

PERSPECTIVE

A Preoperative Medical History and Physical Should Not Be a Requirement for All Cataract Patients

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Cataract surgery poses minimal systemic medical risk, yet a preoperative general medical history and physical is required by the Centers for Medicare and Medicaid Services and other regulatory bodies within 1 month of cataract surgery. Based on prior research and practice guidelines, there is professional consensus that preoperative laboratory testing confers no benefit when routinely performed on cataract surgical patients. Such testing remains commonplace. Although not yet tested in a large-scale trial, there is also no evidence that the required history and physical yields a benefit for most cataract surgical patients above and beyond the screening performed by anesthesia staff on the day of surgery. We propose that the minority of patients who might benefit from a preoperative medical history and physical can be identified prospectively. Regulatory agencies should not constrain medical practice in a way that adds enormous cost and patient burden in the absence of value.

KEY WORDS: cataract surgery; preoperative evaluation; risk assessment. *J Gen Intern Med* 32(7):813–4

DOI: 10.1007/s11606-017-4043-9

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Regulations, entrenched habits of practice, defensive medicine, and economic incentives render changing practice difficult. Understanding these barriers is essential to improving value. We explore the routine preoperative medical evaluation before cataract surgery and barriers to enhancing value.

Cataract surgery is the most commonly performed surgical procedure among Medicare beneficiaries. Based on population age projections, at least 3.3 million procedures are expected per year by 2020 and 4.4 million by 2030.¹ Almost all cataract surgery is performed in outpatient settings with minimal intravenous sedation and various forms of local anesthesia.

Cataract surgery is remarkably safe. The incidence of unplanned hospital admission on the day of surgery has been estimated at 0.05%.² The majority of interventions on the day

of surgery relate to management of hypertension or bradycardia.² Hypertension is often related to anxiety and is frequently treated with sedation. Bradycardia, rarely requiring treatment, typically occurs as a vagal response or following the delivery of intravenous sedation. A large randomized trial demonstrated conclusively that routine preoperative medical testing (blood counts, clotting studies, serum chemistries, EKGs, etc.) conferred no measurable value in reducing adverse medical events on the day of surgery or up to 1 week postoperatively.² Despite the endorsement of “no routine testing prior to cataract surgery” by professional societies and practice guidelines, the performance of preoperative medical testing in patients undergoing cataract surgery has not diminished.³ Such testing was found to be associated with the practice patterns of the provider and *not* the medical characteristics of the patients. Prior research has demonstrated that there is often poor communication between ophthalmologists, anesthesiologists, and internists/general practitioners, with each believing that there is little value to such testing but that one or more of the other specialists or the facility requires testing to prevent cancellation of the surgery.⁴ The performance of testing is perhaps also a reflection of defensive medical practice, and in some settings there may be a financial incentive. There are no data on a national level indicating which physicians order what proportions of the tests. However, the testing is typically generated at the time of the preoperative history and physical. At the Wilmer Ophthalmological Institute, correspondence indicating that no routine medical testing is required accompanies all cataract surgical patients to their source of primary care, yet the majority of patients undergo testing despite this communication.

When it comes to cataract surgery and “choosing wisely”, it is generally not recommended that the medical professional performing the preoperative history and physical routinely order laboratory testing.⁵ However, this begs the question of whether, in the setting of cataract surgery, the routine history and physical itself confers value. Why do patients having cataract surgery still receive a physical exam and laboratory testing? Regulations play a prominent role. The Centers for Medicare and Medicaid Services (CMS) and The Joint Commission both require that a “comprehensive” history and physical be completed within 30 days before surgery, “regardless of the type of surgical procedure”.⁶ This assessment must be

Received December 13, 2016

Revised February 16, 2017

Accepted March 3, 2017

Published online March 20, 2017

separate from the standard medical evaluation performed by anesthesia staff on the day of surgery. Even if a second cataract surgery is performed just 31 days after the first, the history and physical examination must be repeated. These regulations are rigidly enforced, with potential penalties associated with non-compliance, and hence control the practice in the United States. Yet neither evidence nor logic supports routine comprehensive history and physical examinations prior to cataract surgery. The regulatory requirement for a physical exam, separate from that performed on the day of surgery by anesthesia staff, almost certainly increases the likelihood that unnecessary laboratory testing will be performed.

A recent evaluation by Thilen et al. of a cohort of Medicare beneficiaries undergoing cataract surgery demonstrated that the frequency of preoperative consultation for cataract surgery actually *increased* between 1995 and 2006.⁷ Thilen found that referrals for medical consultation were driven by non-medical factors, much like that previously shown for medical testing, and demonstrated substantial geographic variation in the likelihood of referral for medical consultation. Such findings raise questions about the medical value of the care provided.⁸ Perhaps, as also suggested by Thilen, referrals for medical consultations prior to cataract surgery have increased because there is no additional reimbursement if these are performed by the anesthesiologist or surgeon.

The regulations for preoperative evaluation seem to vary unpredictably by type of procedure and venue of care rather than by determinants of patient risk and safety. The risks of many dental procedures are equal to or greater than those for cataract surgery, yet elderly patients undergoing most dental procedures do not routinely undergo separate preoperative history and physical examination, even if minimal sedation is anticipated. Routine colonoscopy is typically performed under monitored anesthesia care, with depth of anesthesia greater than for cataract surgery, but preoperative comprehensive medical evaluations are not routinely performed. Why is the process for cataract surgery different? Perhaps the reason is historical, dating back many decades when cataract surgery was an hour-long procedure, and patients were postoperatively placed on bed rest as inpatients for a week, where they were at risk for thrombosis, embolism, and other serious medical adverse events.

Who are the patients who might benefit from an independent and complete history and physical within 30 days before surgery? Relevant examples of those who might be candidates for such consultation would include patients who cannot lie supine, have chest pain or significant shortness of breath on minimal exertion, have pacemakers or internal defibrillators, have had a recent heart attack, or are on dialysis or take insulin. Other subgroups that might benefit would include those who have had no recent contact with a primary care provider or who have other important functional limitations. Patients meeting such a profile represent a minority of those undergoing elective cataract surgery and can surely be identified prospectively by the surgeon using a simple screening tool. The majority of cataract surgical patients would screen out of

the requirement for an independent preoperative history and physical. A focused preoperative risk assessment on the morning of surgery would be safe and rational care for such low-risk patients. Anesthesia providers already perform this very effectively. The safety and effectiveness of such an approach could be readily assessed by monitoring cancellations for medical reasons on the day of surgery.

So how might we accelerate efforts to enhance the value provided to cataract surgery patients? Patients, policymakers, payers, researchers, professional societies, and providers should systematically consider the evidence and evaluate the barriers to enhancing value. We believe that the most significant barrier is the regulatory requirement mandating the comprehensive history and physical regardless of planned procedure or patient risk. The cost of constraining clinical practice should be robust evidence of benefit to patients. Absent such evidence, clinical practice should be less constrained. Policymakers should remove the absolute requirement for a separate and comprehensive physical exam prior to surgery and require that providers formulate and adhere to rational policy to guide their practice. CMS, The Joint Commission, and other accrediting bodies should not mandate that a preoperative history and physical be performed in stable patients undergoing cataract surgery. The savings to CMS would be enormous, and the value of perioperative care for cataract surgery greatly enhanced.

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Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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