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# Are multifocal (R)GP lenses in aphakic children an option?

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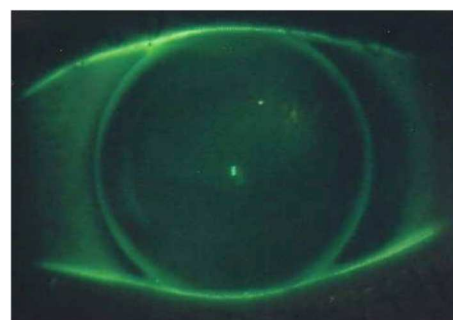
## Introduction

Every year, about 29,000 children are born in Europe and North America with congenital cataract and need surgery during their first weeks of life. At the American Academy of Optometry meeting 2000 in Orlando, we published a poster on “Multifocal contact lenses for aphakic children.” The question at the time was whether this complementary form of visual therapy is of value to the development of such children’s eyes or whether it interferes with the standard occlusion therapy. Now, more than 10 years later, we are able to check the long-term success of this patient and the effect the visual therapy had in her case.

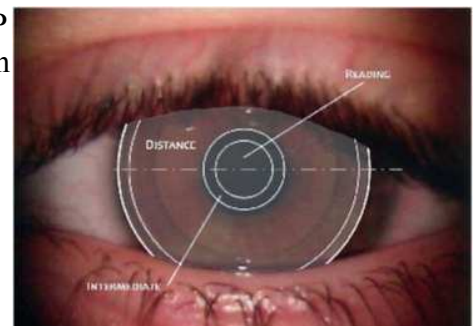
## Case report

Our patient, born in 1994 with unilateral cataract OD, underwent surgery in July 1994, followed by unsatisfactory standard occlusion therapy. Visual acuity with contact lenses (Vcc) OD with single vision contact lenses in April 1998 was 20/40, Vcc OS was 20/24.

In June 2000, we started to fit her with a large, bi-toric, trifocal (R)GP lens, specially designed for aphakic children, on her right eye and with a peripheral-toric, single vision (R)GP contact lens on her left eye.



Occlusion therapy was resumed because of the unilateral amblyopic status at that time. This time the occlusion therapy was more successful due to the fact that vision was better at all distances with the new trifocal contact lens OD.



In December 2000 her Vcc OD gained three lines, and in May 2011 she was up to 20/25 OD and 20/18 OS. She is able to read normal text size of J4 (LogMAR 0.2) with her right eye alone and small text of J2 (LogMAR 0.0) with both eyes while she is wearing her (R)GP lenses comfortably for 14 hours daily 7/7. After successfully earning her Swiss high school diploma, the patient starts her academic career in August as a business manager student at one of the famous Universities in Lausanne (Switzerland).

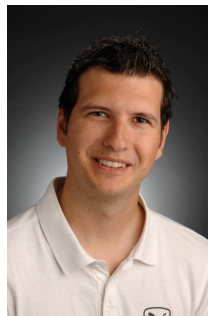
## Discussion

Instead of offering bifocal glasses over the single vision aphakic contact lenses, which are unpopular with children, we believe multifocal (R)GP contact lenses can offer a good opportunity for visual development of unilateral or bilateral aphakic children’s eyes, as was shown in this case.



### **Michael Baertschi**

Michael Baertschi was the senior optometrist at the University Eyehospital Basel from 2000 to 2007. He is the owner of Kontaktlinsenstudio Baertschi in Bern, Switzerland and the CEO of Eyeless AG in Bern. Michael graduated from Pennsylvania College of Optometry as M.Sc. Optom. and from the University of Bern as M.med. Educ. Michael Baertschi is a fellow of the American Academy of Optometry and president of the Swiss Interlens group.



### **Michael Wyss**

Michael graduated from Olten SHFA in Switzerland and did his MSc at the Hochschule Aalen Germany (in cooperation with New England College of Optometry and Pacific University, USA). Since 1999 he has worked in a private practice (kontaktlinsenstudio Baertschi in Bern, Switzerland) as Optometrist for specialty contact lens fitting. Additionally, he is an adjunct Faculty Member at the New England College of Optometry USA, Hochschule Aalen Germany, TVCI in Prague (Czech Republic) and FHNW Optometry in Olten Switzerland. Michael is a clinical investigator for several Industry Partners and has published or lectured on several topics in the contact lens field throughout the world. Michael is a Fellow of the American Academy of Optometry and serves as a Member of the Admittance Committee for new Fellows outside the USA.