

The AAO Makes Education a Priority

Teaching and learning techniques for cataract surgery at the annual meeting.

BY JONATHAN B. RUBENSTEIN, MD

The AAO places a high priority on the education of its members. For many ophthalmologists, cataract surgery is their “bread and butter,” and the annual AAO meeting devotes a large number of symposia, papers, and wet lab skills transfer courses to teach many aspects of the procedure. As chairman of the Skills Transfer Advisory Committee for the Academy, I oversee all of these courses. These lessons usually combine a 1- or 2-hour didactic session describing the surgical technique with a 1- to 3-hour wet lab, during which students perform the technique on an animal or cadaveric eye using state-of-the-art equipment from multiple companies. There are six skills transfer courses devoted to cataract surgical techniques at the annual meeting. They offer participants great opportunities for learning.

PHACO CURRICULUM

The model for all of the AAO’s phaco courses is the course titled, “Basic and Intermediate Phacoemulsification,” which Kenneth Rosenthal, MD, directs. The session begins with a stand-alone 3-hour instructional lecture presented by leading cataract surgeons who are known for their exceptional teaching abilities. The phaco technique is broken into its components and taught in a stepwise fashion, from the beginning of the surgery until the wound’s closure. Students receive a detailed course manual, which contains lecture notes from each of the instructors.

Later, a team of 12 to 15 instructors teach two 2.5-hour laboratory sessions that allow students to practice all of the phaco techniques covered during the didactic session. The participants learn the necessary skills by using multiple phaco machines under the close supervision of experts. A special third phaco laboratory run by Gary Schwartz, MD, is designated specifically for ophthalmology residents. The instructors for this section are chosen from the young faculty at multiple residency programs nationwide. These individuals have

experience in teaching residents and are therefore specially suited to instruct beginning phaco surgeons.

The “Advanced Phacoemulsification” course run by Brock Bakewell, MD, is designed for more experienced surgeons. This lesson consists of a 2-hour lecture and two 2.5-hour laboratories. Participants learn about the latest phaco techniques and technologies. Some of the advanced techniques include the advanced creation of a capsulorhexis, capsular staining, capsular tension rings, pupil expanders, phaco chop, astigmatic management, and experience with micropulsed and torsional phacoemulsification. One-on-one laboratory instruction trains attendees in these techniques.

MICROINCISIONAL CATARACT SURGERY

Another advanced phaco course is “Microincisional Cataract Surgery,” which is directed by Mark Packer, MD. It comprises a 2-hour lecture and a laboratory. This session offers instruction on both bimanual phacoemulsification with two 1.5-mm incisions and microcoaxial phacoemulsification through incisions of 2.2 to 2.4 mm. The course reviews the new phaco technology and specialized instrumentation designed for small-incision phaco techniques. The focus is on teaching techniques that facilitate ophthalmologists’ transition to small-incision surgery. The goal of the course is to expose participants to all of the newest phaco machines and surgical maneuvers so that they become comfortable with small-incision phacoemulsification.

SPECIALIZED ASPECTS

Astigmatism

The “Astigmatism in the Cataract Patient” course directed by Louis “Skip” Nichamin, MD, consists of a 2-hour didactic lecture and three separate 1.5-hour laboratories. The program details methods for controlling postoperative astigmatism, including both limbal or peripheral corneal relaxing incisions and toric IOLs. The

session covers preoperative planning as well as intraoperative and postoperative surgical techniques for managing astigmatism. Attendees can expect to be able to manage the astigmatic cataract patient as soon as they return to their practices.

Phaco/Glaucoma Surgery

Samuel Masket, MD, and Alan Crandall, MD, direct the course “Combined Phaco and Glaucoma Surgery,” which involves a 2.5-hour lecture followed by a 2-hour laboratory. The outstanding faculty for this session consists of a combination of glaucoma and cataract experts. The session covers one-site and two-site combined procedures, techniques for small pupils, and considerations with new IOLs. A detailed review of the current use of antimetabolites is included. Instructors demonstrate nonpenetrating procedures such as viscocanalostomy, deep sclerectomy, and the use of collagen implants, with an emphasis on avoiding and managing complications.

Posterior Vitrectomy

Rosa Braga-Mele, MD, directs the course “Posterior Vitrectomy for the Anterior Segment Surgeon,” which consists of a 2-hour lecture and a 1.5-hour lab. Participants learn about the instrumentation for a pars plana vitrectomy (including 25-, 23-, and 20-gauge vitrectomy instrumentation) and the techniques for complicated cataract surgery. Instruction covers the management of vitreous loss, both from an anterior and posterior approach. Techniques for the lens’ posterior levitation and visualizing the vitreous using triamcinolone are demonstrated. The faculty also addresses the management of dropped lenses and intraoperative vitreous loss.

CONCLUSION

The AAO’s six skills transfer courses on cataract surgery offer students a wonderful opportunity to get their hands on the latest equipment and learn the newest surgical techniques from the leaders in ophthalmology. The author encourages all ophthalmologists to consider registering for these valuable sessions when they attend the next annual meeting of the AAO. ■

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