Patient Counseling for IOL Explantation

An explanation of the surgical plan and its likely outcomes will help patients feel confident about undergoing another procedure.

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Although surgeons generally do not like to reopen an eye that has previously undergone lens surgery, there are occasions when it is necessary to do so. In my career of implanting lenses, which began in 1978, I have encountered a small number of patients who have required IOL replacement for a variety of reasons. It is important to know how to counsel patients who need to have an IOL replaced. The nature of the counseling is determined on a case-by-case basis according to the root cause for the procedure.

THE AIM OF COUNSELING

From the patient's point of view, he or she wants to understand why another procedure is the best solution. Some cases are more obvious and easy to discuss than others. For example, if the IOL is subluxated or has become opaque, it is relatively easy to explain to the patient why the lens must be replaced. In other situations, such as patient dissatisfaction with a multifocal IOL, the considerations are different. By the end of the counseling, the patient should have a clear idea of why the procedure is necessary, how it will be performed, what the risks are during surgery and, in the future, what types of lenses are available for replacement, and what the likely outcome of the chosen approach will be.

The surgeon must also help the patient understand the risks of intervention, which are universal to all IOL replacement scenarios, including the ones discussed herein.

EXPLANTATION SCENARIOS

Opacified lens optic. Some IOLs, mainly those made with hydrophilic acrylic materials, have been associated with opacification that occurs between 2 and 3 years after implantation. Removing an opacified lens is a fairly straightforward procedure, provided the posterior capsule is intact. Most often, lens opacification is due to manufacturing issues rather than the material itself. The patient must understand that, although removing an opacified lens should allow the posterior capsule to remain intact and a replacement lens to be placed in the bag, this cannot be guaranteed. A vitrectomy may be needed if the posterior capsule becomes damaged during IOL explantation. If this happens, the new IOL will almost certainly require sulcus placement and optic capture. However, it is also possible that the capsule is so damaged during explantation that it cannot support a posterior chamber lens. The patient must be aware of the options available if this is the case (ie, an ACIOL, an iris-supported IOL, or a scleral-fixated IOL). The risks associated with each of these options must be explained so that both the surgeon and the patient are clear as to the course of action in any circumstance.

If the patient has already had a posterior capsulotomy, it is more likely that an anterior vitrectomy will be needed and that the lens options mentioned earlier will be necessary. This may compromise the final visual result, even though it will be better than the patient's vision with an opacified IOL.

Many of the issues highlighted for opacified lens explantation apply to all explantations. However, there are some specifics for particular situations.

Excess dysphotopsias. Many patients experience dysphotopsias of varying degrees of severity following IOL implantation. Most disturbances will disappear with time as patients neurally adapt to their new visual environment. However, some dysphotopsias will persist because of the shape or type of the IOL implanted.

Edge effects from sharp-edged hydrophobic IOLs will cause dysphotopsia. Although visual disturbances caused by sharp-edged IOLs usually pass with time as the anterior capsule opacifies, these dysphotopsias can be debilitating, particularly in high myopes, if the anterior capsule does not cover the edge of the IOL.

Patients implanted with pseudoaccommodating IOLs are also prone to dysphotopsia. Due to the division of

light between the near and distance elements of multifocal lenses, patients may see halos at night. Some patients have great difficulty coping with this. Demonstrating the loss of reading vision by placing a minus lens in trial frames will usually make the patient realize the disadvantages of losing multifocality. The same applies to those who are having difficulty adapting to the simultaneous near and distance vision that these lenses produce.

Counseling patients who are experiencing dysphotopsias is not dissimilar from counseling patients with opacified lenses in terms of the risks of explantation. However, the issue of which lens to choose for replacement comes to the forefront. The patient must understand that, if a round-edged IOL is used as the replacement, the risk of posterior capsular opacification and subsequent capsulotomy is vastly increased. In recent years, I have used a sulcus-placed, round-edged IOL, such as the Sulcoflex (Rayner Intraocular Lenses, Ltd., East Sussex, United Kingdom; not available in the United States), as a piggyback lens with good effect. Paul Ernest, MD, was the first to propose this approach (personal communication). It is an alternative that should be discussed with patients who ask for explantation due to edge effects.

Subluxated IOLs. An IOL can move out of position for a variety of reasons:

- It was poorly placed, with one haptic outside the bag causing the IOL to decenter as the capsular bag contracted.
- The bag was compromised during the initial surgery after posterior capsular rupture, and the lens was not placed in a stable position.
- The patient had pseudoexfoliation, and the bag-lens complex dislocated into the vitreous cavity years after surgery.
- A scleral-fixated lens became unstable due to suture rupture.
- An iris-fixated lens became unstable.

In all of these situations, the solution will depend on the problem. Explantation and replacement may be part of the solution, but repositioning the IOL using a variety of techniques must be discussed with the patient. For example, removing a dislocated bag-lens complex and replacing it with an anterior chamber lens in an older patient may be the most appropriate and simple solution. Some surgeons may prefer to suture the lens and bag back into the physiologic position. In this case, the patient must understand the potential problems with each approach.

IOL damage to the eye. By the nature of their design, some IOLs, when not in ideal circumstances, can cause problems that necessitate their removal. This has been particularly common with anterior chamber lenses. Lenses that are too short or too long can cause problems accordingly. Uveitis-glaucoma-hyphema syndrome, which was more common in the past, is a good example. In this situation, an iris-fixated IOL such as the Artisan (Ophtec BV, Groningen, Netherlands) or a scleral-fixated posterior chamber lens is a good alternative. Surgeons must carefully discuss these options with their patients.

Some phakic lenses, both anterior and posterior chamber, have also necessitated explantation. The choices for these patients are starker, in that they will be losing the freedom from spectacles and contact lenses for which they underwent surgery in the first place. A clear understanding of the risks of inaction must be conveyed to the patient before the explantation is undertaken, particularly in relation to ongoing excess endothelial cell loss. Some patients may feel that they would rather accept the risks of retaining their lens.

Wrong lens power. Occasionally, a lens of the wrong power is implanted. If the error is large, it will be fairly obvious in the early postoperative period. The surgeon must then determine if the wrong lens was implanted or if everything was done correctly but a refractive surprise occurred. In the first scenario, it is simple and straightforward to remove the offending lens and replace it with the correct one. However, if a microincisional technique was originally used, a larger incision will be required to remove the lens. If the cause of the error is unknown, explantation is probably inappropriate, and piggybacking or an excimer laser procedure should be discussed with the patient.

CONCLUSION

From patients' point of view, the solution to their problem must be spelled out clearly by the surgeon so that they understand the risks and likely outcomes. A final point, which should not be forgotten, is the issue of payment for the procedure. In cases in which a wrong lens was implanted, the patient will feel that he or she should not be asked to pay. Similarly, a patient who has failed to adapt to a pseudoaccommodating lens may feel disinclined to fund the operation. Although this is an uncomfortable topic to address, the surgeon must discuss payment. ■

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