Capsulorrhexis forceps, diamond knives

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Capsulorrhexis forceps may be the most useful instrument for surgeons performing either bimanual or coaxial procedures, according to OSN Cataract Surgery Section Member I. Howard Fine, MD.

"Every surgeon should have a microincision capsulorrhexis forceps," he told OSN.

The Fine-Hoffman rhexis forceps (MicroSurgical Technology) can be oarlocked in a 1.1-mm incision and manipulated with only finger movement. These forceps have a squeeze handle and a capsulorrhexis portion that can be removed and replaced with suture forceps, tying forceps, iris forceps or different types of scissors for intraoperative manipulation through the microincision, he said.

Little viscoelastic leaks from the microincision during the creation of the capsulorrhexis, so the chamber remains stable, which is particularly important in cases of zonular dialysis when the lens might move as a result of its poor adhesion to the ciliary body, Dr. Fine said.

"In the case of a cataract, when one is afraid of the rhexis tearing, it's much easier to control because all of the viscoelastic stays in the eye and tamponades the capsule," he said.

Dr. Fine said he also values the precision that diamond knives allow for incision architecture.

"They give us perfect incisions that are 1.1 mm in width internally and 1.3 mm in width externally," Dr. Fine said, adding that this slightly funnel-shaped, trapezoidal incision allows manipulation of the instruments without stretching or tearing the incision.