Commentary: Pattern of uveitis in a tertiary eye care center of central India: Results of a prospective patient database over a period of two years

Uveitis covers a large group of varied intraocular inflammatory diseases of diverse causes that not only affect the uveal tract but also other ocular tissues such as the retina, optic nerve, sclera, lens, and vitreous body.[1-8] With the introduction of newer uveitic entities, the differential diagnosis of uveitis and intraocular inflammation is getting widespread, changing with time and becoming highly variable because of the influence of geographic, ethnic, genetic, and environmental factors, updating the diagnostic criteria and referral patterns.[1-5] Despite the availability of improved and more diagnostic techniques, substantial development in understanding the mechanisms involving the etiopathogenesis of uveitis has largely been reliant. Epidemiological and hospital-based studies in uveitis may prove to be a tremendously important tool to better understand the etiology of the ailment and classifications of its subtypes.[1-3] Studies on the uveitis date back to the early 1960s when experimental clinical methods were used to study and analyze the medical literature.[1-4] Uveitis pattern in developing and developed nations shows a lot of variations.[2] Most of the clinical studies in the uveitis literature are retrospective and provide information from the patient records.[1-6] However, the prospective studies, like this study, are very reliable as there are less prone to errors because the specific data are collected during the patients' visits and not from the old records.[9]

Almost all uveitis studies in India and abroad were based on the SUN criteria.[1-8] According to it, anatomically, uveitis is classified as anterior, intermediate, posterior, and panuveitis.[1] Out of these four, anterior uveitis was found to be the commonest in most of the previous studies.[1-9] Pattern of uveitis has previously been studied in the southern, northern, north-eastern, and now central Indian population.[2-5,7] There are only a few studies which described the changing pattern of uveitis in these geographical areas.[6,7] Newer studies point toward the emergence of infectious uveitis in India.[2,3,5,7] The present article describes a prospective observational profile of all new uveitic cases from 2016 to 2017 at a tertiary eye care center of central India.[9] A total of 210 patients were evaluated, of which anterior uveitis was found in 47.1% cases, followed by intermediate uveitis in 31.90% cases.[9] These results are consistent with other published studies in different parts of India.[9] The number of cases of posterior uveitis (n = 27/210, 12.85%) and panuveitis (n = 17/210, 8.1%) were found to be less as compared to previous studies in India.[2-5,7] Infectious uveitis was seen in 54 patients (25.71%). Toxoplasmosis as a cause of posterior uveitis was found to be less than that found in the other studies from India.[2,3,7] Ocular tuberculosis was found in 46.29% of the cases, which showed an ascending trend and was comparative with newer studies in India.[2,3,7] Tubercular (TB) uveitis is found to be common in TB endemic country like India. It has varied presentations and can present as granulomatous or nongranulomatous form.[2,3,7] The ocular TB falls under extrapulmonary TB which is mostly paucibacillary.[3,7] Ocular TB can be immune-mediated reaction to tubercular antigen.[3,7] Uveitis following viral etiology (38.88%) showed a threatening tendency in uveitic patients in the pattern of study in central India.[9] Various viral diseases can affect the uveal tract such as herpes virus, human immunodeficiency virus (HIV), rubella, measles, cytomegalovirus (CMV), dengue, West Nile, chikungunya, and lately Zika virus infection.[1-8] Viral retinitis can occur with or without systemic involvement[2,6,7,8] Serum viral antibody tests can sometimes be misleading while treating these cases.[2] Anterior chamber and vitreous aspirate for polymerase chain reaction (PCR) can be much more informative.[3,5,7] HLA B-27 related seronegative spondyloarthropathy was significant (27.27%) among the noninfectious uveitis.[9] The study mentioned the use of PCR in the diagnosis of HLA B-27, which might be a better standard diagnostic test in evaluating the condition.[9] Analysis of the complications of uveitis was an important aspect of this study.[9] Cataract was seen as a major complication in the subset of the uveitic population of central India, whereas traumatic uveitis constituted 14.54% of the cases.[9] Parasitic uveitis as such in this study was less compared to the rest of the studies in India.[3-7]

Global and region-specific studies should explore the phenotype and genotype of the disease-specific components. The biological behavior of infectious agents can vary from region to region depending on endemicity. TB infection and its manifestation in developed and developing countries like ours vary with geography.[2,3,7,8] Their mode of presentation, diagnosis, and intervention also differs. The same is true with viral infections such as HIV and CMV. There is dramatic change in the presentation of CMV retinitis, in pre - highly active antiretroviral treatment (HAART) and post-HAART era[2,3,7,8]

Interestingly, climatic change and global warming can affect the diseases and their behavior, which needs to be monitored by the experts and uveitic diseases are not an exception. The variations in the uveitis with respect to lifestyle, stress, seasons, diet, and substance abuse can be researched in future studies.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Dipankar Das, Jyotirmay Biswas[1], Harsha Bhattacharjee

Department of Ocular Pathology, Uveitis and Neuro Ophthalmology Services, Sri Sankaradeva Nethralaya, Guwahati, Assam, [1]Department of Uveitis and Ocular Pathology, Medical Research Foundation, Sankara Nethralaya, Chennai, India

Correspondence to: Dr. Dipankar Das, Senior Consultant and HOD: Uvea and Histopathology, Department of Ocular Pathology, Uveitis and Neuro-Ophthalmology Services, Sri Sankaradeva Nethralaya, Guwahati - 781 028, Assam, India.
E-mail: dr_dasdipankar@yaohoo.com

References

1. Jabs DA, Nussenblatt RB, Rosenbaum JT. Standardization of uveitis nomenclature for reporting clinical data: Results of the First International Workshop. Am J Ophthalmol 2005;140:509-16.
2. Rathinam SR, Namperumalsamy P. Global variation and pattern changes in epidemiology of uveitis. Indian J Ophthalmol 2007;55:173-83.
3. Dogra M, Singh R, Agarwal A, Sharma A, Singh SR, Gautam N, *et al*. Epidemiology of uveitis in a tertiary-care referral institute in North India. Ocul Immunol Inflamm 2017;25:S46-53.
4. Biswas J, Narain S, Das D, Ganesh SK. Pattern of uveitis in a referral uveitis clinic in India. Int Ophthalmol 1996-1997;20:223-8.
5. Das D, Bhattacharjee H, Bhattacharyya PK, Jain L, Panicker MJ, Das K, *et al*. Pattern of uveitis in North East India: A tertiary eye care center study. Indian J Ophthalmol 2009;57:144-6.
6. Henderly DE, Genstler AJ, Smith RE, Rao NA. Changing patterns of uveitis. Am J Ophthalmol 1987;103:131-6.
7. Das D, Bhattacharjee H, Das K, Tahiliani PS, Bhattacharyya P, Bharali G, *et al*. The changing patterns of uveitis in a tertiary institute of Northeast India. Indian J Ophthalmol 2015;63:735-7.
8. Luca C, Raffaella A, Sylvia M, Valentina M, Fabiana V, Marco C, *et al*. Changes in patterns of uveitis at a tertiary referral center in Northern Italy: Analysis of 990 consecutive cases. Int Ophthalmol 2018;38:133-42.
9. Borde P, Priyanka, Kumar K, Takkar B, Sharma B. Pattern of uveitis in a tertiary eye care center of central India: Results of a prospective patient database over a period of two years. Indian J Ophthalmol 2020;68:476-81.

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_1679_19

Cite this article as: Das D, Biswas J, Bhattacharjee H. Commentary: Pattern of uveitis in a tertiary eye care center of central India: Results of a prospective patient database over a period of two years. Indian J Ophthalmol 2020;68:482-3.