

## Understanding eye diseases for dentists

Prof. Un Chul Park

In this lecture, I aim to provide a comprehensive overview of various ophthalmic diseases for dentists who require precise work.

In particular, conditions like presbyopia and dry eye syndrome can compromise the quality of precision work, especially when it demands prolonged periods of high difficulty. Presbyopia occurs as the elasticity of the lens decreases with age, leading to a decrease in the eye's focusing ability and the onset of near vision impairment. There is no proven method of prevention, but various methods such as glasses, surgery, and medications can be used to alleviate symptoms, each with its pros and cons and no definitive solution. Dry eye syndrome involves a condition where the tear film's stability is compromised, leading to excessive evaporation of tears or insufficient aqueous layer being the main cause. Particularly during high-level difficult tasks, reduced blinking frequency can exacerbate symptoms. Typically, treatment involves supplementing the aqueous layer with artificial tears and managing meibomian gland function through warm compresses to restore the lipid layer and prevent evaporation.

As society ages, typical age-related eye diseases such as cataracts, macular degeneration, and glaucoma are becoming more prevalent. Cataracts involve the degeneration of lens proteins, causing lens opacity and resulting in vision loss. Although it can occur due to various reasons, aging is the primary cause. Treatment involves surgical removal of the opaque lens and implantation of an intraocular lens. The macula is the central area of the retina responsible for vision, and macular degeneration occurs when structural and functional damage to the macula leads to vision loss. It is often associated with age-related macular degeneration. Depending on the presence of neovascularization, it is classified into dry and wet types, where wet requires more aggressive treatment like anti-VEGF injections. Floaters are perceived as shadows floating in the visual field and are primarily caused by aging and degeneration of the vitreous body. While there is no specific treatment, if accompanied by retinal abnormalities, appropriate treatment may be necessary.

### Profile

- \* Internship at Seoul National University Hospital
- \* Residency in Ophthalmology at Seoul National University Hospital
- \* Fellowship in Ophthalmology at Seoul National University Hospital
- \* Doctor of Medicine, Seoul National University College of Medicine
- \* Present) Professor of Ophthalmology at Seoul National University Hospital
- \* Present) Secretary general, Korean Retina Society