2020 CoA Essay Competition

Topic: Anaesthesia Safety- What do patients expect?

Title:

The Art of The Induction: how preoperative psychological wellbeing affects postoperative outcomes.

Word Count: 961 / 1000 words

Author:

Alexandr Élie Lefebvre Magder

MB BCh BAO Candidate, Class of 2021

"Where's your farm?" said the consultant anaesthesiologist while infusing the dose of propofol that would lull Mary to sleep for her triple coronary arterial bypass surgery. "Oh, just past Brandon in Cross Mahon."[i] "You don't say!" said the anaesthesiologist. "My mother grew up just over the hill in Mayfield." "Small world isn't it?" she said. "We'll since you're Cork royalty, I'll be sure you get the very best today." She smiled broadly as her eyes fell shut.

In most cases, the anaesthesiologist's is the last face a patient sees before their body undergoes the controlled trauma of surgery. For many, particularly those admitted electively following extensive investigations and workup, this is a momentous occasion, a temporal transition they will indelibly recall by whether other events happened prior to or after that day.

The gravity of the circumstances is rarely lost on patients. Nearly all experience preoperative anxiety to some extent, with 40% reporting high levels as measured by APAIS scores[1]. The waiting period leading up to surgery is reported by many to be the most worrisome.[2] While a number of factors may mitigate this, the patient's perception of the care system is especially important: anxiety tends to be especially intense for patients with prior negative experience of healthcare.[3]

In this context, the patient-clinician interaction immediately before anaesthetic induction becomes particularly important; and the consequences of mismanaging it are real and measurable. Anxiety in the leadup to surgery can have significant implications for recovery, even amplifying post-operative pain. Some evidence suggests that preoperative anxiety increases postoperative morbidity and mortality.[2] Thus, any success in reducing anxiety preoperatively may exert a positive impact on the patient's recovery.

In the context of anaesthetics safety, patient anxiety and psychological wellbeing are important factors, and anaesthesiologists have a crucial role to play. In particular, the moments before induction constitute an opportunity to gain a patient's trust before drawing the curtain over the window of their consciousness. I believe that patients are

deeply aware of the manner and rapport between healthcare professionals, and likely hold this experience as a gauge of how they might be treated while unconscious.

Beyond the induction room, mental health plays an important role in the recovery of ICU patients also, this being the location where many awaken after major surgery. Arguably, our duty to comfort our patients is even more significant in the post-operative period. In the dystopian world of the intensive care unit, it is of the utmost importance that patients be treated primordially as humans and individuals. While I acknowledge the need to maintain a degree of detachment given the emotional challenges of working as an ICU physician, it is far too easy to see the patient and not the person – that is, that a patient can be depersonalized while intubated and unconscious. One must always be aware of the vulnerability of the voiceless patient, a challenge faced by all who are intubated.

While few post-ICU patients have detailed psychological follow-up, it is now recognized that between 50-70% of patients and their family members will have long-lasting psychological consequences including intrusive memories akin to post-traumatic stress disorder. Although it still unknown what interventions mitigate post-ICU psychological consequences, one factor that has been reported is “truncated or failed communication”, something inevitable with intubated patients to some degree.[4] This may suggest that interventions that address the communication barrier between healthcare professionals and intubated patients may improve clinical outcomes. In practice, this may involve providing the patient with an update on their clinical picture as often as possible, especially after important developments or before procedures.

It is also important to remember that patients often hear and understand what is said around them despite being sedated. Casual remarks interpreted out of context may be distressing and disturbing for someone that is already confused about their current condition. It is thus essential that clinicians consider how such interactions may impact the mental health of their patients. This may even be true intra-operatively. In a 2018 article in the New Yorker titled “Awake under Anaesthesia”, Joshua Rothman reports that some patients can sometimes recall specific details of what was said while unconscious; in one unfortunate example, a patient recalled her surgeon making crude remarks about her body size.

Anaesthesiologists are privileged to take part in some of the most consequential moments in the lives of their patients. There is a high probability they were present at any one person’s birth and will be around the time of death. More than half of mothers receive epidural analgesia and over 20% undergo caesarean section, for example.[5] [6] Over 20% of hospital deaths in occur in the ICU, as in most developed countries.[7] [8] The importance of patient perception in these circumstances, both before induction and while awakening, should be appreciated. There is growing evidence that kindness and professionalism are more than simply good practice – they actually improve outcomes. For this to occur, patients must be seen as more than a “case”, and not to be referred to as “the CABG” or the “hip”. Rather, all deserve human interaction illustrative of the dignity and respect they deserve.

I was not surprised to see Mary's smooth progress through her post-operative course. From the moment she awoke in the ICU, she was settled and calm, just as in the moments before induction, radiating complete confidence in those responsible for her care. Her family too seemed reassured about her post-operative state, and even more so when told she would be extubated that evening.

Moving forward, I wonder if other patients could be spared the distress of delirium with preoperative initiatives to define expectations and allay anxiety. I know that in my practice, I will not forget the power of meaningful and positive conversation and a sincere smile.

References:

1. Aust H, Eberhart L, Sturm T, et al. A cross-sectional study on preoperative anxiety in adults. *J Psychosom Res* 2018;111:133-39. doi: 10.1016/j.jpsychores.2018.05.012 [published Online First: 2018/06/25]
2. Stamenkovic DM, Rancic NK, Latas MB, et al. Preoperative anxiety and implications on postoperative recovery: what can we do to change our history. *Minerva Anestesiol* 2018;84(11):1307-17. doi: 10.23736/s0375-9393.18.12520-x [published Online First: 2018/04/07]
3. Svensson M, Nilsson U, Svantesson M. Patients' experience of mood while waiting for day surgery. *J Clin Nurs* 2016;25(17-18):2600-8. doi: 10.1111/jocn.13304 [published Online First: 2016/06/29]
4. Myers EA, Smith DA, Allen SR, et al. Post-ICU syndrome: Rescuing the undiagnosed. *Jaapa* 2016;29(4):34-7. doi: 10.1097/01.Jaa.0000481401.21841.32 [published Online First: 2016/03/31]
5. Osterman MJ, Martin JA. Epidural and spinal anesthesia use during labor: 27-state reporting area, 2008. *Natl Vital Stat Rep* 2011;59(5):1-13, 16. [published Online First: 2011/05/11]
6. The Economic and Social Research Institute; Health Research and Information Division. Perinatal Statistics Report 2007 [Internet]. Dublin, Republic of Ireland; 2007 [cited 2020 Sept 25]. Available from: https://www.esri.ie/publications/perinatal-statistics-report-2007 [
7. Curtis JR, Engelberg RA, Bensink ME, et al. End-of-life care in the intensive care unit: can we simultaneously increase quality and reduce costs? *Am J Respir Crit Care Med* 2012;186(7):587-92. doi: 10.1164/rccm.201206-1020CP [published Online First: 2012/08/04]
8. The National Office of Clinical Audit. Irish National ICU Audit: annual report 2018 [Internet]. Dublin, Republic of Ireland; 2020 [cited 2020 Sept 25]. Available from: https://www.noca.ie/publications/publications-listing/P0/category/3.

[i] Locations and names changed for confidentiality