ANESTHESIA SAFETY NETWORK

QUARTERLY PERIOPERATIVE INCIDENTS REPORT

Newsletter #001 – October 2016

TOWARD EXCELLENCE IN HEALTHCARE

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INTRODUCTION

Thanks a lot for your participation to this first newsletter.
After three months, more than 360 nurses and anesthesiologists have subscribed to this platform with about 50 reports shared. I hope that you'll find out in this newsletter what you're expecting with more information to improve your expertise.
The development of this network is mainly due to your contribution. To enhance our network, we're looking for new endorsements from the European Society of Anesthesiology and many others. As an early adopter, don't forget to share this website with your colleagues.
Now it's time to upgrade your status from reader to actor leading to an improvement of healthcare quality. Recently, Ghaferi and al (1) talked about the three waves of innovation in patient safety. They suggested to focus on how health care providers organize for highly reliable performance. Sharing our incidents is probably a very interesting tool to achieve expertise for caregivers.
As a conclusion, I'd like to address a special thanks to Martin Bromiley (Founder and current chair of Clinical Human Factors Group), Christian Morel (author of many books) and Claude Valot (senior consultant in Human Factors – Dedale SAS).
Finally, thanks a lot to Thomas LOPES M.D., a brilliant colleague and a precious help and support for the development of this platform.

NOW IT'S TIME TO UPGRADE YOUR STATUS FROM READER TO ACTOR LEADING TO AN IMPROVEMENT OF HEALTHCARE QUALITY.

(1) Amir A. Ghaferi Christopher G. Myers Kathleen M. Sutcliffe Peter J. Pronovost. The Next Wave of Hospital Innovation to Make Patients Safer. Harvard Business Review. August 08, 2016

DEATH IN POST ANESTHESIA CARE UNIT

The 91 y.o. patient was known to suffer from a severe aortic valve stenosis. She also had cognitive disorders with dementia and agitation. One month before, she had broken her right elbow and was operated under general anesthesia (qualified as highly difficult with hemodynamic instability after the interview of the first anesthesiologist). Unfortunately, there was a wound infection and she needed another surgery. When she came to the anesthesiologist appointment before the second surgery, the medical doctor didn't have access to medical data so he decided to postpone the appointment to the day before the surgery. Unfortunately, she arrived in the hospital three hours before the surgery. The orthopedic surgeon was in a hurry and pressed the anesthesiologist. He read the last medical data report and chose to use the same anesthesia protocol. Shortly after IV induction, the blood pressure and capnography decreased needing three injections of 100 microg of epinephrine and crystalloid to restore stable hemodynamic condition. The surgery was cancelled and the patient was admitted in post anesthesia care unit. The extubation was impossible due to acute pulmonary edema and cardiac failure. After discussion and information of the family, the patient died.

Feedback from the reporter :
The cancellation of the planned appointment has compromised the awareness about ASA physical status (ASA IV) of the patient leading to the use of an inappropriate anesthesia protocol. The production pressure led to a too short checklist avoiding discussion among team workers. This situation should have been considered as a NO GO event.
Key words : communication / productivity / awareness

NO GO SITUATION

During the anesthesiologist's appointment, the medical doctor discovered that triplets children had to be operated on the same day from different kinds of surgery with the same surgeon (cryptorchidie and phimosis – both side or just one). The three brothers were a perfect replica of each others. The anesthesiologist decided to cancel one of the brother reducing thus the risk of error. Finally, both parents declared that they feared to take care of their children the same day at home.

Feedback from the reporter :
This case illustrates the necessity to speak up when something seems to go wrong for all stakeholders (patient, anesthesiologist, nurse…). On the one hand, parents were uncomfortable with this situation and didn't want to disturb the surgeon if they'd have decided to postpone the surgery of one of their children. On the other hand, the surgeon was convinced the family expected this kind of planification.
Key words : organisation / NO GO / preventable risk

DISTRACTION DURING ANESTHESIA INDUCTION

On Monday morning after a sunny weekend, during the first general anesthesia procedure, the anesthesiologist was speaking and laughing with his coworkers. It was an IV induction for a minor surgery needing an orotracheal intubation (A.S.A. 1). Immediately after intubation, the Young patient coughed violently risking to fall off the table. All the staff secured him and the anesthesiologist discovered that he had forgotten to inject the muscle relaxant drug. After the injection, the surgery began without any problem at the discharge.

Feedback from the reporter :
The anesthesiologist was distracted during general anesthesia. He wasn't aware of the inadequate muscle relaxation during intubation. Silence and calm must be a main goal during critical phases of anesthesia allowing concentration of all providers. In aeronautical industry, they talk about sterile cockpit.
Key words : distraction / sterile cockpit

FAILURE OF LOCO-REGIONAL ANESTHESIA

C-section was decided because of stagnation and fetal heart rate abnormalities at 9: 00 p.m. The patient had an epidural analgesia for the labor. The quality of analgesia seemed to be poor. In the same time, the anesthesiologist on duty was taking care of a patient with septic shock. He decided to call a colleague. When the other anesthesiologist arrived after a delay of about 45 minutes, the anesthesiologist went to the operating room and injected a full dose of local anesthetic for the C-section. The surgeon and the patient were exhausted. When the surgeon began the surgery the patient was really painful but she decided to continue because she was scared about the general anesthesia in this condition. Moreover, she declared that she'd suffer if it had been a normal delivery without analgesia. Everybody seemed aware of the situation but nobody wanted to say « STOP, I'm concerned ». The day after, she didn't report any post-traumatic stress disorder. The surgeon apologised for this awful experience.

Feedback from the reporter :
This case underlines the lack of communication among healthcare providers. No information was given to the patient and her husband during the procedure. The surgeon was focused on proceeding to the C-section (tunnel vision). The anesthesiologist was tired and he didn't want to face another failure (omission bias).
Key words : distraction / sterile cockpit

OVERCONFIDENCE

After a difficult surgery (9 hours long), there were two minor surgeries for a man and his wife. They came from Africa. During the checking of medical data from the husband, the anesthesiologist discovered a result of blood sample belonging to his wife. Then, the woman arrived. She seemed to be exhausted and after a short exam, the medical doctor read that she was diabetic. The glycemia was low and after G30% injection, she recovered. The anesthesiologist was proud of him and proceeded to the general anesthesia. When he arrived in PACU, reading the medical data for a short briefing with the nurse, he discovered that the woman was epileptic and he had injected a contra-indicated pain killer. Nothing happened.

Feedback from the reporter :
Overconfidence and fatigue lead to inappropriate drug injection without harmful event. The evening is a well-known contributing factor for wrong decision and cognitive mistakes. In this report, the positive point was to get out of the trap (cognitive shortcut between fatigue and jetlag) looking for other diagnosis for drowsiness.
Key words : overconfidence / fatigue

DISTRACTION DURING AN OUT OF HOSPITAL EMERGENCY

An emergency team was called at 7:00 am for a car accident with a comatose patient incarcerated in her car. A traumatic brain injury was suspected and the Glasgow Coma Scale was 3. The medical doctor decided to secure venous access and the airway. He ordered to be prepared for a crush induction. The CRNA was anxious because she had to include the patient in a new scientific research protocol with many data to record. She put the venous catheter and used an hemocue to evaluate the hemoglobin value. Few minutes later, the patient was extracted from her car and immediately intubated and ventilated. The CRNA looking for identity card discovered an insulin prescription. The glycemia measured was very low (1.2 mmol/l). The nurse injected IV G30%. After performing the bodyscan in the trauma center, the patient woke up without any damage. She was quickly discharged from the hospital.

Feedback from the reporter :
« To Err is human ». Fixation, distraction are common causes of medical errors. In this case, the nurse was focused on the new research protocol forgetting to check glycemia as in any coma. All the staff was well trained but they were absorbed by their main goal : Do not miss the inclusion of a patient in a new research protocol.
Key words : tunnel vision / cognitive aid / distraction

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BAD COMMUNICATION AND DIFFICULTY TO INTUBATE

An healthy patient came for an anesthesia appointment. After a medical exam, he was supposed to be difficult for the oro-tracheal intubation. He had undergone previous general anesthesia without any difficult intubation reported. Few days later, the same anesthesiologist realised the general anesthesia. Three attempts were needed for intubation with the use of a videolaryngoscope, a cricoid pressure and an Eschmann tracheal tube. No incident was noticed. In the postop ward, while the anesthesiologist was given to him a difficult intubation certificate, he remembered not havin mentioned during pre-anesthesia questioning a similar situation with the delay of the surgery and the use of fiberoptic intubation protocol. The questions during the appointment didn't allow him to remember such event.

Feedback from the reporter :
The anesthesiologist was surprised with the gap between the data collected during the appointment and memories reported in the postop ward. He said that he'd have used more specific questions. To ask opened questions could be a way for people to remember past events with more details. During the appointment, the anesthesiologist was tired, angry and late with a surgery planned just after the end of the appointment. He reported that he probably didn't want to spend more time with this patient. As a conclusion, all that didn't happened if the patient had had a difficult intubation certificate
Key words : communication / productivity

MEDICATION ERRORS

In this section, we will report two medication errors that occurred between 11:00 pm and 7:00 am.
The first case reported an intrathecal injection of a small dose of suxamethonium for an emergency C-section. The drug supposed to be delivered to the patient was sufentanil. It had a similar labeling with suxamethonium. The nurse and the anesthesiologist didn't realised that the wrong drug had been injected. No poor outcome was reported.
The second case report is about the management of an epidural analgesia in the intensive care unit. The ICU nurse was not used to this ward. She called the anesthesiologist because there was an occlusion alarm. The anesthesiologist wanted to inject isotonic saline solution and asked the nurse to find out some. She didn't know where it was and finally, the medical doctor decided to help himself. He was angry and after the injection of the solution, he discovered that he had injected hypertonic saline solution. Nothing happened but the team reported a fearful experience.

Feedback from the reporter :
These two cases occured between 11:00 pm and 7:00 am with reduced concentration. The key words used by subscribers were fear, lonelyness. With these words, it's easier to understand the term of « second victim ».
In the second case, there is a task transfer among caregivers leading to medication error. Anger and fatigue could have lead to these sentinel events.
Key words : fear / lonelyness / error / fatigue

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DISCOMFORT AND FEAR OF JUDGEMENT

A certified nurse anesthetist (CRNA) was working with an anesthesiologist for a patient who underwent an angioplasty. The anesthesiologist who was in charge of the patient wanted to use several IV medication to produce a mild sedation. It was a new procedure for the CRNA who was stressed. The case took place between 11:00 am and 3:00 pm. The patient airway was Mallampati III with an ASA III status. A few minutes after the beginning of the procedure, the physician went out of the operating room. The CRNA asked the surgeon if he needed some heparin bolus and the surgeon answered « later ». During the procedure, there were many technical problems and the surgeon was angry. After two hours in the post anesthesia care unit, the patient was painful and suffered from a leg ischemia leading to a reoperation. At this moment, the CRNA reminded him that he had forgotten to inject heparin bolus.

Feedback from the reporter :
The reporter wrote that he was stressed and not comfortable with the anesthesia protocol. Fearing to be judged by the physician, he preferred to be silent. One hour later, the surgeon was upset and communication became impossible. The anesthesiologist didn't allow to the CRNA to ask question. The CRNA should have stopped the procedure and asked for help. Because of stress and fear of judgement, he didn't speak up.
Key words : fear / judgement / culpability / lonelyness

THE REPORTER WROTE THAT HE WAS STRESSED AND NOT COMFORTABLE WITH THE ANESTHESIA PROTOCOL. FEARING TO BE JUDGED BY THE PHYSICIAN, HE PREFERRED TO BE SILENT.

SEPSIS TWO DAYS AFTER BARIATRIC SURGERY

On Saturday morning, two days after a gastric sleeve surgery, a patient suffered from abdominal pain associated with dyspnea. The abdominal scan showed intra-abdominal collection. The surgeon decided to plan an emergency laparoscopy. At 1:00 pm, the patient arrived with the surgeon and his assistant. They left her in the operating room while the anesthesiologist was taking care of another patient. After the end of his previous surgery, the anesthesiologist discovered an hypoxic patient without any IV line and without monitoring. It was decided to put the patient in the recovery room in order to organise the anesthesia protocol and also administrate preload IV fluid before surgery. When the surgeon arrived, he was really angry and didn't understand the situation arguing why the patient was still awake.

Feedback from the reporter :
The surgeon wasn't aware of the crisis code. The anesthesiologist didn't ask to put the patient in the PACU before surgery. He expected that the surgeon knew the critical situation. The assistant wanted to go back home as soon as possible and pressed the staff. The use of the SBAR technique could have offered a solution to bridge the gap in communication between care givers. Thus medical staff could have discussed about treatments and recommandations.
Key words : SBAR / awareness / productivity / situation

CARDIAC ARREST IN OPERATING ROOM

TWO CARDIAC ARREST HAS BEEN REPORTED.
The first case occured at the end of an orthopedic leg surgery and the decompression of the tourniquet. The patient had a regional anesthesia (spinal anesthesia) for this procedure. During the cardio pulmonary rescucitation, the anesthesiologist decided to intubate the patient and he discovered that his dental plate hadn't been removed before the surgery as needed. It was an unplanned procedure. The surgeon was late and his surgical planning was overbooked. The subscriber reported that he was tired (middle of the day).

Feedback from the reporter :
Productivity lead to a shift from safety to unsafe condition. The checklist hasn't been performed. When seconds count, quality decrease and is replaced by quantity.
Key words : late / productivity

Unfortunately the incident description of the second report is too short for being analysed. It was an anaphylactic shock during a crush induction for a bariatric surgery. The CPR began shortly without recovery and the patient died. The CRNA underlined the poor communication during the crisis code.

Feedback from the reporter :
Effective communication between followers and leader is one of the key for CPR (Crisis Ressource Management)
Key words : communication / CRM

TAKE HOME MESSAGE

1. sterile cockpit during critical time
2. SBAR
3. Speak up in operating room to reporte discomfort
4. Resist to productivity without safety

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