# Intraocular pressure down with anesthesia in children

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(HealthDay)—Pediatric patients undergoing general anesthesia have reductions in intraocular pressure (IOP), with the lowest IOP measured after induction of anesthesia, according to a study published online July 5 in *Pediatric Anesthesia*.

Julia Termühlen, from the University of Muenster Medical Center in Germany, and colleagues examined normal distribution of IOP during general anesthesia in healthy children. Participants included 100 pediatric patients with no history of glaucoma scheduled for nonintraocular surgery. The patients underwent general anesthesia induced with sevoflurane (s) or propofol (p) and maintained with sevoflurane with remifentanil (S) or propofol with remifentanil (P). Depending on the anesthetics used during induction and maintenance, the patients were grouped as sS, sP, pP, pS. Hemodynamic measures and IOP were measured before anesthesia induction (M1), in apnea immediately after induction (M2), in deep anesthesia (M3), and after extubation (M4).

The researchers observed a significant reduction in IOP with general anesthesia. The mean IOP was distributed normally (mean 7.4 ± 2.89 mm Hg at M1) and it decreased to a minimum of 5.6 ± 3.04 mm Hg at M2. Comparable decreases in IOP were seen between M1 and M2 in all groups. The IOP increased again during deep anesthesia (M3) and reversal (M4) in all groups. The sS group had a significantly lower IOP than the sP and pP groups during reversal.

"Sevoflurane and propofol, both in combination with remifentanil, significantly lower IOP in children," the authors write.

**More information:** Abstract
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