What Are We Forgetting in the Opioid Epidemic?

To the editor: Local newspapers in the United States have started to recognize the opioid epidemic that the government and healthcare agencies have been reporting. This provides an opportunity and a medium for anesthesia providers to educate the public on the multimodal approaches being used to reduce opioid administration.

For example, the following is an excerpt of a letter to a local newspaper:1

How did the government and hospitals play into the opioid epidemic?

Some critical events happened to bring us where we are today:

• In the 1980s, a major study indicated that addiction was rare in patients treated with narcotics. Healthcare providers were told that pain was undertreated and began to prescribe more opioids.

• Since 1995, government-funded surveys tie patient satisfaction regarding pain management to reimbursement from Medicare and Medicaid. This added to the increase in opioid prescription.

• In 2001, the hospital accrediting agency introduced guidelines, which required hospitals to assess, manage, and reassess pain in order to be accredited. Pain became labeled as the 5th Vital Sign making it as important as the other 4: Blood pressure, temperature, pulse rate, and respiratory rate. Pressure was placed on physicians and bedside nurses to treat any pain that existed.

• Due to the increased pressure to prescribe opioids, an increase in addiction, misuse of prescriptions, overdoses and deaths followed.

In 2000, Congress passed the “Decade of Pain Control and Research” to examine controversies in pain policy at the federal and state levels, the abuse and misuse of prescription medication, and pain education. Results of this decade of research from 2001-2011 revealed a need for change.

What are the government and hospitals doing now to address the opioid epidemic?

The misuse and abuse of prescription opioids has become a serious public health problem in the US. Some of the actions being taken include:

• In 2016, the Surgeon General sent a letter to all physicians alerting them to the severity of the opioid epidemic and the need for more caution in prescribing opioids.

• The Centers for Disease Control and Prevention (CDC) conducted research revealing the statistics of the increase in addiction, misuses, overdose, and deaths.

• States have started to limit the number of opioids that can be prescribed.

• Cities, counties, and states have filed lawsuits against pharmaceutical companies for their role in the opioid epidemic.

• Current research reveals the need for more caution in prescribing and administering opioids.

• Researchers are seeking effective alternatives to opioids.

• Clinicians are developing new approaches to pain management.

• The American Pain Society recommends using a variety of strategies to manage pain through different pathways and mechanisms of action.

• The group, Physicians for Responsible Opioid Prescribing (PROP), is encouraging the accrediting agency to re-evaluate its pain management standards and remove pain as a 5th Vital Sign. PROP feels these standards have contributed to a pattern of overprescribing.

• PROP is also asking that Medicare and Medicaid remove the patient satisfaction questions related to pain management from their surveys. These questions tie reimbursements of patient satisfaction with pain management and may fuel a tendency to overprescribe.

The government and healthcare agencies have been part of the opioid problem but they are now part of the solution. Hospitals are making major changes in opioid prescribing and administration. They have also made it a priority to educate the public about risks and side effects of opioids and alternative therapies.

How are anesthesia providers addressing the opioid epidemic?

Anesthesia has been making major changes to do its part to help end this epidemic. In the past, opioids were a central factor in treating surgical pain. Research is guiding us to change how we manage pain and reduce the need for opioids.

Many anesthesia providers are adopting the model “Enhanced Recovery After Surgery,” which is a proven, multimodal (multi-approach) strategy to manage pain to reduce the need for opioids. This approach begins before the procedure and continues through discharge using less opioids by the addition of non-opioid medications and increased use of regional anesthesia.

Regional anesthesia involves the...
injection of local anesthetic near a cluster of nerves to numb a specific area of the body that requires surgery. It may be given before surgery as the primary anesthetic for the surgery or after the surgery for pain management. Regional anesthesia includes spinal, epidural, and peripheral nerve blocks.

Spinal and epidural blocks involve interrupting sensation from the legs or abdomen by injecting the local anesthetic in or near the nerves from the spinal canal. Some of the surgeries this is used for include total knee or hip replacements, c-sections, and fractures of the lower extremities. Generally, this is reserved for patients that will be staying in the hospital after surgery.

In peripheral (shoulder, arm, leg) blocks, local anesthetic is injected near a cluster of nerves to numb only the area of the body that requires surgery. It is often given at the end of the surgery or in recovery room to provide postoperative pain management. These blocks will wear off completely in 6-12 hours and require additional methods of pain management.

Another peripheral nerve block is the transversus abdominis plane block, commonly called the TAP block. In a TAP block, local anesthetic is injected to the nerves that supply the abdominal wall to block the transmission of pain. This may be used for a variety of abdominal surgeries.

Regional anesthesia choices may be limited by contraindications to the procedure. The surgeon is also consulted for approval prior to the block.

Most adverse effects after surgery were due to opioids. Nausea, vomiting, urinary retention, constipation, and respiratory depression, are all adverse effects of opioids.

Incorporating regional techniques has been associated with reduced postoperative pain, decreased incidence of postoperative nausea and vomiting, lower doses of opioids, shorter recovery room stays, shorter hospital stays, earlier ability to begin rehabilitation, shorter time to resuming normal activities, and increased patient satisfaction. Research has shown that with increased use of regional anesthesia, we can prescribe less opioids.

What are we forgetting?

Adequate pain management is necessary for the patient to perform physical therapy and regain strength to return to normal activities. However, we seem to have forgotten that pain is also a protective measure that prevents the patients from over-exerting themselves so far that they injure their surgical repair. Somewhere there is a balance between too much and too little pain. A certain amount of pain is protective and we need to find the level of tolerance for each individual patient.

REFERENCE


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Lost and Found: The Story of a Laryngoscope Bulb
To the editor: Laryngoscopy and intubation are crucial time periods in the conduct of general anesthesia during which various mishaps can plague a routine procedure. One such mishap is detachment of the laryngoscope bulb. The inability to locate a detached bulb is a potential nightmare for any anesthesiologist, because of the risk of the bulb entering the trachea and airways. In this report we describe the loss of a laryngoscope bulb in a patient’s oropharynx and the successful retrieval after the use of C-arm x-ray imaging. We obtained written informed consent from the patient.

The patient was a 56-year-old man who was undergoing surgical decompression of a right falcine meningioma. In the context of this case description, he had buck teeth and examination of his airway showed a Mallampati grade of 3. An airway crash cart was kept ready owing to the anticipated difficulty of intubation, and direct laryngoscopy was planned as the initial approach for securing the airway. Anesthesia was induced with thiopentone injection and atracurium injection and the patient was successfully endotracheally intubated on the first attempt with a Cormack-Lehane grade 2 view on laryngoscopy. The tube was secured after checks of end-tidal carbon dioxide and auscultation. The endotracheal tube was then swept to the left side of the tongue by rotating the laryngoscope in the oral cavity.

The anesthesia technician responsible for checking the equipment then announced that the bulb on the laryngoscope blade was missing. Laryngoscopy was immediately repeated with a fresh blade, but the bulb was not visualized. A thorough search of the surrounding linen and the operating room floor proved fruitless. The surgeon was informed and surgery was postponed until the missing object could be found because it was feared to have entered the trachea and airways. A fiberoptic scope was used to thoroughly search the pharyngeal cavity but the object was not found. As a last resort, x-ray imaging with a C-arm was used to confirm the absence of the bulb. The C-arm x-ray imaging revealed the bulb inside the pharynx hidden behind the tonsillar pillar and behind the endotracheal tube (Figure). Repeat direct laryngoscopy showed the bulb to be lodged posterior to the enlarged adenoids. The bulb was finally removed with a Magill forceps.

Retrieval of a foreign body from the pharynx or hypopharynx after the accidental ingestion of toys, coins, seeds, or a fish bone has been reported previously. In most cases the foreign body can be retrieved
by direct laryngoscopy with the aid of a Magill forceps. The presence of a foreign body in the pharynx is diagnosed either by the history of its accidental ingestion or by the development of symptoms such as dyspnea, dysphagia, cough, wheeze, stridor, or acute respiratory distress. The persistence of a foreign body leads to congestion, edema, and inflammatory reaction of the surrounding structures. In our case, however, the patient was anesthetized and the airway secured.

The importance of checking the airway equipment scrupulously (such as for a loose bulb on the laryngoscope) before and after a procedure cannot be stressed enough. Also, the use of C-arm x-ray imaging to immediately locate a foreign body while the patient is still in the operating theater can save time and prevent complications due to displacement of the bulb if the patient is shifted for an x-ray.

In conclusion, C-arm x-ray imaging can be used as an alternative technique for timely diagnosis of a radio-opaque foreign body in the pharynx when not visualized by conventional methods.

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Improving Patient Handovers in Peri-Anesthesia Settings Is More than Filling Out Checklists
To the editor: We read with great interest the article that assessed the need for a standardized anesthesia handoff tool and identified the most essential components to develop the TIME anesthesia handoff tool. Patient handovers play a significant role in continuity of care in peri-anesthesia settings. This study provided valuable knowledge of developing and using checklists to improve intraoperative patient handovers between anesthesia providers. However, we believe that improving patient handovers in peri-anesthesia settings is more than filling out checklists. We offer further insights in this letter.

Checklists have become the most commonly used tool of managing extreme complexity. The increasing evidence in medicine sometimes exceeds healthcare providers’ individual ability to deliver the benefits of medicine reliably, correctly, and safely. To handle this complexity, checklists are widely used in medicine and are promoted as being substantially helpful and effective in improving patient safety in many areas. However, simply making marks on checklists cannot solve the problems. Checklists need to be applied appropriately to maximize their power. As cognitive aids, checklists provide reminders of the most critical and minimum necessary information. But more importantly, checklists improve the flaws of attention inherent in healthcare providers during patient handovers. They establish a higher standard of baseline performance and help providers to address simple and routine problems, serving as forcing functions: relatively straightforward solutions that lead to the necessary behaviors. In this way, healthcare providers avoid the pitfalls of perfunctory routine, and instead focus on difficult, complex,
and unanticipated problems.

We need to understand that no single checklist can address all the pitfalls a healthcare team needs to guard against during patient handovers. Developing and completing checklists are important, but it is more important for anesthesia providers to communicate and question during patient handovers.4

Intraoperative patient handovers between anesthesia providers are complex social interactions. They are the cognitive approaches to building the mutual understanding of patients, which include constructing shared meaning between team members, distributing cognitive work around appropriate anesthesia care, transferring the responsibility of caring patients, and creating opportunities for discussing team values.5 The diversity of purposes for patient handovers suggests no single intervention is most promising for improving handover processes and no single outcome can measure the quality of handovers fully. Moreover, patient handover processes are influenced by various factors, including individual factors, interpersonal interaction, organizational culture, community, and policy. It is critical to develop different interventions to address all the factors that negatively influence patient handovers. It is also beneficial to involve interdisciplinary research teams in the study of this inherently complex process, including but not limited to the health professions, psychology, sociology, engineering, and anthropology.

Having a well-developed checklist does not guarantee that it will be used in clinical settings. The process of translating and implementing evidence-based practices in clinical settings is complex and challenging. We strongly recommended using a valid theoretical approach to facilitate the improvement of patient handovers in peri-anesthesia settings, such as the knowledge-to-action model, the Ottawa model of research use, and the PARIHS (Promoting Action on Research Implementation in Health Services).

In the last decade of implementation science, it was widely recognized that establishing the theoretical bases of implementation strategies to facilitate evidence-based practice is significant.6 Implementation theories or frameworks may provide an explicit rationale for selected strategies to implement tools that best serve the intraoperative patient handover between anesthesia providers and also guide the process of translating and incorporating the checklist into the routine. Moreover, using a theoretical approach to guide implementation strategies will help researchers to understand how checklists can be evaluated, explain what influences the outcomes, identify which strategies are more likely to succeed, and suggest which strategies need to be advanced in the next cycles of quality improvement.

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