

Meet the challenge

The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy, said Martin Luther King, Jr.

Such a challenge for ophthalmologists of all subspecialties is uveitis as it deals with every cell and tissue of the eye, not just the eye, but beyond. The implications of its precise diagnosis and the controversies surrounding its optimal management have direct implications on the quality of life.

To partly meet this challenge, an earlier issue in 2010 was dedicated largely to the basics of diagnosis and the management of uveitis. Yet another attempt follows to highlight the intricacies of precision in the management of uveitis, and the recent updates and concepts to answer the controversies of what to choose and when.

In this issue, Dr. Biswas and team describe in detail the role of laboratory investigations in the exact diagnosis of uveitis and the recent developments in the same, emphasizing on the concept that investigations should be directed by history, signs, and symptoms rather than an umbrella of investigations, in an attempt to cover all the possible tests causing additional diagnostic pain to the patient.

Analysis of the vitreous is shown to be a valuable adjunct to the management of patients with intraocular inflammation.^[1]

Invasive techniques such as vitreous tap, diagnostic vitrectomy, retinochoroidal biopsy, and fine needle aspiration biopsy (FNAB) also play a pivotal role in the diagnosis of uveitis.^[2]

Vitreous biopsy is a highly accurate procedure not only for the diagnosis of uveitis but also for the diagnosis or exclusion of malignancy involved in ocular inflammation. It also helps in guiding relevant alterations in the management of inflammation. It is found to be an equally safe procedure.^[3]

Vitreous biopsy also extends help in cases of uveitis of unknown etiology by identification of specific causative agents and precise histopathologic grouping of the involved entities.^[4]

Vitrectomy is another useful way of obtaining vitreous sample. When used cautiously, diagnostic vitrectomy can be an extremely helpful procedure for establishing the etiology of ocular inflammation. Recent advances in minimally invasive instrumentation have made the procedure safer and more efficient. The combination of an array of diagnostic laboratory assays further potentiates the quality yield of the procedure.^[5]

Diagnostic vitrectomy is vital in case of suspicious infectious posterior uveitis due to bacteria and delayed onset endophthalmitis, acute retinal necrosis, progressive outer retinal necrosis syndromes, protozoal and helminthic diseases, herpetic necrotizing retinitis, and fungi.^[6]

Vitreous biopsy is by far the only means of definitive diagnosis of primary intraocular lymphoma and intraocular Whipple's disease.^[7]

In cases that project diagnostic dilemmas, vitrectomy for diagnostic sampling is a safe procedure and should be considered sooner than later.^[8]

Occasionally, vitreous analysis may fail to provide any relevant diagnostic information. Certain infectious pathogenesis like atypical presentations of toxoplasmosis or candida retinitis or masquerades like intraocular lymphoma presenting with sub-retinal pigment epithelium (RPE) infiltration and others localized in the neurosensory retina or RPE may require endoretinal or subretinal biopsy.^[9-11]

As a last resort to ascertain the diagnosis and excluding the possibility of malignancy, retinal biopsy may be indicated in patients with severe bilateral vision compromising uveitis. Endoretinal biopsy and histopathologic evaluation help in accurate diagnosis leading to targeted treatment that may potentiate the scope of vision salvage.^[12]

Although retinal or choroidal biopsy is a valuable investigation of last resort, it should be considered at an earlier stage if severe visual loss is to be prevented.^[13]

Though associated with possible morbidity, retinal and choroidal biopsies can play a vital role in the diagnosis and further management of atypical, aggressive presentations of uveitis.^[14]

Not only is etiologic diagnosis a challenge, so also are the associated complications.

Cataract and glaucoma are frequently associated with chronic or recurrent uveitis, either as an extension of the disease or its management. These are sometimes very difficult to deal with, and controversies on the need and technique for the surgery keep washing the bay. In this issue, Dr. Murthy and team very efficiently resolve the issue, clarifying the need to be either therapeutic or diagnostic or to manage complications. The article also gives an insight on vitreoretinal surgery in uveitis.

Vitreoretinal surgery may be needed in a case of uveitis for diagnostic or therapeutic purposes. Diagnostic aims are clearly discussed above. For therapeutic purposes, vitreoretinal surgeries may be employed for treating complications and sequelae like vitreous hemorrhage/opacification, retinal detachment, fibrotic tissue, and epiretinal membrane. Though not completely proven, vitrectomy can speed the recovery and reduce the dosage or the need for corticosteroids and immunosuppressant medications.^[15]

The photo essay in this issue reinforces a picturesque view of the peripheral choroidal nodules. The idea promotes the need for not only confirming a diagnosis leading to accurate management but also documenting the same for the benefit of all.

An algorithm for diagnostic approach to uveitis makes the diagnosis look like a child's play, but in fact, it helps battle through difficult times when the signs and symptoms are misleading or the test reports are misleading. One has to know the pitfalls concerned with each observation before establishing the etiologic diagnosis of uveitis.

Amidst all controversies and lacunae in the etiopathogenic mechanisms and treatment response associated with uveitis, the diagnosis and management of uveitis and its complications many times pose a threat to the ophthalmologists, even when equipped with all clinical and ancillary acumen. Though clues through clinical evaluation give a hint to the diagnosis, investigations assist in confirming the diagnosis. Recent advancements and newer techniques in the investigations and management have increased the precision and yield of diagnosis.^[16]

Indian Journal of Ophthalmology is proud to have a Guest Editorial by Narsing A Rao, Past President of The International Uveitis Study Group and the present President of the International Ocular Inflammation Society.

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