

## Scleral contact lenses in normal corneas: is it possible to improve visual performance?

Lentes de contato esclerais para córneas normais: é possível melhorar o desempenho visual?

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### Supplementary Material 2. Transcribed interviews.

#### P1

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** To be honest, for me, there isn't any advantage in wearing lenses. I felt there was always something in my eye, although I got more and more used to it over the days. Handling is not that simple and removing them was the hardest part. It seems that they don't do any good for my eye, they seem like a foreign body that is virtually useless. I'm afraid there's a risk of infection involved.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** Occasionally, I felt my vision was blurred when I was about to remove them. I felt no discomfort, pain, or itching until it was time to remove them. After removing them, yes, I felt my eyes were itchy and irritated many times.

**Investigator:** Regarding handling the lenses, on a scale of 0 to 10 where 0 is 'very difficult to handle' and 10 is 'very easy,' how do you rate your experience?

**Participant:** 4 at the beginning. Then it gets better.

**Investigator:** Was the level of difficulty the same throughout the period of lens wear?

**Participant:** No. At the end, I could put them in and take them out quickly.

**Investigator:** Have you noticed any improvement in your performance at work while wearing lenses?

**Participant:** No, I haven't.

**Investigator:** Have you noticed any reduction in eye discomfort at the end of a work-day while wearing lenses?

**Participant:** No, I haven't.

#### P2

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** It was quite difficult to handle them at first. Using the plunger made it much easier, and now I can do it quickly. I felt a slight difference in depth in relation to wearing glasses, but I got used to it over time. Last week, I wore them for 12 hours and didn't even notice it. I don't feel my eyes dry for most of the day, but after about 8 hours I start to feel a slight discomfort, it feels like dryness. Once I tried changing the fluid in the middle of the day, but it didn't make any difference in that feeling.

I used to wear soft contact lenses, and they differ only in handling, which is much harder at the beginning with scleral lenses. Also, I feel my eyes are moister with daily

soft contact lenses. In general, I do not tolerate soft contact lenses well, I only wear daily lenses with extra hydration.

**Investigator:** Please describe any symptoms while wearing lenses.

**Participant:** I can see really well with the lenses, and I don't feel them in my eyes most of the time.

**Investigator:** Regarding handling the lenses, which is most difficult: putting them in or taking them out?

**Participant:** Putting them in was the worst part! Taking them out was easy from the start.

**Investigator:** Was the level of difficulty the same throughout the period of lens wear?

**Participant:** No! Now I can do it easily. But I struggled in the beginning.

**Investigator:** Have you noticed any improvement in your performance at work or any reduction in eye discomfort at the end of a workday while wearing lenses?

**Participant:** I enjoyed wearing them, I can see really well and don't even notice them in my eyes. I haven't noticed any big difference between scleral and soft lenses in terms of comfort.

### P3

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** I enjoyed wearing them. Apart from having to put them in and take them out, which was difficult, I guess I got used to them quite well. My eyes were always moist and sometimes I even forgot I was wearing lenses.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** A few times I felt my eye was irritated when I removed the lens, especially in the first week. Then I got used to it.

**Investigator:** Regarding handling the lenses, how difficult was that? Has it gotten better or worse over time?

**Participant:** It was really bad at first and then it got better. I don't like things near my eyes, and I've never had to wear lenses or glasses, and that must be the reason.

**Investigator:** Have you noticed any improvement in your performance at work while wearing lenses?

**Participant:** It's hard to measure that. I felt comfortable on the days I wore them.

### P4

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** The hardest part was getting used to putting them in and taking them out. Sometimes, when I was in a hurry, I ended up wearing soft lenses because it was easier... particularly to remove them.

I could see really well, also during physical activity. Compared with soft contact lenses, scleral lenses don't move so they're better. Also, my eyes were less dry than with soft lenses.

**Investigator:** Regarding handling the lenses, was the level of difficulty the same throughout the period of lens wear?

**Participant:** No, it was worse at first. Now I feel a bit uptight only when I have to take them out. When bubbles appear, it is really hard to remove the lens, even with a plunger.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** No, I haven't. I found them comfortable and could always see really well. There was this one time when my vision blurred right after removing the lens, but in less than 1 hour everything was fine.

**Investigator:** Have you noticed any improvement in your performance at work or any reduction in eye discomfort at the end of a workday while wearing lenses?

**Participant:** There was not much of a difference at work, but I enjoyed the experience. Good to know there is such an option. My eyes were less dry, and I could see really well. Too bad it's a lot of work to put them on and take them out.

## P5

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** Inserting the lens was very complex, especially at the beginning. And this started to get in the way of my morning routine. So, I wore them more in the afternoon. While wearing them, I felt my vision improved. It's much better than wearing glasses! I've never worn contact lenses before, so I have no experience to compare with that.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** I felt good wearing lenses. Sometimes it was bad at first, because it was hard to put them on and I ended up hurting my eyes a little bit.

**Investigator:** Was the level of difficulty the same throughout the period of lens wear?

**Participant:** No, it was worse during the first few days. I'm doing better now, but I still struggle a little to handle them, especially to put them on. Removing them is easier.

**Investigator:** Have you noticed any improvement in your performance at work or any reduction in eye discomfort at the end of a workday while wearing lenses?

**Participant:** I've never had eye discomfort before, so I can't say whether it improved or not. I enjoy wearing the lenses, but I haven't noticed any improvement in my work because of it. I haven't made such an association.

## P6

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** I enjoyed the experience, it's nice to know something like this. I was a little scared to handle them, especially to put them on, and I think that got in my way a little bit. While wearing lenses, it took a while for my eyes to get used to them, but after about 40 minutes, I wouldn't even feel them anymore and could wear them all day long.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** When I was about to remove them, I felt my eyes were a little irritated, especially in the first week.

**Investigator:** Regarding handling the lenses, how difficult was that? Has it gotten better or worse over time?

**Participant:** It was difficult, especially at the beginning. It got better, but I still find it a lot of work.

**Investigator:** Have you noticed any improvement in your performance at work while wearing lenses?

**Participant:** I don't know. Maybe so, I felt less tired at the end of the day. My eyes were also less dry. I believe that, only if I wear them for a longer time, I will be able to define it better.

**P7**

**Investigator:** Please tell me about your experience in wearing lenses for 30 days.

**Participant:** I liked that wearing lenses helped me not to scratch my eyes so often, I was afraid of scratching and hurting them while wearing lenses. Also, I certainly had less dry eye and I didn't need to use lubricating eye drops in the last few weeks. Handling is a lot of work, but not impossible... It gets better with time. I was afraid of hurting my eyes.

**Investigator:** Have you experienced any symptoms while wearing lenses? Please describe them.

**Participant:** During the first few days, it took me a long time to put them on, and I think it ended up hurting my eyes, they were red. I felt no discomfort while wearing them.

**Investigator:** Regarding handling the lenses, how difficult was that? Has it gotten better or worse over time?

**Participant:** Hard in the beginning, and medium now at the end. It was never super easy.

**Investigator:** Have you noticed any improvement in your performance at work while wearing lenses?

**Participant:** I felt my eyes were cleaner and moister. That must have improved my performance.