

Closed Claims Lessons

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What are Closed Claims

- ▶ Closed claim means a claim that has been settled or otherwise disposed of by the insuring entity, self- insurer, facility or provider. A claim may be closed with or without an indemnity payment to a claimant.

How are they useful?

- ▶ Closed claims analysis is useful for generating hypotheses about the mechanism and prevention of anesthetic injury. As a retrospective study, it cannot establish a cause-and-effect relationship of previous events, nor of changes in claim experience.

History

- ▶ In the 1970s and early 1980s, most anesthesia malpractice claims involved death or permanent brain damage.
- ▶ During this time, which coincided with escalating malpractice premium costs as well as a new emphasis on anesthesia patient safety,

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- ▶ 1st study involved 640 claims that closed from 2007-2012 and was published in the Journal for Healthcare Risk Management in 2014.
- ▶ 2nd study: In June 2019, we repeated the study for 587 claims that closed between 2013-2018. The goals for these parallel studies were to determine whether the number of patient injuries had decreased and to identify any new trends in claims involving anesthesia care.

What was looked at?

- ▶ All case, regardless of the outcome, that closed were included in this analysis.
- ▶ The approach helps reveal what motivates patients to initiate claims
- ▶ Provides a broader overview of the individual failures, system failures and processes that resulted in patient harm

Study Focus

- ▶ Most common case types.
- ▶ Most common patient injuries.
- ▶ Injury severity.
- ▶ Factors contributing to patient injury.
- ▶ Strategies for mitigating risk.

Considerations

- ▶ patients' injuries to understand the full scope of harm
- ▶ Plaintiff and defense experts conducted medical record reviews
- ▶ Identified factors that caused patients harm and whether the standard of care was met.
- ▶ Contributing factors were considered such as: clinical judgment, technical skill, patient behaviors, communication, clinical systems, clinical environments, and documentation.

How does anesthesia rank against other specialties?

- ▶ Mean indemnity was 12th out of 25 clinical services between 2013 and 2018. (Meaning insurance pay out amounts)
- ▶ These rankings are based on the average indemnity for all anesthesiology claims compared with the average indemnity for other clinical services.
- ▶ However, other specialties are gradually reducing the frequency of claims while anesthesiology has remained between 3 and 6 percent for more than 14 years. (Why??)

Injuries 2013-2018

- ▶ Tooth damage claims continue to make up almost a quarter of all anesthesiology claims (22 to 23 percent). Although tooth damage claims are less expensive than most other types of anesthesia-related injuries, their processing and handling costs can impact the cost of medical malpractice insurance.
- ▶ 30.5% of tooth damage claims were paid
- ▶ Mean indemnity for paid tooth damage claims: \$2634

Tooth damage

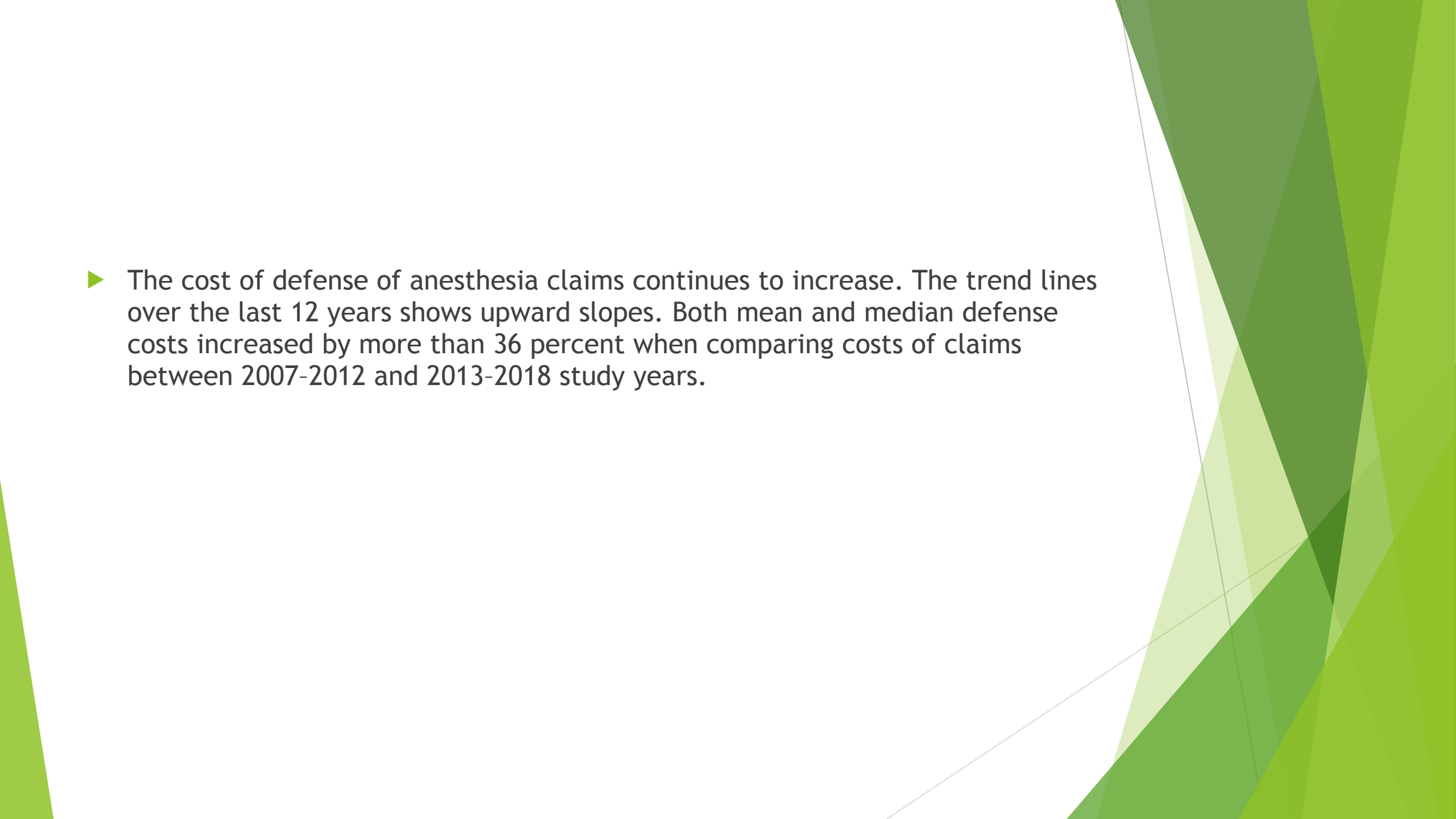
- ▶ Some patients have anatomy that creates challenges to intubation and other patients have poor dentition. It is essential to evaluate patients preoperatively to determine their dental condition and airway challenges. Plan for airway techniques least likely to damage teeth at risk. In cases of short neck, overbite, limited neck extension, and other anatomical challenges, anesthesia professionals can take precautions against tooth damage. In case of poor dentition and severe gum recession, patients need to be aware of risks to their teeth.

Tooth damage contributing factors

- ▶ In most tooth damage cases, documentation indicated that patients were informed of the risk of tooth damage. The injury was known to the patient as a risk of the procedure (84 percent). In only 3 percent of tooth damage cases was poor technique identified.
- ▶ The other primary factor determining the outcome of these cases was documentation (13 percent). The two areas of inadequate documentation were lack of descriptive preoperative clinical findings related to dentition, airway, and anatomy and informed consent listing tooth damage as a risk.
- ▶ According to claims specialists, defense of tooth damage claims is more likely to be successful when anesthesia professionals document the preoperative condition of patients' dentition, record descriptions of airways, and choose an appropriate intubation process.

Other claims

- ▶ The trend for higher indemnity in anesthesia claims and lawsuits, continues. Since 2009 when only 19 percent of indemnity payments were greater than \$500,000, the percentage of indemnity payments in 2018 that was greater than \$500,000 jumped to 36 percent.

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- The background of the slide features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side and bottom of the slide, creating a modern, dynamic feel.
- ▶ The cost of defense of anesthesia claims continues to increase. The trend lines over the last 12 years shows upward slopes. Both mean and median defense costs increased by more than 36 percent when comparing costs of claims between 2007-2012 and 2013-2018 study years.

- ▶ The most common case type in the 2007-2012 study was improper performance of anesthesia procedure. However, in that study, we saw a downward trend over those years for this case type. That finding was borne out in the 2013-2018 study where we found that the case type improper performance of anesthesia procedure dropped by 7 percent and became the second most common case type.

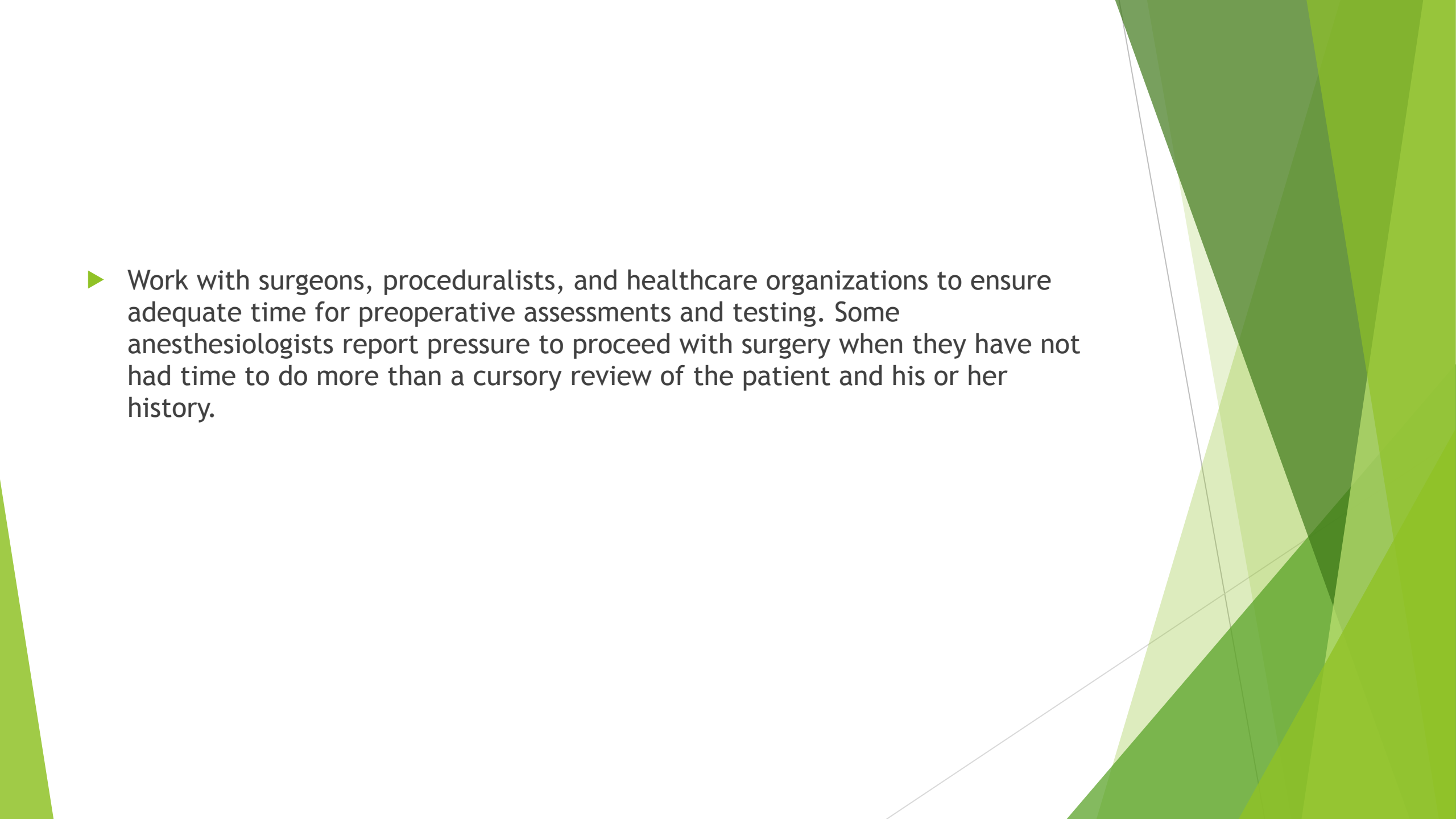
- ▶ In the 2007-2012 study, the case type improper management of patient under anesthesia was the second most common. In the 2013-2018 study it was the most common, having increased by 10 percent between the two studies.

- ▶ Claims identified as being improper management of patient under anesthesia, were due primarily to respiratory, central nervous system, and cardiac complications. These complications were due to comorbidities that were present before the patient went to surgery.

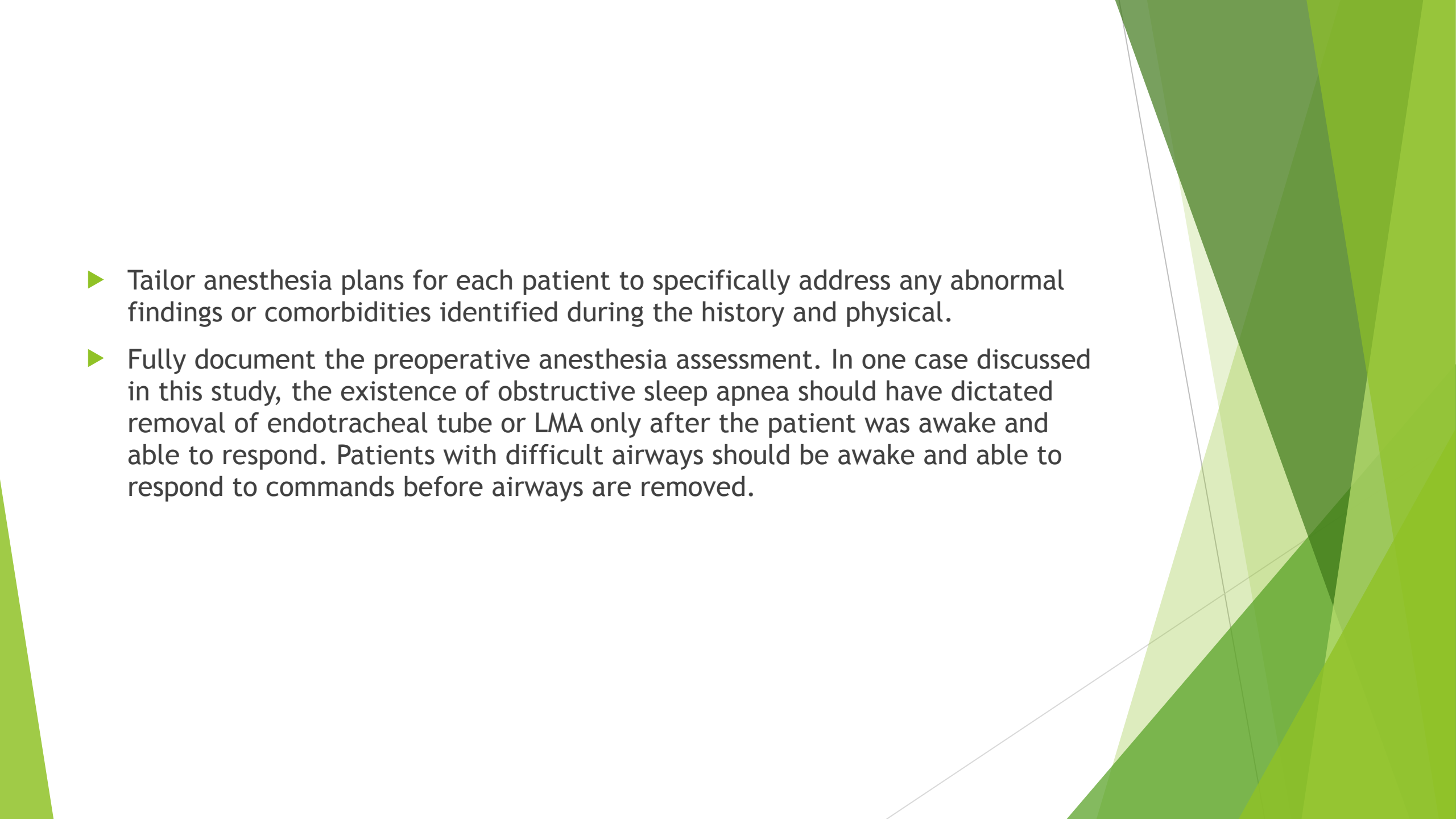
- Claims with the allegation improper management of patient under anesthesia averaged more than two comorbidities per patient. In these cases, 67 percent of the patients had at least one comorbidity. This was two times higher than the percentage of claims with a comorbidity for the rest of the anesthesia cases where only about a third of cases had a comorbidity that impacted the outcome of care.

Mitigation of risk

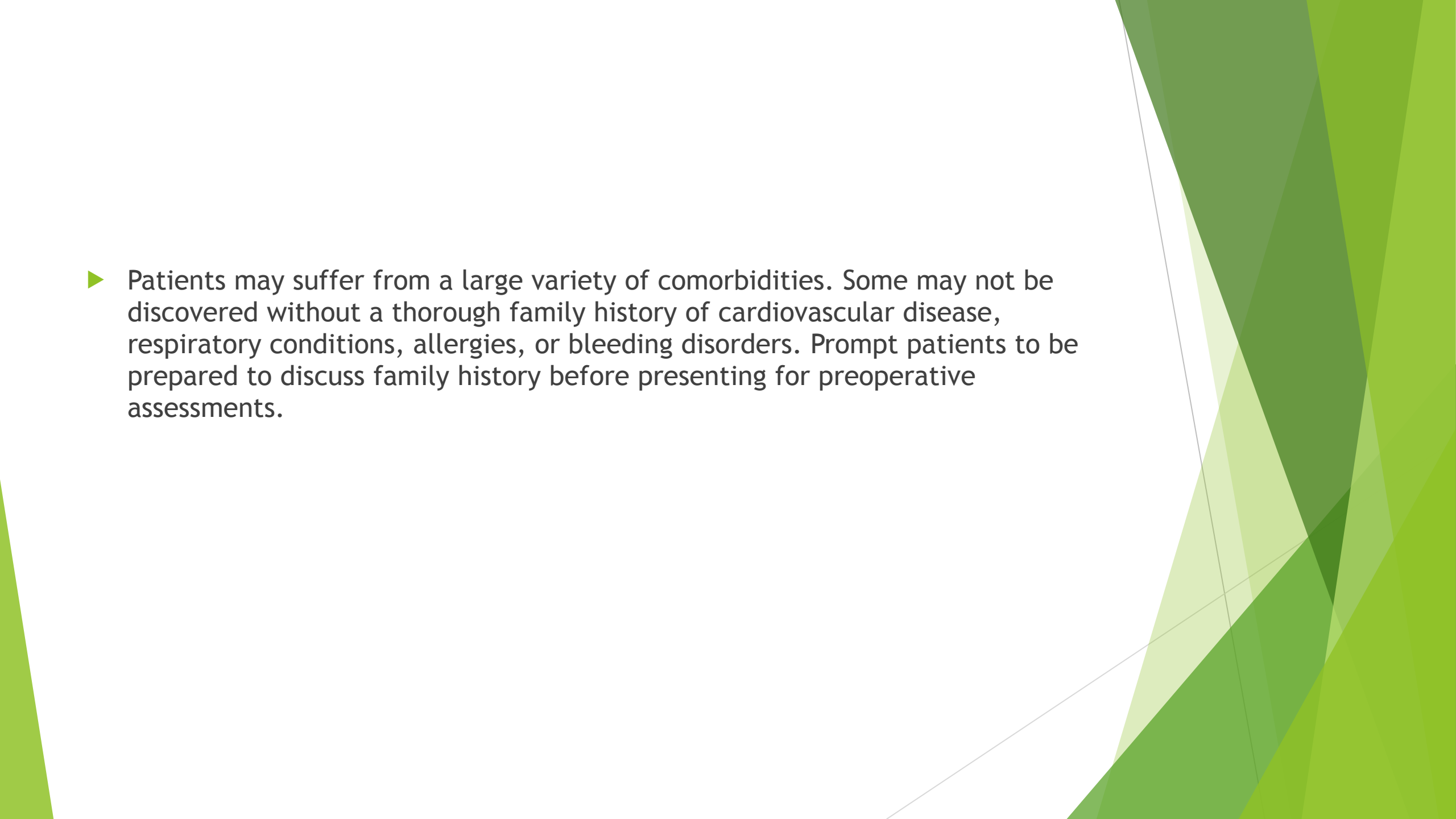
- ▶ Include information in informed consent discussions about anesthesia risks including special positioning risks and risks of special procedures like nerve blocks and arterial lines. Patients with dental appliances or poor dentition should be informed of the risks.


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- ▶ Work with surgeons, proceduralists, and healthcare organizations to ensure adequate time for preoperative assessments and testing. Some anesthesiologists report pressure to proceed with surgery when they have not had time to do more than a cursory review of the patient and his or her history.

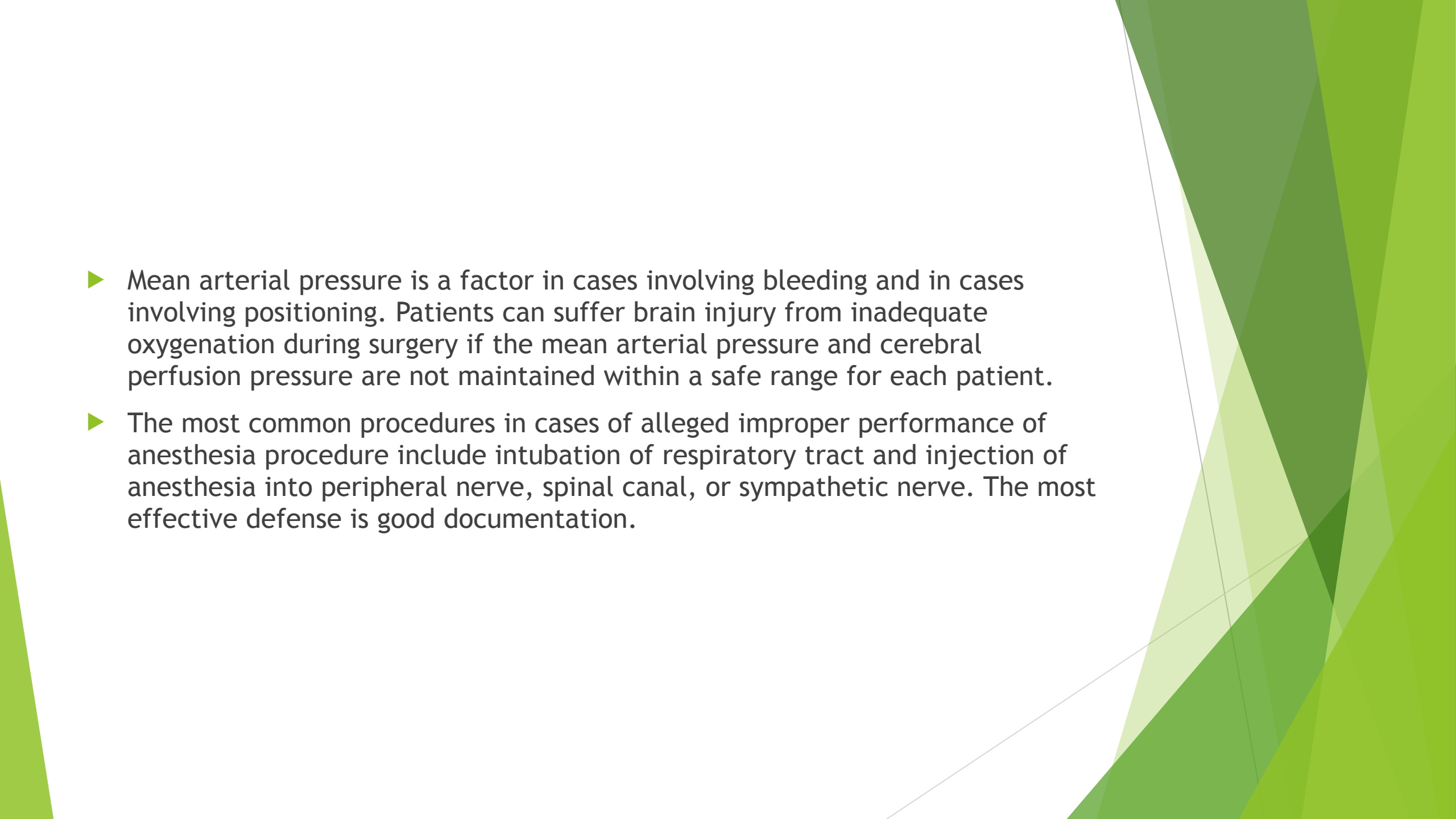
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- The background of the slide features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.
- ▶ Include a review of the patient's previous experience with anesthesia in the history and physical. When possible view previous anesthesia records.

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- ▶ Tailor anesthesia plans for each patient to specifically address any abnormal findings or comorbidities identified during the history and physical.
 - ▶ Fully document the preoperative anesthesia assessment. In one case discussed in this study, the existence of obstructive sleep apnea should have dictated removal of endotracheal tube or LMA only after the patient was awake and able to respond. Patients with difficult airways should be awake and able to respond to commands before airways are removed.

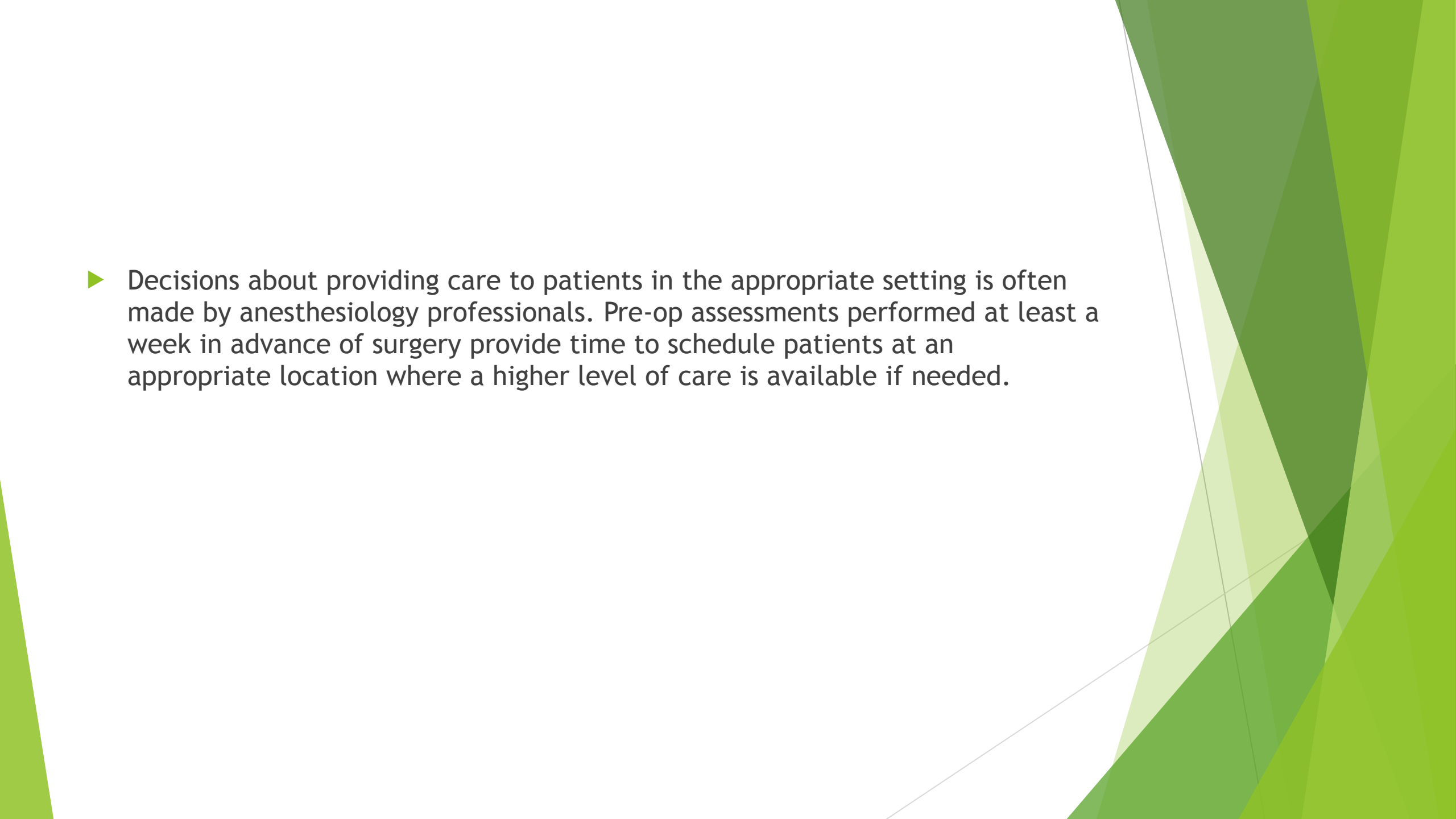
- ▶ After patients are extubated, airways sometimes close due to obstructive sleep apnea, neck swelling, hematomas, laryngospasms, etc. For these reasons, equipment for performing emergency cricothyrotomies or tracheostomies must be immediately available in case attempts to reintubate fail.

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- ▶ Patients may suffer from a large variety of comorbidities. Some may not be discovered without a thorough family history of cardiovascular disease, respiratory conditions, allergies, or bleeding disorders. Prompt patients to be prepared to discuss family history before presenting for preoperative assessments.


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- ▶ Even fasting patients may accumulate large amounts of fluid in their stomachs. Caution should be taken when intubating to reduce the chance of aspirating vomit.
 - ▶ One complication of placing patients in the prone position is inadvertent dislocation of endotracheal tubes. Close monitoring of these patients is important. The surgeon should be notified if there are concerns about respiration rates, end-tidal CO2 levels, oxygen saturation, or any other monitored metric or vital sign.

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- ▶ Mean arterial pressure is a factor in cases involving bleeding and in cases involving positioning. Patients can suffer brain injury from inadequate oxygenation during surgery if the mean arterial pressure and cerebral perfusion pressure are not maintained within a safe range for each patient.
 - ▶ The most common procedures in cases of alleged improper performance of anesthesia procedure include intubation of respiratory tract and injection of anesthesia into peripheral nerve, spinal canal, or sympathetic nerve. The most effective defense is good documentation.

- ▶ The most common factor that contributed to patient injury was complications of the procedure. These injuries were known to patients as risks of the procedure. Poor technique was found in only about 11% of anesthesia cases. When patients suffer from known complications, create opportunities to talk with patients and/or their families. Patients may not remember informed consent discussions or the content of the consent form document they were provided, and may not understand that the injury that they experienced was known as a risk of the procedure. Help patients understand and offer to answer their questions, thus building trust and providing explanations that patients deserve.


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- ▶ Decisions about providing care to patients in the appropriate setting is often made by anesthesiology professionals. Pre-op assessments performed at least a week in advance of surgery provide time to schedule patients at an appropriate location where a higher level of care is available if needed.

- ▶ Documentation is essential for providing good care and for defending that care, often years after the services were provided.

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- ▶ Rare situations don't require extensive discussion since anesthesia professionals know how to provide high-quality care. However, the following circumstances from case reviews may be instructive, so they are included here:
 - ▶ The patient was given a paralytic agent but not anesthetized (failed to turn on the anesthetic gas so there was a period of awareness).
 - ▶ Records were suspected of being fabricated because they did not fit the clinical picture.
 - ▶ Burns from radiation or previous surgeries resulting in scar tissue made intubation difficult—not identified in the patient's history and physical pre-op assessment.

POLL TIME

- ▶ How many people here practice outside the OR at any time?
- ▶ Outside OR meaning: endo area, cath lab, IR, office, procedure room etc?

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- ▶ current literature demonstrates that procedures performed in the endoscopy suite make up the largest number of nonoperating room closed claims anesthesia cases.
 - ▶ Oversedation and subsequent inadequate oxygenation/ventilation account for the majority of malpractice claims.
 - ▶ Conclusions from the current literature emphasize the importance of complying with monitoring standards and having well prepared providers to improve patient outcomes in nonoperating room locations.

POLL time

- ▶ How many people have worked in an ambulatory care setting (surgicenter)?

Solutions?


- ▶ AI?
- ▶ Thoughts?
- ▶ Will AI become a standard that perhaps will help or help medical/legal defenses?
- ▶ Advancements made in event prediction

- ▶ Ambulatory surgery center claims were more likely to be classified as medium severity than HOR claims, more likely to involve dental damage or pain than HOR claims, but less likely to involve death or respiratory or cardiac arrest.
- ▶ Technical performance was the most common contributing factor: 47% of ASCs and 48% of HORs. Only 7% of allegations relating to technical performance were judged to be a direct result of poor technical performance.
- ▶ The most common anesthesia procedures resulting in ASC claims were injection of anesthesia into a peripheral nerve (34%) and intubation (29%).
- ▶ Obesity was the most common contributing comorbidity in both settings. Mean closed claim value was significantly lower for ASC than HOR claims, averaging US \$87,888 versus \$107,325.


- ▶ The Doctor's Company provides actual case examples worth taking a look at and discussing.

Case 1

- ▶ A 56-year-old morbidly obese male with a history of hypertension, diabetes, sleep apnea, and elevated cholesterol presented to ambulatory surgery center for knee arthroscopy. Following a brief pre-op assessment, he was rated as ASA III Mallampati III. It was decided to use LMA with 100 mcg of Fentanyl and 2 mg Versed followed by inhalation anesthesia.
- ▶ How many people would do the anesthetic this way?

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- ▶ After the procedure, the LMA was removed and the patient was moved to PACU. The patient was unresponsive for about 20 minutes and exhibited signs of respiratory distress. Efforts were made to open the airway with jaw thrusts and nasal trumpet. The anesthesiologist determined that the patient was suffering from congestive heart failure, aspiration, or pulmonary edema.
 - ▶ How would we treat this? Thoughts?

- ▶ They administered 40 mcg of Narcan. The patient began to awaken but had oxygen saturation readings in the high 70s. The patient was encouraged to take slow deep breaths. Rhonchi were heard and the patient complained of shortness of breath. The EKG reading was unchanged from the pre-op test.
- ▶ Thoughts?

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- ▶ Thirty minutes after the first dose, a second dose of 40 mcg Narcan was administered with no improvement. Oxygen saturation remained between 79 and 88 percent. Albuterol was given with little effect. The patient's respiration rate was 44.
 - ▶ What would you do?

- ▶ The patient was reintubated. Copious pink frothy fluid was suctioned from the ETT. The patient received Propofol and paralytic agents with the code team present to assist. The patient's heart rate continued to decline to about 45 beats per minute. The patient was transferred to a hospital emergency department.
- ▶ Upon arrival in the emergency department, the patient was in asystolic arrest. Attempts to place a transvenous pacer were unsuccessful. The NG tube returned 400 cc of brown coffee-grounds gastric fluid. After 30 minutes of CPR, the patient was pronounced dead.

- ▶ The autopsy report noted no apparent airway obstruction, so the pathologist determined that the cause of death was flash pulmonary edema. Negative pressure pulmonary edema (NPPE) is a form of flash pulmonary edema caused by forceful inspiratory efforts made against a blocked airway. Toxic levels of ropivacaine were found in the patient's blood. The pathologist noted hypertrophic cardiomyopathy and grossly enlarged heart.

- ▶ Plaintiffs argued that the LMA was removed too soon with sleep apnea and a class III Mallampati score. They raised questions about the high levels of ropivacaine and wondered if it contributed to bradycardia. They said that the reintubation took too long resulting in high end-tidal CO₂. They also noted inconsistent documentation between PACU nurses and the anesthesia.

- ▶ Some defense experts were supportive of the care, stating that the cause of death was probably from a fatal arrhythmia due to hypotension and enlarged heart. They questioned if undiagnosed pulmonary hypertension would explain the failure to respond to Lasix. It was noted that both of the patient's parents had died suddenly following surgeries. The assumed cause was coronary artery disease.

Case 2

- ▶ A 29-year-old female delivered a baby and then requested tubal ligation that day. Twenty minutes after receiving spinal anesthesia, she began having respiratory difficulty with decreasing oxygen saturation. She was intubated and lung sounds were auscultated but there was no improvement in low end-tidal CO₂ levels. She began having seizures and had only a faint carotid pulse.
- ▶ The outcome was a patient in a persistent vegetative state. Concerns raised by physician reviewers were the delivery day return to surgery because of the higher risk for gastric aspiration. Possible causes included high spinal, bronchospasm, misplaced ETT, and vasovagal response. Following surgery, the surgeon learned that the patient had been ill with an upper respiratory infection for about two weeks.

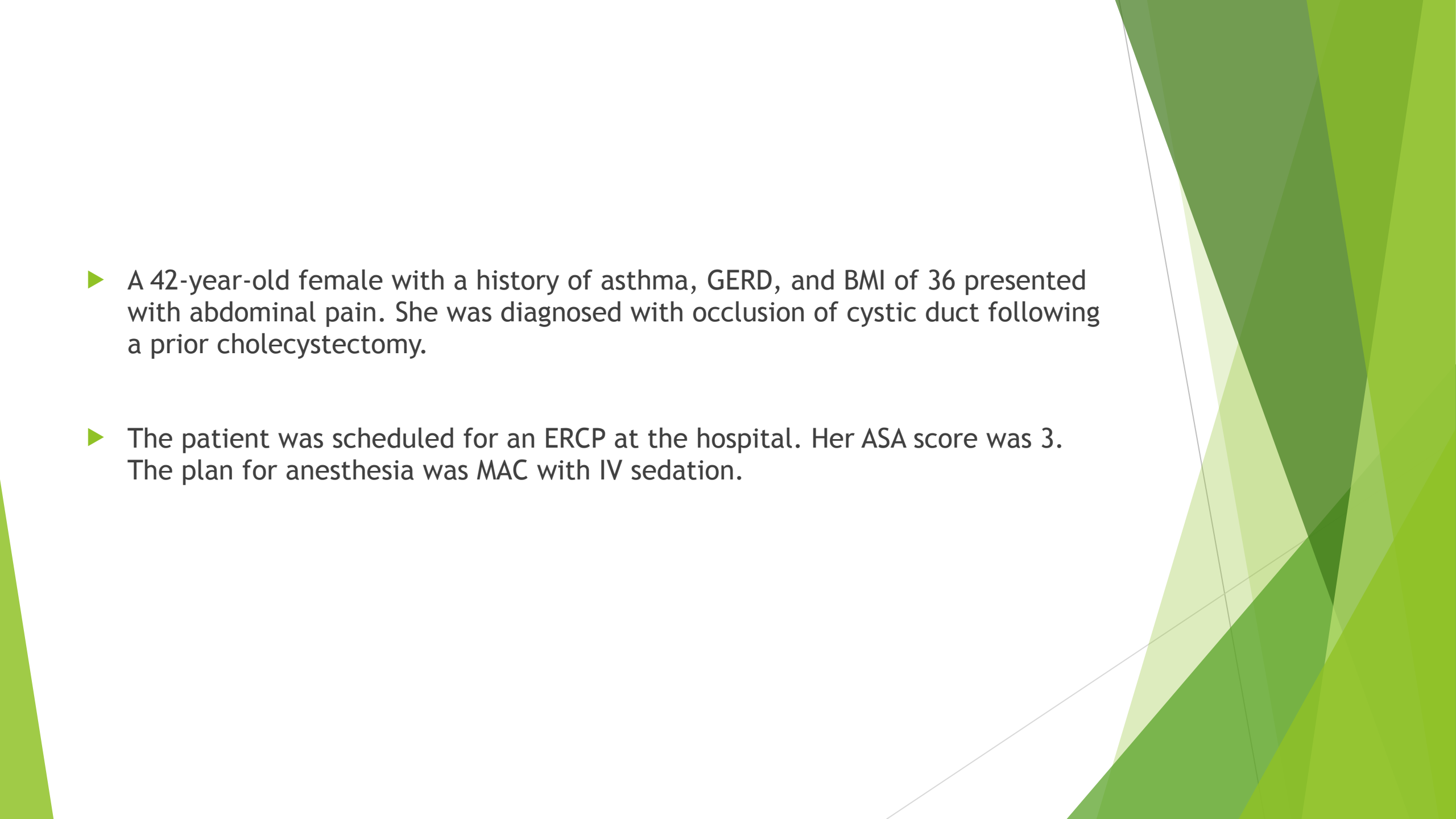
Case 3

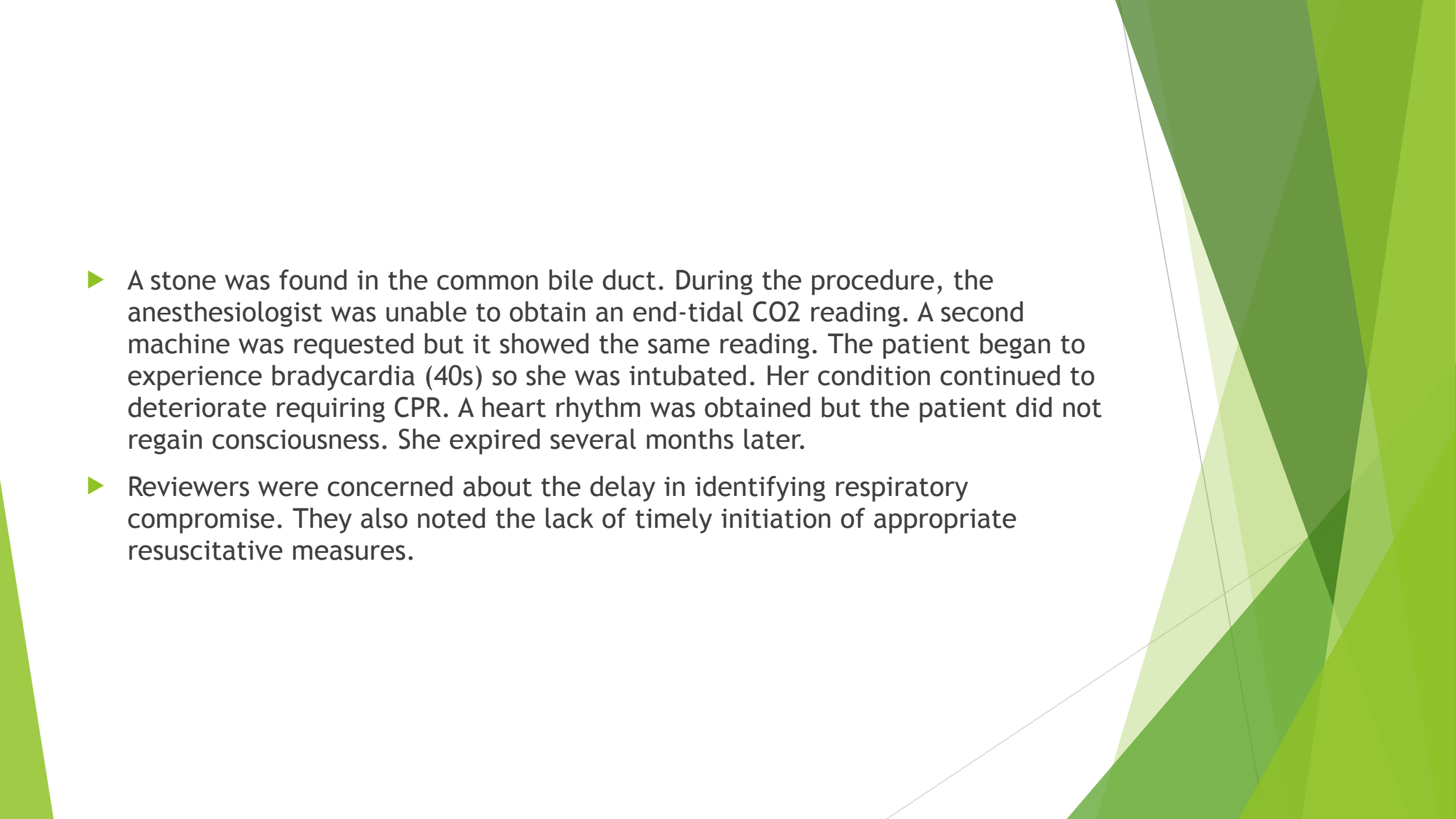
- ▶ A 72-year-old male was taken to surgery for a full thickness rotator cuff tear repair. The pre-op assessment was documented with ASA III and Mallampati score of I or II.
- ▶ Surgery was successful and the patient was transferred to ICU. However, he expired a few days later.
- ▶ Concerns about his care included poor documentation of the preoperative assessment. The patient had a history of respiratory failure during previous surgeries that required reintubation. In this case, it was determined that the patient had been extubated prematurely in PACU.

- ▶ Almost all factors related to patient monitoring were for inadequate monitoring of patients' physiological status.
 - ▶ Low mean arterial pressure and severe acidosis resulted in blindness.
 - ▶ A drop in end-tidal CO₂, likely due to an airway obstruction, was not noted and resulted in encephalopathy and death.
 - ▶ Lack of documentation of breath sounds and slow response to drop in CO₂ and heart arrhythmia resulted in anoxic brain injury.
 - ▶ A patient's oxygen levels dropped rapidly, and the low pulse oximeter readings were assumed to be due to equipment malfunction. It was later discovered that breathing circuit tubes had disconnected.

- ▶ A 26-year-old female was taken to surgery for an elbow fracture repair. During surgery, it was discovered that the tourniquet had remained inflated too long, resulting in nerve damage. Plaintiffs raised concerns about the level of monitoring the patient had received during her surgery.

- ▶ A 71-year-old female received a translumbar epidural steroid injection by a pain management specialist. The anesthesiologist planned to provide MAC, but he delivered propofol in four doses for a total of 350 mg for the short procedure. The patient developed respiratory distress (O2 saturation of 70) and bradycardia (40 bpm). The patient was resuscitated and transferred to ICU.
- ▶ The outcome was short-term memory loss and loss of emotional control. The patient is unable to perform household chores. Experts raised concerns about the slow response to the patient's changing status.
- ▶ I feel like we all have this one??

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- ▶ A 42-year-old female with a history of asthma, GERD, and BMI of 36 presented with abdominal pain. She was diagnosed with occlusion of cystic duct following a prior cholecystectomy.
 - ▶ The patient was scheduled for an ERCP at the hospital. Her ASA score was 3. The plan for anesthesia was MAC with IV sedation.

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- ▶ A stone was found in the common bile duct. During the procedure, the anesthesiologist was unable to obtain an end-tidal CO₂ reading. A second machine was requested but it showed the same reading. The patient began to experience bradycardia (40s) so she was intubated. Her condition continued to deteriorate requiring CPR. A heart rhythm was obtained but the patient did not regain consciousness. She expired several months later.
 - ▶ Reviewers were concerned about the delay in identifying respiratory compromise. They also noted the lack of timely initiation of appropriate resuscitative measures.

- ▶ A 58-year-old patient with diabetes, BMI of 36, and Stage Five renal failure presented with a necrotic toe. She was admitted for surgery following dialysis. An IV was started in the non-AV-fistula arm, the same arm where her blood pressure was monitored.
- ▶ When IV anesthesia was administered, the patient's heart rate dropped into the 60s. The blood pressure monitor was turned off to give additional medications. When the blood pressure monitor was restarted, no blood pressure was readable. The patient's heart rate dropped into the 30s. The patient was given Atropine, epinephrine, and Phenylephrine.

- ▶ The patient's heart rate increased but remained in the 50s, so more medications were given. When surgery was completed, the surgeon left the OR. The patient had no palpable pulse and no pulse oximeter reading.
- ▶ Chest compressions were initiated, and the patient was intubated. A short time later, the patient had a blood pressure of 130/50, but she did not regain consciousness. Her seizures started a short time later. The patient was moved to ICU where she was diagnosed with diffuse anoxic brain injury. Life support was terminated a short time later and the patient expired.

- ▶ In the claim brought by the patient's family, experts on both sides criticized the anesthesia care. There was very limited documentation regarding the patient's vital signs. The surgeon and the rest of the surgical team were not notified that the anesthesiologist was having difficulty maintaining a reasonable blood pressure.