Study casts doubt on routine use of anesthesiologists in cataract surgery

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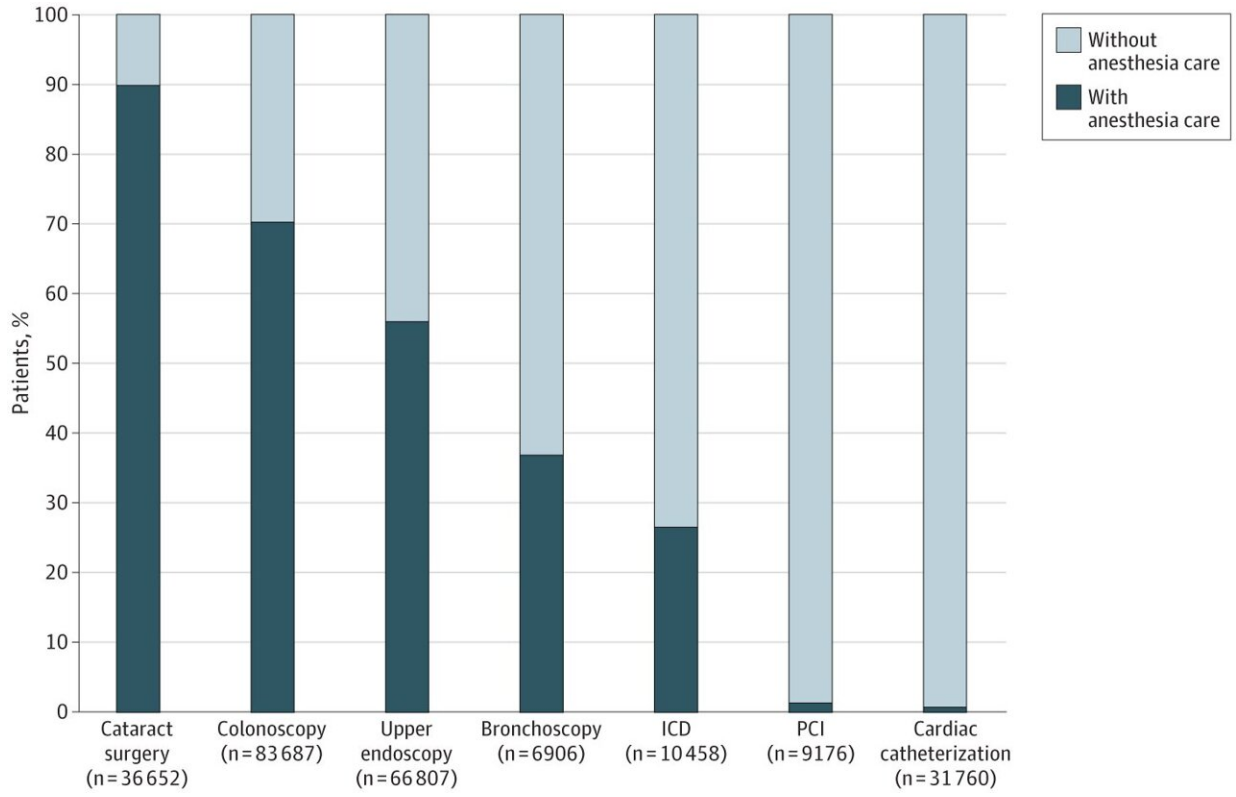

Prevalence of Anesthesia Care for Selected Low-risk Procedures in the 2017 Medicare 5% Sample. ICD indicates International Classification of Diseases; PCI, percutaneous coronary intervention. Credit: *JAMA Internal Medicine* (2022). DOI:10.1001/jamainternmed.2022.4333

Ophthalmologists may be able to safely cut back on having

anesthesiologists or nurse anesthetists routinely at bedside during cataract surgery, which accounts for more than 2 million surgeries per year in the U.S., according to a study publishing Oct. 3 in *JAMA Internal Medicine*.

A team of researchers from UC San Francisco examined Medicare claims for 36,652 patients who had cataract surgery in 2017 and found the use of anesthesia care was substantially higher for cataract surgery when compared to patients undergoing other elective, low-risk outpatient procedures—such as cardiac catheterization or screening colonoscopy.

However, they found that these patients experienced fewer systemic complications—such as myocardial infarction or stroke—than did patients undergoing the other low-risk procedures. These results held true even in cases where anesthesia experts were not present for the cataract surgery, suggesting that for many cataract patients, it may be reasonable to consider doing the procedure without routine anesthesia support.

"It's important to note we only looked at systemic complications and not ophthalmologic outcomes from the procedure," noted senior study author Catherine Chen, MD, MPH, UCSF associate professor in Anesthesia and Perioperative Care and researcher at the Philip R. Lee Institute for Health Policy Studies. "We are evaluating those next, but it would be premature to say we should change practice now based on this study. Hopefully we can get a conversation going, though."

Some type of anesthetic and possibly sedation is needed for cataract surgery, Chen noted, but the question is who should be present for administration and intraoperative monitoring of these patients. In the past, cataract surgery carried a much higher risk of complications, which helps explain the historic and legacy use of anesthesiologists and/or certified registered nurse anesthetists (CRNA).

"The risk of the procedure itself used to require general anesthesia with paralysis and inpatient admission. Over time, ophthalmologists improved their technique so it [cataract surgery] is much safer and can be done on an outpatient basis," said Chen. "Often the patient just needs a topical anesthetic such as numbing drops in the eyeball, and, at UCSF anyway, a little fentanyl and midazolam, which are agents a sedation nurse can administer safely."

A question of resources

The study found that, for cataract surgery, 90% of U.S. Medicare patients have an anesthesia provider at the bedside compared to a range of