HERO HELMET

Leigh Speilberg explains how it sometimes pays off to invest in the gadget yourself

"So, what did you see?" I asked the most junior resident, who thought he had a retinal detachment case in the emergency room.

"Well, I saw a detached retina," he answered. I wasn't convinced. The patient had experienced no flashes or floaters, was not myopic and had come to the ER for other reasons entirely. I suggested he go back to the patient and take another look while I finished examining my own patient. It was a calm day in the ER. I was supervising the younger residents that day, and we all had enough time to incorporate some teaching moments into the flow.

"Check for tobacco dust!" I called out to him as he exited my exam room. "And I'll drop by your exam room in a few minutes."

"Will you bring your hero helmet?" he asked as he popped his head back into the doorway, referring to my binocular indirect ophthalmoscope (BIO).

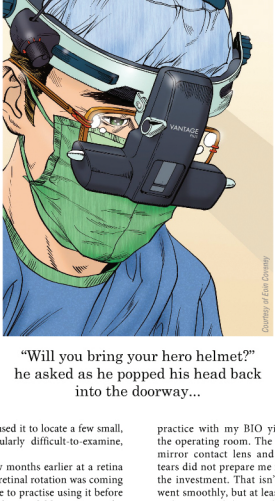
I would. My Keeler had quickly become my favourite piece of equipment and I rarely went anywhere in the hospital without it. Victor had begun calling it the "hero helmet" after I'd used it to locate a few small, peripheral retinal tears in a particularly difficult-to-examine, wheelchair-bound patient.

I had bought my Keeler BIO a few months earlier at a retina meeting in London. My major vitreoretinal rotation was coming up and I wanted to have enough time to practise using it before I started. After having tested all the available BIOs in the exhibition hall at the meeting, I choose the newest Keeler with the LED light. Sleek!

Coincidentally, it's the same model the VR specialists in my training hospital in Rotterdam use for scleral buckling procedures. Along with the BIO, I decided to spoil myself and also purchase a Volk Digital Clear Field, which has a similar field of view as a standard 30D lens.

SERIOUS INVESTMENT

It was a serious investment, but it was definitely worthwhile. Having done retinal research in New York, I had noticed that all ophthalmology trainees, even those not considering a future career in retina, routinely used BIOs. But use in my country of training, the Netherlands, is less common. I wish I had started using it earlier, because I was worried I might soon be struggling to see the retinal break while assisting during buckling surgery.



Courtesy of Eoin Donnelly

"Will you bring your hero helmet?" he asked as he popped his head back into the doorway...

Previous trainees had recommended getting a BIO. "Why would you want to look monocularly," said Rudolf Reyniers when he was a VR fellow at the Rotterdam Eye Hospital, "when you could look with two eyes? There's no comparison!" he said, referring to the monocular indirect ophthalmoscope favoured by some. "You have more light, a better view, stereopsis and an extra free hand."

I used it as much as I could, often when it wasn't even strictly necessary, just to practice. Peter van Etten, a former optometrist, current trainee ophthalmologist and future vitreoretinal surgeon, had showed me how to use it to find a lost contact lens and retrieve it from the superior fornix using some fluorescein and the blue light filter. I had begun using it for every bedside examination during my community hospital general ophthalmology rotation, and occasionally for wheelchair-bound patients who needed funduscopy, whether for suspected grade 4 hypertensive retinopathy or simple screening for DRP.

The three months of daily practice with my BIO yielded its results on my first day in the operating room. The four years I had spent using a three-mirror contact lens and a monocular BIO to locate retinal tears did not prepare me for this, so I was happy to have made the investment. That isn't to say my first attempt at buckling went smoothly, but at least I could locate the break and keep it within view while struggling with the buckle itself. I promised myself I'd free up some extra time to practice scleral sutures in the wetlab.

Back in the emergency room, I was getting ready to examine the junior resident's patient, who looked on with great interest as I strapped the BIO onto my head. The image of an ophthalmologist with a bright light on his head seems to conform to patients' expectations. Maybe it reminds them of the classic head mirrors of the past. Maybe it projects knowledge and authority. Maybe it just looks cool.

Nevertheless, the first thing he said was: "Is this going to hurt?"

"On the contrary," I answered. "I don't need to touch your eye at all for this examination."

There was no tobacco dust. Further, the patient was slightly hyperopic and had lesions in both eyes, both located inferotemporally. No breaks, no haemorrhage, no pigmentation line. We diagnosed retinoschisis and discharged the patient, to his great relief.