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The impact of diabetes on corneal nerve morphology and ocular surface integrity

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## Review. The impact of diabetes on corneal nerve morphology and ocular surface integrity

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### FOOTNOTES

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**Abstract.** Diabetes mellitus is a chronic disease that results from inadequate insulin production or ineffective insulin utilization. It is one of the most common systemic diseases worldwide with increasing prevalence. Diabetes mellitus is associated with premature mortality, macrovascular complications such as cardiovascular disease, and microvascular complications, including nephropathy leading to kidney failure, potentially blinding diabetic retinopathy, and diabetic neuropathy. While the retinal complications of diabetes are well recognized by eye care professionals, the effects on the ocular surface are poorly understood. Recent studies have reported on the association between peripheral neuropathy and corneal neuropathy, showing the latter to be of predictive value for the systemic disease. Corneal neuropathy can lead to loss of corneal sensation and can ultimately result in neurotrophic ulcers and significant visual morbidity. The epithelial fragility and poor wound healing that result from reduced epithelial adhesion to the underlying basement membrane in diabetes,

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