TABLE 9-1

Anesthesia Protocol*

PREOPERATIVE
1. Offering patient a diazepam (Valium) sublingual (5 mg or 10 mg depending on anxiety) 2. Administering following eye drops 1 to 2 gtt x 1 time: • Moxifloxacin (Vigamox) 0.5% • Proparacaine hydrochloride (Alcaine) 0.5% • Povidone-iodine (Betadine; 0.5% Betadine w/ 0.5% BSS) • Phenylephrine 2.5% • Tropicamide 1%
OPERATING ROOM
1. Administering topical anesthesia. Choosing one of the following agents, 1 to 2 gtt x 1 time: • Proparacaine hydrochloride (Alcaine) 0.5% • Lidocaine hydrochloride ophthalmic gel (3.5%) (author preference) • Lidocaine jelly 2% • Marcaine 0.75% 2. Intracameral injection • Preparation of intracameral solution: 30 cc of Methylparaben free (MPF) 1% lidocaine is drawn into a syringe. Then 0.3 cc of epinephrine 1:1000 is added. Label: Expires in 24 hours. • Applying: 0.3 cc of above solution is injected into the anterior chamber for additional anesthesia 3. Anesthesia administered by the CRNA. • Patient requiring additional IV sedation will receive either versed or sublimaze, or a combination of both
IRRIGATION SOLUTION
1. 500 mL bottle BSS , add: 0.5 mL epinephrine (1:1000)

*gtt = drop; CRNA = Certified Registered Nurse Anesthetist; IV = intravenous; BSS = balanced salt solution.

Microincisional Cataract Surgery

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As suggested by Grabow,[11] the terms based on the length of cataract incision can be defined as long incision (6- to 10-mm incision) for extracapsular/intracapsular cataract extraction, small incision for phacoemulsification with a methyl methacrylate intraocular lens (IOL; 6-mm incision), mini-incision (2- to 3-mm incision) for phacoemulsification with a foldable IOL, and microincision for phacoemulsification with a foldable IOL (<2-mm or less incision). Some suggested using the term *small-incision cataract surgery* (SICS) for phacoemulsification and foldable IOL with the incision size 3.2 mm or less.[12] Most authors consider an incision less than 2.5 mm as a microincision surgery.

The goals of microincisional cataract surgery (MICS) are to minimize surgical-induced astigmatism (SIA), hasten wound healing, and reduce the risk of leaking wounds and, thereby, the risk of infection (see Chapter 9 Videos 1 and 2). The MICS technique has shown advantages over SICS in minimizing the effect of the incision size on the optical quality of the cornea, measured by the mean levels of higher-order aberration.[13] Whether this small difference is clinically important is still unknown. The coaxial/bimanual MICS has been receiving great attention and debate. MICS performed through an incision size of 1.2 to 2.2 mm has been reported to cause less surgical trauma with faster rehabilitation, reduction in SIA and other optical aberrations, and improved corneal optical quality and visual function compared to standard phacoemulsification with 2.5- to 3.5-mm incisions.[14-17] Again, the question is still open about whether these small differences are noticeable by patients.