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# Twop Case Study

**MANAGEMENT OF A PATIENT USING  
THE WRONG LENSES ON  
KERATOCONUS**



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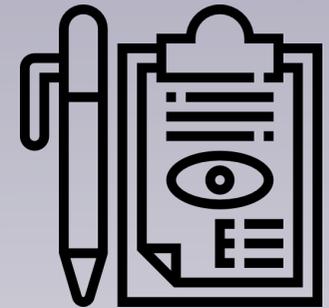
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# Patient History



**CHIEF COMPLAINTS:** 30 year-old male subject, wearing rpg lenses.

**OCULAR HISTORY:** The patient suffer from keratoconus from the age of 13.

**PAST MEDICAL HISTORY:** The guy in the past and in the present does not suffer from other eye problems besides his keratoconus - both eyes

**FAMILY HISTORY:** No one in the family suffers from keratoconus or other eye diseases.

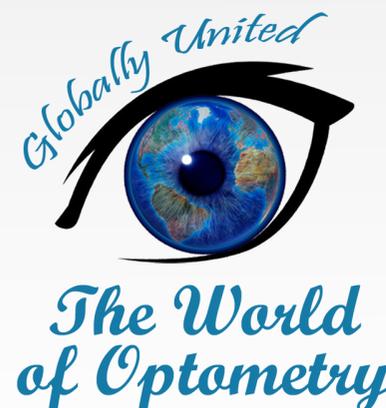
**VISUAL ACUITY:** (without CL):

RE: -2,50/-1,50 ax 90° Vision: 20/30

LE: 20/400

**VISION WITH HIS "OLD" RPG LENS:**

- RE: 20/20
- LE: 20/30



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# Contact Lens History

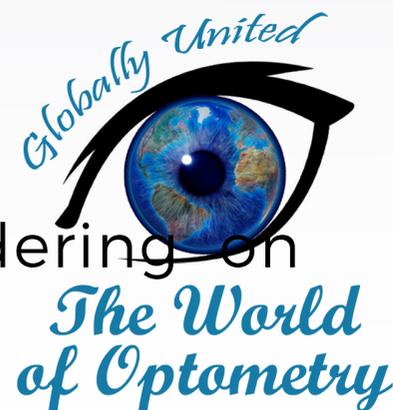
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The patient before going to our clinics, was followed by another Doctor. Unfortunately, the situation was badly managed right from the start. Since 2004, rgp customized lenses for keratoconus have been applied without modifying them until today!

The keratoconus in all these years has continued its evolution and the lenses year after year were more and more wrong. In the slit lamp, the contact and rubbing of the lens on the cone was evident, the situation was serious.

The vision acuity with the lenses was still good, but these was damaging the cornea.

After analyzing this situation, I decided to apply scleral contact lenses, so as to preserve the health and well-being of the keratoconus, which was increasingly degenerating (very thin cornea, bordering on transplantation).



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# Clinical Findings With Contact Lens

I decided to approach Scleral lenses

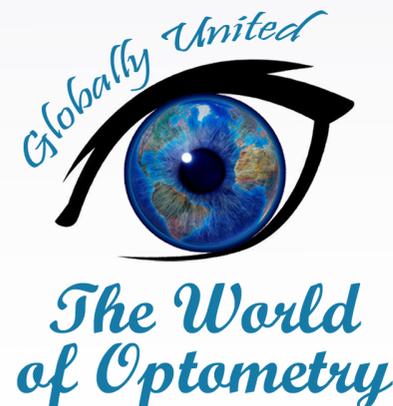


## TRIAL SET LENSES APPLIED:

- **RECL:** CUSTOM STABLE ELITE 24E; r0: 7,18 mm; 47,00D; Diameter: 14.80; F'v: -6,00; SAG: 4,280 mm
- **LECL:** CUSTOM STABLE ELITE 14E; r0: 6,89 mm; 49,00D; Diameter: 14.80; F'v: -8,00; SAG: 4,530 mm

## OVER REFRACTION:

- **RE:** +1,75 (vision achieved with lens applied 20/20)
- **LE:** -5,50 / -4,00 ax 5° (vision achieved with lens applied 20/30)



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# Clinical Findings With Contact Lens

## SLIT LAMP EXAMINATION OF CL:

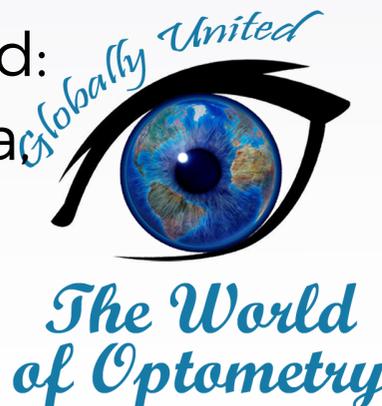
On both eyes everything was ok in diffused light, in the optical section the distance between the cornea and the back surface of the lens is excellent.

The lenses are well centered on both eyes, the astigmatism axes were also correct (horizontal reference marks  $180^\circ$ ).

## FLUORESCEIN EXAMINATION:

This moment of the visit is important because it allows us to understand if the lens remains too raised in the periphery (or not). A lens that is too raised in the periphery can allow the patient's tear to pass underneath, compromising good vision during wearing.

We must also observe the situation with the lens removed: if we see too much (or too little) indentation on the sclera we should open or tighten the curvature of the surfaces. In this case everything was ok on both eyes.



DRAG TO THE SIDE  
DRAG TO THE SIDE

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# Clinical Findings With Contact Lens

RIGHT OLD LENS WITH FLUORESCEIN

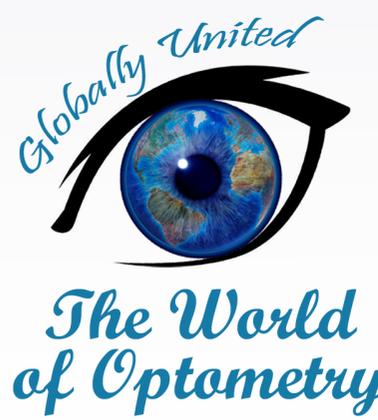
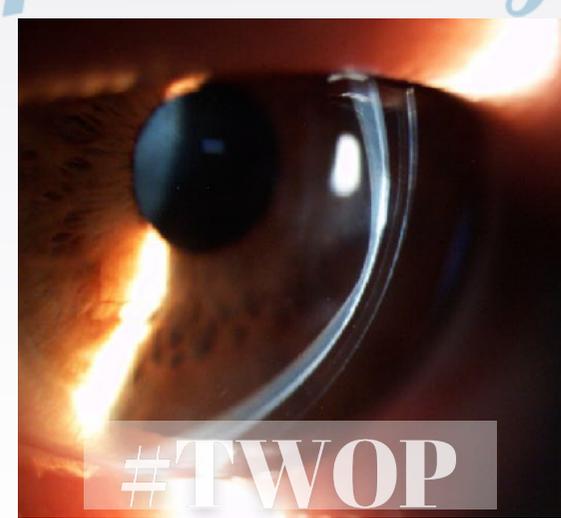


LEFT OLD LENS WITH FLUORESCEIN



## TRIAL LEFT SCLERAL LENS

In this photo we see how the cornea is very thin due to the keratoconus and the support and rubbing of the old rgp lens (easily visible in the two photos proceeding with fluorescein)



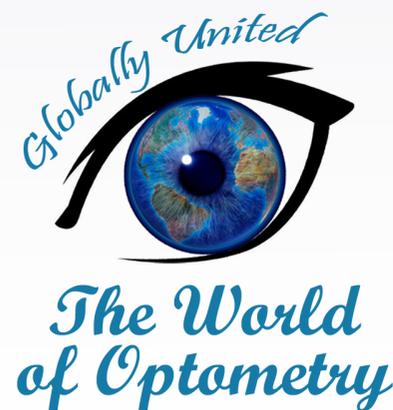
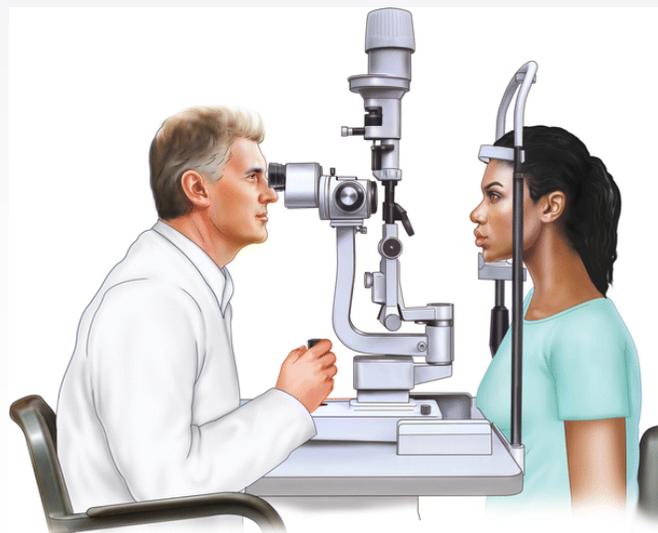
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# FINAL LENSES ORDERED

## FINAL LENS PARAMETERS:

- **RECL:** CUSTOM STABLE ELITE 24E; r0: 7,18 mm; 47,00D;  
Diameter: 14.80; F'v: -4,25; SAG: 4,280 mm.  
Vision achieved: 20/20

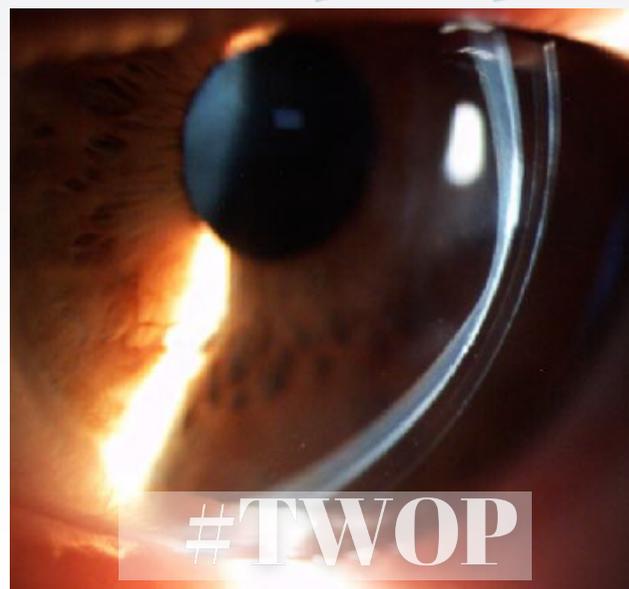
- **LECL:** CUSTOM STABLE ELITE 14E; r0: 6,89 mm; 49,00D;  
Diameter: 14.80; Power: -13,50 / -3,50 ax 180; SAG: 4,530 mm.  
Vision achieved: 20/25



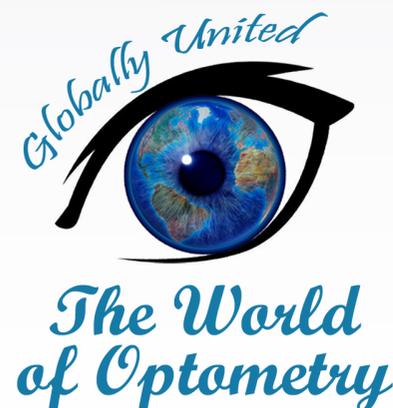
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# Management & Treatment

- The vision remained optimal As with the previous lenses, But the big upgrade we got By changing the type of lens From custom rgp to scleral Lens.
- Periodic checks are carried Out regularly every 3 Months. Lens maintenance is Well managed and the eye is Healthy.
- The cone is not touched by The lens, this preserves and Does not degenerate its Health



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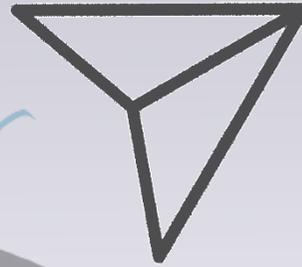
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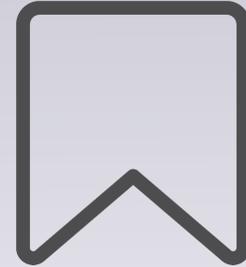
Wow, what a cool content



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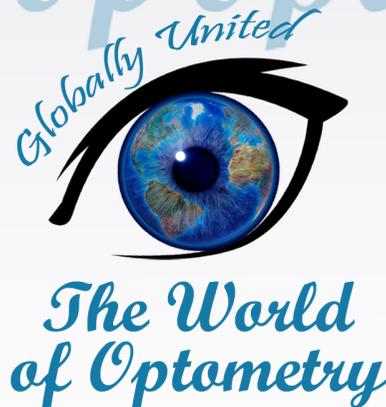


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