

Common Ocular Surface Disorders and their Management

Hassan M.B

Department of Surgery, College of Health Sciences, Osun State University, Osogbo.
E-mail: mustapha.hassan@uniosun.edu.ng

Introduction: Ocular surface is a complex, integrated system involving the cornea, conjunctiva, tear film, lacrimal gland, nasolacrimal system and the eyelids. Its physiological function depends on the interaction of these different components to maintain a clear optical surface, keeping the eye moist, and protect it from trauma and infection. Changes in the structure and function of any of its components can disrupt this delicate balance and lead to pathology.

Clinical Features: Common symptoms include reduced vision; redness; irritation; itching; pain; discharge; and watering. Detailed histories of these symptoms are essential. Clinical examination of the ocular surface using a stepwise approach to assess the vision followed by examination of eyelids for position and closure; the lid margin and meibomian gland openings for abnormal positions, inflammation and plugging with secretions. Tears are also examined for quality and quantity. Conjunctiva is assessed for inflammation, scarring, haemorrhages and abnormal swellings and possible malignancies, foreign body defects, inflammatory membranes, papillae and follicles. Cornea is examined for foreign bodies, infiltrates, oedema and deposits. Corneal sensation is tested. Stromal opacity is assessed for size, location, pattern and depth. It is necessary to look for active or inactive blood vessels, guttata, Descemet folds and deposits.

Diagnosis: Ocular surface problems present with a limited range of symptoms which often overlaps. Their pattern can often help to differentiate between conditions. Therefore, a careful examination is critical to reaching an accurate diagnosis among myriads of conditions that can affect ocular surface.

Management: Ocular surface diseases can be managed effectively, choosing an approach and therapy based on the functional effects observed and their severity which include chronic punctate keratopathy, and recurrent corneal erosion among others. Stepwise approach to treatment will involve eliminating exacerbating factors like surface irritants; support ocular lubrication; using therapeutic contact lenses; control of ocular surface inflammation and managing specific disorders. Surgical intervention may be necessary for cases amenable to surgery like pterygium.

Conclusion: It is important that patients are counselled prior to treatment as they must understand the nature of their condition and the expected outcomes following treatment, as life-long therapies may be needed. And in the absence of a definite diagnosis, identifying and treating the functional effects of the underlying disorder on the ocular surface is often sufficient.

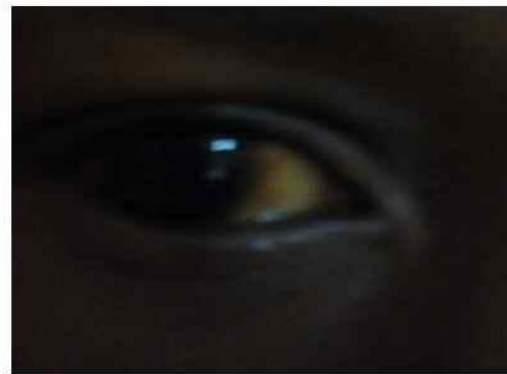


Fig. 1: Vernal Conjunctivitis

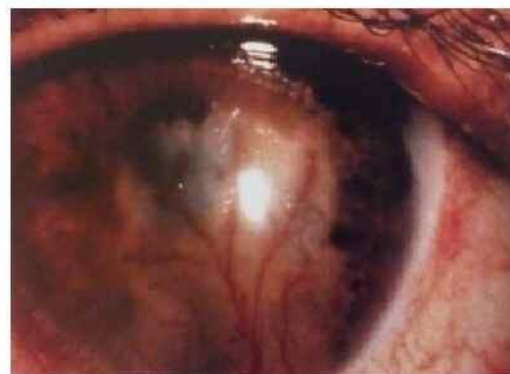


Fig. 2: Corneal Pannus

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