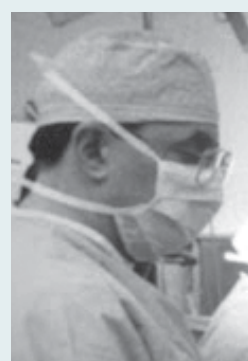


How Long Should Patients Fast Before Surgery?



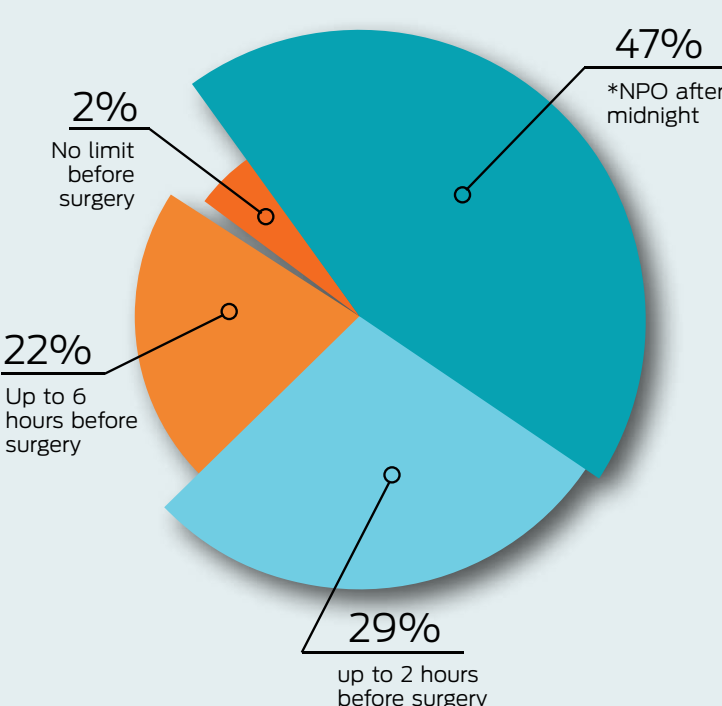
Written by
Skeptical Scalpel

Clear liquids may be ingested for up to 2 hours before procedures requiring general anesthesia, regional anesthesia, or procedural sedation and analgesia.

A light meal or nonhuman milk may be ingested for up to 6 hours before elective procedures requiring general anesthesia, regional anesthesia, or procedural sedation and analgesia.

Having once had an encounter with an anesthesiologist who postponed a case because my patient had a piece of hard candy in her mouth, I wanted to see how closely that guideline was being followed since its publication 2 years ago. I posted a poll on Twitter. Although such polls are unscientific, over 3,800 people responded, and the results are thought-provoking:

What is your hospital's standard policy regarding oral intake prior to most operations? Patients may have clear liquids by mouth as follows:



*Nothing by mouth

Almost half of those participating said their hospitals were still mandating that patients take nothing by mouth after midnight. A number posted comments describing their experiences and frustrations.

Here's my favorite. "I once had a case canceled because the patient brushed their teeth in the a.m.!" (I don't know about you, but I try not to swallow any toothpaste. Even if someone did swallow toothpaste it is probably no more than a few milliliters of fluid.)

An anesthesiologist said, "The results of this poll are a little mind-boggling to me. (The ASA) guidelines dictate clears 2 hours before surgery is fine. How is the poll showing that patients have to be NPO for clears after midnight?"

In 2018, three European anesthesiology societies recommended a 1-hour fluid restriction for children undergoing anesthesia.

What is your hospital's policy? ■



Examining Trends in Opioid-Related Hospitalizations in Patients With Cancer



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Opioids are routinely prescribed for cancer-related pain, but little is known about the prevalence of opioid-related hospitalizations among patients with cancer. "This is an important topic because oncologists and palliative care clinicians must often balance providing patients legitimate access to opioids while protecting them from risks associated with these medications," explains Isaac S. Chua, MD. Few studies have explored opioid-related harm in patients with cancer. Some estimates have shown that the rate of opioid addiction in people with cancer is as high as 7.7%, but these data are based on small, preliminary studies.

For a research letter published in *JAMA Oncology*, Dr. Chua and colleagues examined trends and risk factors of opioid-related hospitalizations among patients with cancer between 2006 and 2014 using the United States National Inpatient Sample of the Healthcare Cost and Utilization Project. "We wanted to understand national trends and risk factors of opioid-related harm for patients with cancer by examining the prevalence of opioid-related hospitalizations in this

patient population," says Dr. Chua. Opioid-related hospitalizations were identified using ICD-9 codes for heroin poisoning, opioid poisoning, and opioid dependence or abuse in the primary diagnosis field.

Important New Data

According to the study, just over 14,000 (0.06%) of the more than 25 million overall hospitalizations for patients with cancer were opioid related. A linear regression model approximated an increasing trend in the overall number of opioid-related hospitalizations from 2006 to 2014 with an average increase of 78.9 admissions per year. After adjusting for all-cause hospitalizations, the linear time trend of opioid-related hospitalizations increased on average by 0.003% per year.

"In general, opioid-related hospitalizations were rare among patients with cancer, but they appear to be gradually increasing over time," says Dr. Chua. When the study team stratified their findings by diagnosis type, they found that non-heroin opioid poisoning accounted for 88.0% of all opioid-related hospitalizations (Figure). Several factors were associated with opioid-related hospitalizations for patients with cancer, including:

- **DRUG ABUSE** (odds ratio [OR], 7.92; 95% confidence interval [CI], 6.95-9.02)
- **DEPRESSION** (OR, 2.34; 95% CI 2.13-2.58)
- **PSYCHOTIC DISORDERS** (OR, 4.13; CI 3.66-4.65)

White race, younger age, and year of hospitalization were also linked to higher rates of opioid-related hospitalizations for these patients. Alcohol abuse was associated with opioid-related hospitalizations, but the association was not significant (OR, 1.15; 95% CI 0.99-1.35).

Assessing the Implications

The characteristics linked to opioid-related hospitalizations among patients with cancer in the study were consistent with established risk factors for opioid abuse in those without cancer. "Prescribing opioids is not without risk, especially for certain patients with cancer," Dr. Chua says. "Prior to prescribing opioids to these patients, routinely screening for risk factors of opioid abuse may identify people at greatest risk of an opioid-related hospitalization. Understanding this risk may better inform clinical decision making around opioid prescribing and monitoring."

Dr. Chua notes that identifying risk factors may be particularly helpful when managing high-risk patients. "These individuals may require more frequent follow-up visits, random urine drug testing, or early referrals to addiction medicine or psychiatry," he says. "Identifying these risk factors early will allow clinicians to develop patient care plans that provide adequate pain control while minimizing risks of opioid-related harm."

Currently, clinicians have little guidance on pain management in patients with both cancer and aberrant opioid use behavior. Further complicating matters is that there is no "usual" dose of opioid prescribed to patients because each individual will have different needs when it comes to treating pain. Although there is no validated screening tool for cancer patients, several screening tools have been validated in the non-cancer patient population and are free, including the Opioid Risk Tool (available at www.drugabuse.gov). This brief, self-report screening tool is designed for use in adult patients to assess risk for opioid abuse among those prescribed these drugs for treating chronic pain. "Screening patients for these risk factors using a standardized tool, such as the Opioid Risk Tool, may optimize efforts for safe prescribing practices, especially among high-risk patients," Dr. Chua says. ■

Catheters an Overlooked Source of Infection

Indwelling devices like catheters cause roughly 25% of hospital infections, according to a recent University of Michigan study. Often due to poor physician-nurse communication, ongoing efforts to reduce catheter use and misuse have fallen short.

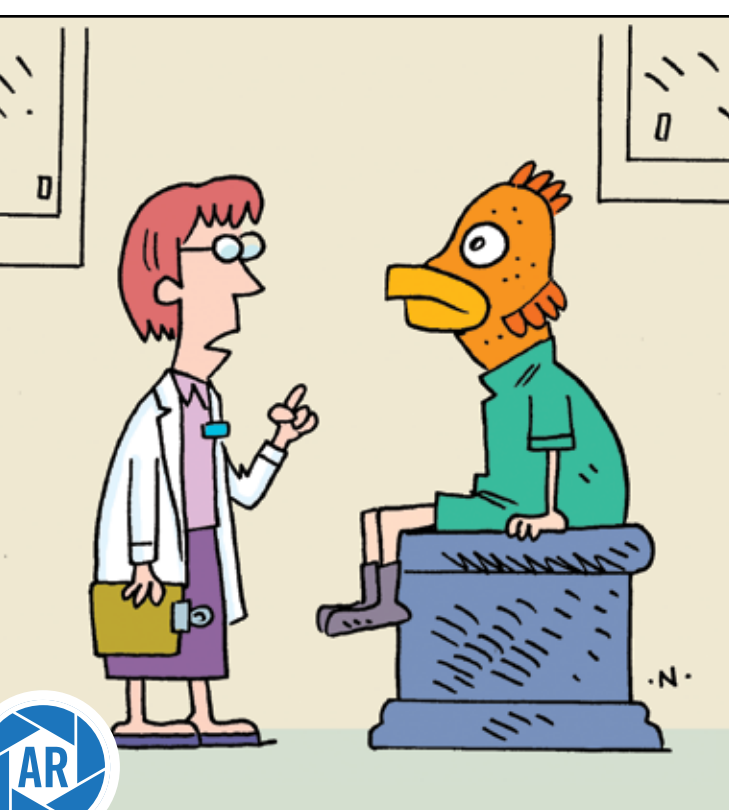
Milisa Manojlovich, PhD, RN, FAAN, a professor at the University of Michigan School of Nursing, and colleagues interviewed a group of nurses, physician assistants, nurse practitioners and physicians about problems monitoring and communicating among their teams about patients' indwelling catheters.

All respondents said poor communication delayed removal of unnecessary catheters. Communication broke down for various reasons and on many levels: poor relationships between doctors and nurses, hierarchical differences or misalignment of workflows that prevented nurses from being present for daily rounds (when surgeons and healthcare teams review patient care plans).

Catheters can be hidden beneath blankets, so physicians may not know who's using one, especially if a nurse isn't there to point it out. And, often, catheters remain in too long, which can cause infection—or they aren't necessary at all. It's estimated that 60% to 90% of intensive care patients, and 10% to 30% outside the ICU have urinary catheters, according to the study.

Electronic health records also caused confusion. Sometimes nurses and doctors have different information, or there's a lag updating charts, or a reliance on both paper and computer records causes problems, says Dr. Manojlovich in an interview.

Source: Adapted from: *American Journal of Critical Care*, July 2019



Validating a Molecular Thyroid Test for Avoiding Diagnostic Surgery



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Ultrasound-guided fine needle aspiration (FNA) is a commonly used biopsy tool for diagnosing thyroid nodules. However, thyroid FNA cytology yields an indeterminate result for about 20% of nodules.

In recent years, molecular testing has been developed to fill this diagnostic gap for indeterminate thyroid nodules. Despite advancements, molecular tests have lacked high specificity and positive predictive value, adequate clinical validation, and refined cancer risk by specific molecular alteration. A newly developed thyroid test—ThyroSeq v3 Genomic Classifier (GC)—was recently assessed in a prospective, blinded, multicenter clinical validation, and the results were published in *JAMA Oncology*.

Among 257 thyroid samples with indeterminate cytology, informative ThyroSeq test results, and final surgical pathology diagnosis, ThyroSeq GC demonstrated high sensitivity at 94% and high specificity at 82%, for Bethesda cytology categories III and IV.

Negative predictive value (NPV) was high at 97%, with a cancer/non-invasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP) prevalence of 28%. Also, 61% of nodules yielded a negative ThyroSeq result, with 3% residual cancer risk in those nodules, a residual risk similar to that of benign cytology. False-negative nodules were all low-risk tumors. The observed positive predictive value (PPV) was 66%. ThyroSeq correctly classified 100% of Hurthle cell carcinomas and NIFTP as positive.

In addition to the high NPV and reasonably high PPV observed, ThyroSeq GC also provided specific genetic alteration information that informed cancer probability. In the test-positive nodules, the probability of malignancy or NIFTP varied from 59% to 100%, depending on specific genetic alteration. The specific alteration found and subsequent risk may inform the extent of thyroid surgery.

Overall, the study demonstrated that utilizing ThyroSeq testing for patients with indeterminate thyroid nodules may allow up to 82% of patients with histologically benign nodules to avoid diagnostic surgery. For ThyroSeq test-positive cases, the provided detailed genetic information may assist physicians, in conjunction with imaging and relevant clinical information, to offer more individualized treatment to these patients. ■

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