In Ophthalmology

DRY EYE DISEASE

Dry Eye Disease (DED) is a common, chronic ocular condition with a multifactorial etiology and an increasing incidence over the past few decades.

DED can be classified as aqueous deficiency dry eye and evaporative dry eye, with major components in both being tear film instability and inflammation.

Some of the risk factors include smoking, contact lens use, chronic ocular allergy, prolonged exposure to digital screens among others. Dry eye disease can also be a part of systemic conditions such as Sjogren's syndrome, thyroid abnormalities or other autoimmune disorders such as rheumatoid arthritis.

The symptoms could range from ocular discomfort in the form of irritation, foreign body sensation, redness and ocular fatigue to visual impairment, which may be present in severe cases.

Evaluation of DED begins with recording the subjective perception of the patient symptoms in the form of questionnaires. Clinical evaluation includes the Schirmer's test, tear film break-up time, ocular staining scores, tear film analysis and meibomian gland analysis. Systemic evaluation for associated conditions can also be done when suspected.

Management is usually a step ladder approach depending on the severity of the condition. Basic environmental modifications like quitting smoking, appropriate use of digital screens and contact lenses can help in improving patient comfort.

Various forms of artificial tear substitutes are available for treating mild to moderate cases. Control of the inflammation component, when present, in the form of steroids/cyclosporine also plays a major role to keeping the disease under control.

Supportive measures like warm compresses, topical and/or oral antibiotics to manage any meibomian gland dysfunction is the key in managing evaporative dry eye disease.

Surgical management in the form of punctal plugs, once inflammation is under control, help in prolonging the retention time of tears in chronic cases.

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