For more than a decade, I have found the Siepser sliding knot and slight modifications of the technique to be tremendously valuable in managing patients with complex anterior segment problems. The combination of the Siepser knot, the McCannel retrievable suture concept, and newer microinstrumentation greatly facilitates suture fixation of lens haptics to the iris as well as iris repair and pupilloplasty.

**Recent Modification**

In 2010, I uploaded a video to Eyetube that illustrates the knot-tying technique using a diagram and 5-0 nylon sutures (eyetube.net?v=rire). The knot I created is essentially identical to the slipping suture technique originally described by Steven B. Siepser, MD,1 but with one slight modification: I use angled tying forceps to wrap the retrieved suture loop twice before picking up the trailing suture segment to create the double-throw knot (Figure 1), which is then slid into the anterior chamber. In Siepser’s original description, the trailing suture segment was passed painstakingly over and under one side of the retrieved loop to create the knot. I find it inherently simpler to use the modification shown in the video, in which one side of the loop is wrapped around the forceps, just as we do when we are tying a simple double-throw knot in any other situation. I hope the video demonstrates this clearly.

Since posting the video, I have further modified the technique I use. Now, I use a 25-gauge suture snare (MicroSurgical Technologies) rather than a hook to retrieve the suture. This simplifies retrieval from anywhere within the anterior segment or posterior chamber. With the snare, I can enter and exit the corneal paracentesis or sclerotomy faster and induce less trauma compared with an open Kuglen- or Hirschmann-style hook, which can snag the internal aspect of the cornea or, when used through a posterior sclerotomy, the uveal tissue.

**Figure 1.** The angled tying forceps are positioned away from the limbus (A). Dr. Condon then wraps the 5-0 nylon retrieved suture loop around the forceps twice before picking up the trailing suture segment to create the double-throw knot (B).
A MAJOR ADVANTAGE

The Siepser sliding knot has a major advantage over my earlier, simpler modification of the knot described by Malcolm A. McCannel,2,3 in which the two suture ends are delivered through a common paracentesis. This is because the Siepser knot provides a snugger, cinching effect when a haptic is sutured to the peripheral iris. This reduces the tendency for the haptic to rotate out of the knot, as is more likely when the simpler, modified McCannel approach is used.

When working strictly with iris, the Siepser sliding knot is formed at the site of the defect, minimizing the disturbance and traction of iris tissue as the knot is cinched. I prefer to use intracameral microscissors to trim the knot, as they reduce iris traction and the potential for tearing and bleeding. Alternatively, with the modified McCannel technique, the knot is externalized for trimming. I use 10-0 polypropylene sutures to fixate the IOL haptics to the peripheral iris and to repair any pupil and iris defects. Needle options include the PC-7 (Alcon) and the CIF-4 and CTC-6 needles (Ethicon).

CONCLUSION

Practicing this valuable technique with a 5-0 nylon suture, as shown in the video, or with a polypropylene suture should help the surgeon become efficient enough with the technique to include it in his or her day-to-day surgical armamentarium.

Garry P. Condon, MD, is an Associate Professor of Ophthalmology at Drexel University College of Medicine in Philadelphia, a Clinical Associate Professor at the University of Pittsburgh, Pennsylvania, and the Chairman of the Department of Ophthalmology at Allegheny General Hospital in Pittsburgh, Pennsylvania. Dr. Condon states that he is a consultant to Alcon and Allergan. He may be reached at tel: +1 412 359 6298; e-mail: garrycondon@gmail.com.