INTRODUCTION

Dry eye is the most common complication of LASIK eye surgery. Dry eyes after LASIK may be a life-altering, chronic condition. Refractive surgeons are aware that LASIK induces dry eye. Dry eye may interfere in the healing process and lead to corneal erosions and refractive regression ***(Ambrosio et al., 2008)***.

Dry eye is defined as a disorder of the tear film caused by tear defi ciency or excessive tear evaporation, which, in turn, causes damage to the interpalpebral ocular surface and is associated with symptoms of ocular discomfort. Symptoms of ocular dryness are most common after ophthalmic surgical procedures. Cutting a LASIK flap and performing stromal ablation disrupts the corneal innervation and produces a relative loss of corneal sensation for up to 6 months after surgery. Dry eye symptoms are the most common problems encountered after LASIK and occur in 15-25% of patients ***(Takashi Kojima et al., 2008).***

Under normal circumstances, the very sensitive nerves in the cornea send signals to the lacrimal gland which produces tears in response to dryness or irritation. However, during LASIK, the surgeon prepares a thin flap under which the Laser energy is apllied. It is normal and expected that during the creation of the flap a certain number of the corneal nerves will be temporarily damaged. It means that for some period of time after LASIK, the regular nerve impulses that would have ordinarily told the lacrimal gland to produce tears will be interrupted. This is normal and expected part of the healing process after LASIK. Every LASIK patient will need to use lubricating and moisturizing drops very often after their procedure.

This is normal. You must keep the eye adequately bathed in tears in order to heal properly ***(Shoja and Besharati, 2007).***

There are several diagnostic tests may be used to help to diagnose dry eyes, like Schirmer's test which involves placing a small strip of filter paper in inferior cojunctuval sac. This test evaluates aqueos tear production. A second test is called a break up time which involves instilling a small amount of fluorescein dye in inferior conjunctival sac and observing the pattern of dryness in tear film. Lactoferrin assay is also helpful to diagnose dry eye ***(Calvillo et al., 2004)***.

The management of dry eye begins during the preoperative screening examination, when patients signs and symptoms are assessed, and an individualized treatment regimen devised to prepare and optimize the ocular surface for LASIK. Measures of optimization of the ocular surface vary according to aggravating factors. ***(Wilson and Perry, 2007).***

Aim of the work

The aim of this work is to review the literatures concerning dry eye after LASIK and the update in the management.