dystrophy were the most common (64.7%). Colville et al.[6] reported that dot-and-fleck retinopathy and anterior lenticonus were present in almost 75% of their cases.—*Mohammad Taher Rajabi, MD*

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Scleral fixation technique with scleral cleft

I congratulate Monteiro et al.[1] for their article about scleral fixation via suture burial in a scleral cleft. Scleral suturing is done in cases in which the patient has iris problems, such as a scleral ring, or when the intraocular lens (IOL) requires suturing. In this article, the technique is used to prevent the suture ends from protruding from the conjunctiva by keeping them in the scleral cleft. After looking at other reports on this topic, I would like to make the following points:

1. This method is similar to my scleral fixation method[2]; however, I do not create a scleral cleft. Surgeons do not need a scleral cleft, flap, or patch to bury the suture and knot.
2. The need to prepare 2 clefts.
3. As mentioned by Monteiro et al., based on the large corneal incision, suturing of the incision could be joined to the scleral cleft. Because of this, the suturing position could be changed to 2 o'clock and 8 o'clock or 4 o'clock and 10 o'clock.
4. In my article on scleral fixation,[2] the suture end with the knot is buried in the sclera. The edges will not cause problems because the knot and suture edge lie horizontally in the sclera. It is not necessary to cover the knot with a patch, graft, flap, or rotation. Additionally, the technique is easy; once it has been learned, it can be performed quickly.

The suture burial technique has been used successfully in all my cases requiring scleral fixation.

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REPLY: We have been using our technique of scleral fixation for more than 10 years, not only in cases of secondary IOL implantation (fixation of both haptics or fixation of 1 haptic and placement of the other haptic in the sulcus with capsule support), but also in cases in which broken haptics must be resutured.

The scleral cleft is created to bury the polypropylene (Prolene) 10.0 knot in the sclera. Because of the way the suture is fixated to the haptics (sailor loop), the knot does not untie. The scleral suture can be done in all 360 degrees of the globe. The scleral incision is only sutured in cases with thin sclera.

In 10 years of using this technique, we have not had a single case in which the suture ends protruded from the conjunctiva.—*Manuel Monteiro, MD*

Techniques for scleral fixation of IOLs

Monteiro et al.[1] propose a variation to the technique of scleral fixation of intraocular lenses (IOLs). Although details are not provided in the body of the paper, the complications of hyphema, vitreous hemorrhage, and choroidal hemorrhage are mentioned in the abstract. We believe these occurrences may be peculiar to their technique of scleral fixation.

Monteiro et al. make 2 entries into the eye in the region of the ciliary sulcus, the first with a 30-gauge needle, followed by the "blunt" end of the double-armed 10-0 polypropylene (Prolene) suture. Considering the vascularity of the ciliary body, 2 penetrations, the second by a blunt instrument, may tear ocular tissue and thereby predispose these eyes to the aforementioned hemorrhagic complications.[2]

The authors argue that an advantage of their technique is the lack of scleral flaps. In the absence of a scleral bed, the knot of the anchoring suture is buried in the scleral incision. On careful study of the illustrations, we notice that the anchoring suture is subconjunctival at the conclusion of the procedure. This is not the case when scleral flaps are fashioned, as the anchoring sutures are placed in the scleral bed and covered by the scleral flap as well as the conjunctiva.

This difference is important. As the authors point out, suture exposure might lead to endophthalmitis even after several years. In the case of scleral-fixated IOLs, the anchoring suture communicates directly with the intraocular cavity. We believe the anchoring

sutures in this technique are in closer contact with the ocular surface because of the absence of scleral flaps and are more likely to erode through the conjunctiva. Even a microscopic break in the overlying conjunctiva could result in bacterial contamination. It would be worthwhile to compare the incidence of endophthalmitis and suture exposure over the long term with the authors' technique and the scleral flap method.

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REPLY: In response to the first point of Singh and Stewart, it is true that 2 penetrations in the eye in the region of the ciliary body would predispose it to further hemorrhagic complications. However, we do not make 2 entries into the eye in the region of the ciliary sulcus; instead, we create a scleral route 1.5 mm from the posterior limit of the limbus. From there, we pass the blunt end of the double-armed 10-0 polyprolene (Prolene) suture.

As for the risk for endophthalmitis with our technique, the Prolene knot that serves as an anchor does not remain in the subconjunctiva but is buried deeply in the scleral incision. In addition, the loose ends of the suture are carefully cut next to the knot. Consequently, the suture will not be close to the conjunctiva or superficial.

When the scleral flap technique is used, the borders of the scleral incision are usually closed with a polyglycolic acid (Dexon) 6-0 suture. This suture often unties during the procedure, which is responsible for a great loss of time. Additionally, in up to 30% of cases, there is some degree of scleral flap atrophy after 10 years, with erosion and extrusion of the knot through the conjunctiva, which are more likely to cause bacterial contamination and endophthalmitis.

In more than 10 years of patient follow-up, we have not experienced any erosion of the sutures or case of endophthalmitis; thus, we believe our technique is safer than the scleral flap technique.—*Manuel Monteiro, MD*

Reliability of peripheral corneal pachymetry with the Oculus Pentacam

In their recent paper, Khoramnia et al.[1] overlooked mentioning their stated reference point when measuring peripheral corneal thickness. Did they use the default setting of pupil center as the reference point or the more reliable corneal vertex? We emphasize this point because in our study,[2] peripheral corneal thickness measurements showed poor repeatability (mean coefficient of repeatability [COR] ±95% limits of agreement[3]) ±26.28 μm [range 22.37 to 30.04 μm]) using the default pupil center, whereas a marked improvement in reliability (mean COR ±16.00 μm [range 13.71 to 19.85 μm] was evident when corneal vertex was used as the reference point. We found that repeatability of peripheral corneal thickness measurements were comparable to repeatability of central thickness measurements using the corneal vertex as the reference but peripheral repeatability worsened twofold using the pupil center as the reference point. The poor reliability findings of Khoramnia et al. suggest that they used the default pupil center in acquiring their peripheral measurements.

The problem is inherent because the pupil center is an unreliable measure.[2] Because of the dynamic nature of pupil size and shape and the image acquisition time of 2 seconds, we propose that the pupil center is constantly moving so the results are variable. If the reference point keeps changing, it follows that the corneal sampling for peripheral thickness also changes between measurements. The end result is poor reliability.

The default standard of pupil center as the reference point when measuring corneal thickness, in the tradition of ultrasonic probe pachymetry,[4] is an anachronism when using an automated scanner such as the Oculus Pentacam. We recommend that the default be altered to use corneal vertex as the more stable reference point.

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