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# An introduction to scleral lenses

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Scleral contact lenses have been a part of management and treatment of corneal disease since the 19th century. Due to difficulty with manufacturing, improper fitting and poor patient comfort, scleral lenses were not as frequently used as rigid gas permeable lenses. Significant advances in technology have allowed scleral lenses to become a more important player in the management of diverse groups of conditions. The development of high Dk lens material, the same used for rigid gas permeable lenses, has reduced hypoxic related complications that prevented scleral lenses from being the primary lens used for corneal conditions. These new lenses have increased oxygen permeability, tear flow and are able to vault the limbus appropriately preventing limbal cell damage. The enhancement in design features of scleral lenses is evidenced by the various eye conditions treated, including ocular surface disease, keratoconus, pellucid marginal degeneration, post-operative or post-trauma corneal disease, and irregular astigmatism. By creating a smooth refractive surface, scleral lenses have optimized visual performance and clarity. Scleral lenses have given patients increased options for visual enhancement without requiring surgery or the need for glasses. This lecture will guide practitioners through a basic scleral lens fitting starting from lens selection to fit evaluation.

## Biography

Suzanne W Sherman is working as an Instructor in Optometric Science in Ophthalmology at Columbia University Medical Center. She is board certified from the American Board of Optometry and National Board of Examiners in Optometry (NBEO). She is graduated from SUNY College of Optometry and completed a residency in Ocular Disease and Primary Care from Bronx Lebanon Hospital Center

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