prevalence of SO across geographic areas, demographic and clinical characteristics, and beta coefficient (β) estimates of demographic and clinical characteristics impacting time to SO onset after procedure ('Procedure Only' cohort) or trauma ('Trauma cohort').

Results:

Out of 65,348,409 distinct patients, 2,429 (0.0037%) were diagnosed with SO. Of these, 1,460 (60.11%) were females and 2,106 (86.70%) belonged to the 'Procedure Only' cohort. The prevalence of SO after trauma was 0.04% while after procedures it was 0.02%. The highest prevalence of procedure-related SO was seen in patients with history of multiple procedures (0.0005%) and the lowest was noted with vitreoretinal surgeries (0.0001%). The average time to onset of SO across both cohorts combined was 511.06 (± 798.43) days and was shorter with increasing age, by 7.42 (95% CI: -9.88, -4.97) days for every one-year increase.

Conclusions:

SO following trauma and ophthalmic procedure is potentially rarer than previously reported, as measured in this large dataset. Female sex may be a risk factor for SO while older age might be a risk factor for quicker onset. These findings can guide clinical decision-making and management.