

Leptospiral uveitis: A late complication of systemic leptospirosis

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Background and objectives: Leptospirosis is an important animal borne disease that primarily affects farmers in tropical countries. As a late complication, it causes ocular inflammation, uveitis. We are presenting ocular signs of leptospiral uveitis.

Methods: In this retrospective observational study, we have reviewed the data from clinical and laboratory records of microscopic agglutination test (MAT) positive, uveitis patients seen between 1994 and 2017 at the uveitis department of a university affiliated ophthalmology postgraduate institute in Tamil Nadu, South India.

Results: Out of a total of 75,150 new uveitis cases with different aetiologies seen in 24 years, 3,658 (4.9%) had clinical diagnosis of leptospiral uveitis. Of them, 1,268 (34.7%) patients were positive for leptospiral serological test. Of them, follow-up details were available for 876 patients. Of 876, 650 (74.2%) were men, 482 (55%) were farmers. 1224 eyes of 876 patients were found to have uveitis. The most common ocular signs were vitreous membranous opacities seen in 814 eyes (66.5%) followed by retinal phlebitis in 347 (28.4%), optic disc hyperaemia in 260 eyes (21.2%), and hypopyon in 208 eyes (17%). Active choroiditis/retinitis were never seen. Topical, oral or periocular steroid injections were used to treat uveitis. Inflammatory control was achieved in 96% of the patients. Two or more-line visual improvement was seen in 700 out of 740 (94.5%) eyes.

Interpretation and conclusions: Ocular involvement is an important immunological complication of systemic leptospirosis. Recognition of this entity is vital, especially in young males in whom other immunological uveitis are also common.

Keywords Hypopyon; Leptospiral uveitis; Ocular leptospirosis; Retinal vasculitis; Vitreous membranes