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Nosocomial Postoperative Endophthalmitis

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Aaberg and coworkers evaluated the incidence of acute-onset (within 6 weeks after surgery) postoperative endophthalmitis between January 1, 1984, and December 30, 1994, at the Anne Bates Leach Eye Hospital, University of Miami Medical Center. The overall 10-year incidence of acute-onset postoperative endophthalmitis after intraocular surgery was 0.093% (54/58,123). Incidences by surgical category were cataract surgery with or without intraocular lens (IOL), 0.082% (34/41,654); pars plana vitrectomy (PPV), 0.046% (3/6,557); penetrating keratoplasty, 0.178% (5/2,805); secondary IOL placement, 0.366% (5/1,367); glaucoma surgeries, 0.124% (4/3,233); combined trabeculectomy and cataract surgery, 0.114% (2/1,743); and combined penetrating keratoplasty and cataract surgery, 0.194% (1/515). The median visual acuity after endophthalmitis treatment was 20/200. Median acuities by procedure were cataract surgery with or without IOL, 20/133; PPV, no light perception; penetrating keratoplasty, 20/200; secondary IOL implantation, 20/40; glaucoma surgery, 20/80; and combined trabeculectomy and cataract surgery with or without IOL, 20/150.

The incidence of endophthalmitis was higher after secondary IOL implantation than after cataract extraction (P=.008). After treatment, visual acuity outcomes were worse in the patients who developed endophthalmitis after PPV than after cataract extraction, glaucoma procedures, or secondary IOL implantation (analysis of variance [ANOVA], P<.05), and were better among the patients with secondary IOL implantation than after penetrating keratoplasty or PPV (P<.05, ANOVA). The results of this 10-year review from a large teaching center can serve as a source of comparison for other centers and future studies.

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