

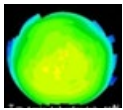
## Contact lenses in advanced solutions for management of irregular corneal profile

**Moataz Elhelaly**

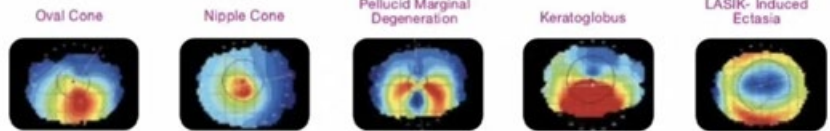
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While the cornea is the first front transparent medium of the eye facing light its sphericity and axial curvature can identify most of refraction errors and its irregular profile forming irregular vision as a result of high order aberration.

### Regular corneal profile



### Irregular corneal profile



### Regular and Irregular vision



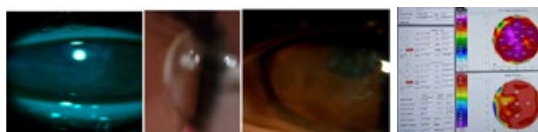
Specialty Contact lenses is non-surgical solution managing irregular cornea and correct vision for every day wear.” Soft customized - RGP corneal - Hybrid RGP/soft - Scleral “ Lenses.

**Introduction:** Keratoglobus is a rare, non-inflammatory corneal ectasia characterized by diffuse protrusion and thinning of the cornea And it appears at the first decade of life bilaterally.

**Case Report:** Male 25 years old male teacher ,with keratoglobus, assessment of visual acuity UNAIDED VA is <6/60 & BCVA is <6//30 with Amblyopia in right eye.



**Slit lamp biomicroscopy Corneal Topography thickness = 180 μm**



**Contact lenses attempts**

	<b>Lens type</b>	<b>BC</b>	<b>Dia</b>	<b>Sag</b>	<b>BVP</b>	<b>Edge Curve</b>	<b>Finding</b>	<b>VA</b>
<b>1</b>	Mini scleral	6.7	15	550	-5.5	--	bearing with the apex uncomfortable.	<b>6/18</b>
<b>2</b>	Hybrid lens	--	14.5	550	-14.00	8.1 (M)	feather apex bearing	<b>6/15</b>
<b>3</b>	Scleral	7.18	16.5	638	-8.00	Steep	bearing with the apex	<b>6/12</b>
<b>4</b>	Rgp corneal	6.2	11.2	--	-9.00	--	Not comfortable	<b>---</b>
<b>5</b>	Customized soft	7.6	15	--	-13.5	Steep 1	Comfortable	<b>6/12</b>

**Discussions:** The key to success with this patient was the ability to configure diameter, base curve and edge lift independently of the central fit

**Conclusions:** We don't deal with cornea as one piece, we should customize lens as per corneal profile, lens parameters BC, Dia, peripheral edges and lens material. After 25 years of living with severely compromised vision 6/30 to 6/12. His wearing time is generally 4 hours and has been pushed to 6 and has recovered an important degree of independence.

**Biography**

Moataz Elhelaly has completed his BSc science in optics technology at the age of 22 years from Higher Institute of Optics Technology Egypt and post bachelor studies in contact lenses was in Kuwait with practice more than 8 years HASSAN'S OPTICIAN CO. He is a teaching assistant and institute and head of training in optical company for ophthalmic and contact lenses.

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