Table 14-1

Dry Eye Pertinent Medical History

SYSTEMIC PATHOLOGY	SYMPTOMS	MEDICATIONS
Systemic lupus erythematosus	Contact lens intolerance	Antidepressants
Steven-Johnson syndrome	Foreign body sensation	Antihistamines
Environmental allergies	Fluctuation of vision	Antihypertensives
Neurological pathology	Redness	
Sjögren's syndrome		
Rheumatoid arthritis		
Acne rosacea		
Sarcoidosis		
Menopause		
Ocular cicatricial pemphigoid		

Table 14-2

Dry Eye Preoperative Clinical Evaluation

OCULAR SURFACE	SYSTEMIC
Punctate epithelial keratopathy	Dental and peridontal disease (Sjögren's)
Meibomian gland inspissation	Rhinophyma
Tear meniscus/Schirmer's	
Eyelid collarette formation	
Conjunctival pleating	
Exposure/ectropion	
Conjunctival tylosis	
Hyperosmolarity	
Palpebral fissure	
Telangiectasia	
Tear break-up time	

Reduced Visual Quality: Anatomical-Functional Alterations

Anatomical alterations can cause deterioration in visual quality, limiting or compromising the final result. These changes mean that it may not be possible to implant a premium IOL in the eye.

Keratoconus or marginal pellucid degeneration can lead to HOA that may compromise the visual quality and the final refractive result.

It has already been stated that keratoconus is a contraindication for surgical correction of refractive errors to allow a good refractive outcome.

Due to corneal collapse, keratoconus (Figures 14-3 and 14-4) will induce characteristic HOA, called *coma* (Z3 -1; +1) (Figure 14-5); this will lead to a misalignment of the wavefront. The analysis of the point spread function illustrates the formation of a tail around the light spot in the shape of comet (Figure 14-6). By definition, this aberration cannot be corrected with lenses and the resulting refraction is associated with moderate/severe astigmatism.

Even in the presence of a debilitating pathology such as keratoconus, the surgeon should evaluate the error carefully and decide if and when a toric lens, for example, should