

New Instrumentation for Pediatric Retina Cases

WITH AUDINA M. BERROCAL, MD

Due to the challenges that pediatric retina cases present, a new line of shorter vitrectomy instrumentation has been designed specifically for children (25+ Short, Alcon). Retina Today recently spoke with Audina M. Berrocal, MD, who has used the vitrectomy probe and light-pipe in many different cases at Bascom Palmer Eye Institute. Dr. Berrocal discussed this instrumentation at the Inaugural Vit-Buckle Society Meeting in Miami on April 13, 2013. Retina Today has provided coverage of this meeting throughout the year, and will be covering the upcoming VBS 2.0, which will be held this month in Las Vegas.

Retina Today: What are the challenges involved with operating on children's eyes?

Audina M. Berrocal, MD: Everybody thinks that children's eyes are little adult eyes, but they're really not. I think that the challenges include the size—the lens is large compared to the rest of the eye and the sclera is



really thin. When you're using traditional small-gauge instruments, they are very flexible, and it is hard to maneuver as desired because the instruments can bend. They are not made for tiny eyes in which it is difficult to maneuver in thick vitreous and through a thin sclera.

RT: When did you start using these instruments?

Dr. Berrocal: We started using these instruments approximately 1.5 years ago. We have been working with Alcon for some time trying to get smaller instruments for babies.

RT: Can you describe the design of these instruments?

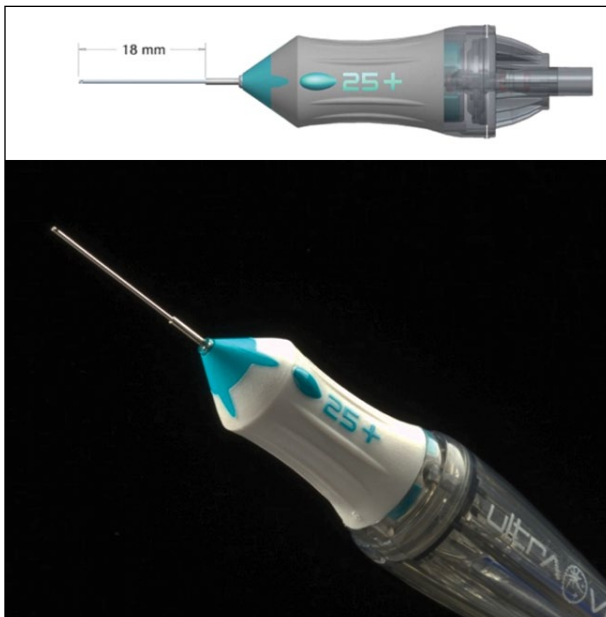


Figure 1. The 25+ Short Ultravit 7500 cpm vitrectomy probe.

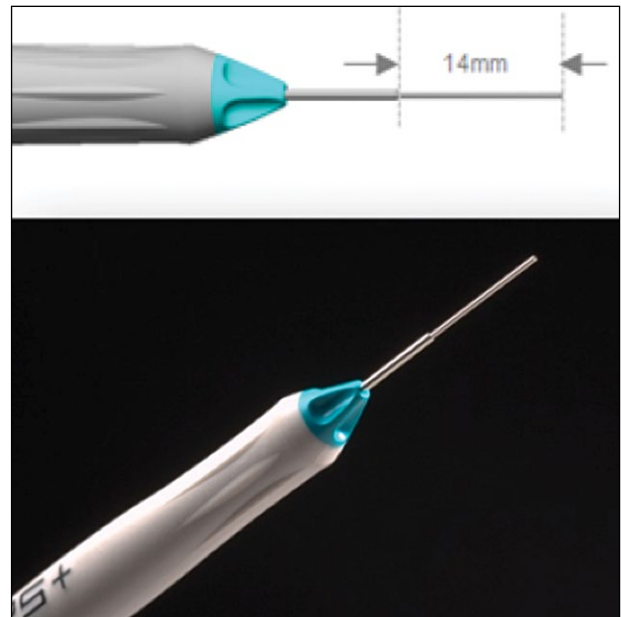


Figure 2. The 25+ Short Endoilluminator.

Dr. Berrocal: These 25+ Short instruments are shorter and stiffer than the standard instruments. A 20-gauge probe, for example, is 31 mm long compared with 18 mm with the 25+ Ultravit probe (Figure 1).



The pak is not perfect in that it includes a sutured-in infusion cannula. I would prefer a valved system with shorter trocars. Overall, however, these instruments offer better control of the eye allowing entry into the anterior periphery. I am able to get my probe all the way in without bending or moving the eye. Previously, I had to compromise my surgical technique because of the instrumentation.

I also like the shorter lightpipe (25+ Short Endoilluminator), which is 14 mm in length (Figure 2). The only caveat is that the lightpipe cannot be used as a second instrument for posterior work because it is too short. An advantage of this shorter lightpipe, however, is that it is great for training fellows because, as they are learning, I know that they won't cause any damage to the macula.

RT: In how many cases have you used these instruments?

Dr. Berrocal: Currently, I have used them for approximately 60 cases of a wide variety and in children from 6 months to 12 years old.

RT: Have you noticed that your outcomes are better?

Dr. Berrocal: Yes. I can now accomplish all of my goals in 1 surgery. Multiple procedures are common in pediatric surgery, but with the shorter instrumentation, I often have to go in only once. ■

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