HaloView
and
SimVis Gekko

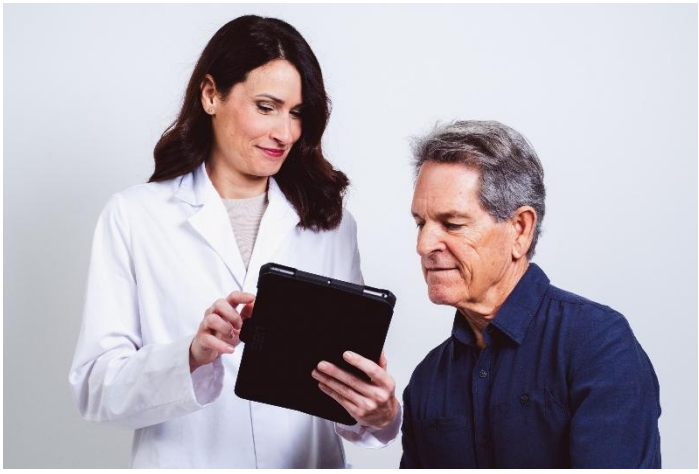
SimVis Gekko is a **binocular, wearable visual simulator** designed to allow patients to experience, before surgery, how their vision would look with different types of premium intraocular lenses (IOLs).

SimVis Gekko can reproduce the optical quality of the IOLs, including photic phenomena such as halos produced by the design. The origin of the halos in multifocal IOLs is the consequence of the overlaying of 2 or more images. To simulate them in the clinic SimVis Gekko can be used combined with **HaloView.**

HaloView is a device with four punctual LED lights that can be used in the clinic to help the patient experience what to expect regarding photic phenomena.

How do patients react?

Patients tend to describe dysphotopsias as an issue of quality of vision that can negatively affect their quality of life. This leads to patient dissatisfaction after cataract surgery, being the main cause of patient dissatisfaction after cartact surgery. The patient experiences surprise because they detect a mismatch between expectations and experience.



Using SimVis Gekko with HaloView will allow the patient to experience a subjective perception of dysphotopsias reducing the surprise after surgery.

Photic phenomena that will be present due to the superposition of the foci in each lens design can be perceived by the patient. When a perception is anticipated, it generates less emotional reaction.

Patients will be able to feel, understand and express themselves prior to surgery reducing uncertainty.

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How to use it during a SimVis Gekko examination?

1. **Adjust the SimVis Gekko** on the patient's head. And align it until the green making show up on the displays.
2. Select the pathway you want to test and evaluate the patient's perceptual vision for each correction.
3. Go back to the first correction and turn-off or dim the lights in the examination room. Turn on the HaloView. Place it straight at the patient's eye level and switch between pathway's corrections.
4. Comments can be written down during the evaluation.

Script for the clinician:

"Now, I am going to turn off the lights in the room to test photic phenomena. These phenomena are the glare and halos around sources of light. I am going to go back to the first correction I have showed you and you tell me how you feel, and if you notice the differences between the different options while looking to the four lights I will be holding."

Turn of the room's lights and stand as far as possible from the patient with the HaloView turned on. Start with the monofocal lens and let them know that is the baseline. Then start with the trifocal lens:

"You are now seeing through the first multifocal IOL option. Have you notice a change? Let me know if it bothers you. Would it be something that would affect your daily life or could you get used to it?"

Repeat the steps with the rest of the corrections if needed. If a patient during the SimVis Gekko examination has a preferred option, you can just try that correction out skipping the other options.