Surgical Safety Checklist : Are we there yet?

Pallavi Lande-Marghade

Surgery on a wrong body part or wrong side or a wrong procedure itself! How often do we read these news in the media? These sort of errors are not terrifically rare. According to John Hopkins Malpractice study (2012) surgical 'never events' occur at least 4000 times per year .

These sort of medical errors can be prevented by simple solution i.e. using surgical safety checklists. Medicine first borrowed the concept of safety checklist from aviation, the idea being surgeons, like pilots, could reduce the risk of fatal complications with some verbal confirmations and ticking of boxes.

Dr Atul Gawande, a surgeon and Harvard professor whose book "The Checklist Manifesto" implored the doctors to use basic check lists to avoid shocking errors of omission. This book was based on the study published in NEJM in 2014. The results of this study were outstanding with the rate of any complication at all sites dropping from 11% at baseline to 7% after introduction of the check list ($p<0.001$) and the total in hospital rate of death dropped from 1.5 % to 0.8 % ($p<0.003$)[1]. Further more a large study conducted at 74 Veteran Affairs Hospital experienced a 18 % reduction in annual mortality compared with 7% decrease among the facilities where they did not undergo the training for surgical safety checklist[2]. The implementation of 19 point check list was able to reduce the surgical morbidity and mortality considerably[3]. There are certain studies which refute these findings. Urbach et al observed after 3 months of implementation of checklists no significant reduction in operative mortality[4]. Many confounding factors like secular trends and co interventions could have skewed the results. The likely reason for the failure of this Ontario based study was that in all probability the checklist was not actually used[5]. Full implementation of the checklist system is difficult and takes time and therefore without measuring compliance from all the medical staff, the research says next to nothing[5]. Negative results from this study should not arm the naysayers and keep people from implementation or spreading the checklist in a meaningful way[1]. It is an culture and has to be imbibed deep in to our minds.

No matter what facility we work for or in whatever capacity, one must not overlook the importance of this document. The check list is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged[3]. A surgeon is successful but not a solitary member of a team responsible for patient care. An anesthesiologist thus plays a pivotal role in shouldering responsibility for participation in this check list procedure. Every member of the surgical team participates diligently through the sign in, time out and sign out. Embracing safety culture is a team responsibility. The essential principles of checklist are that it should be focussed, brief, actionable, verbally communicated, collaborative, tested and integrated. Incorporation into hospital policies and local guide lines and modifications to suit the needs are highly recommended[6]. Resistance from surgical colleagues is commonly observed. This quintessential event is often mocked at and taken very lightly. Such kind of deplorable attitude should be shunned away.

Use of the WHO safety checklist has demonstrably improved compliance with basic standards of surgical care in diverse hospitals around the world. While the relationship between adherence to standards and decreases in complication rates is likely multifactorial, improving the safety and reliability of surgical care can save times and promote confidence in the health health system[6].

The take home message is that the checklists are here to stay! Training and teamwork are the key elements the success of its implementation.

[1]Department of Anesthesia, Specialist Anaesthesiologist Al Zahra Hospital, Sharjah, UAE.

Address of Correspondence
Dr. Pallavi Lande-Marghade
Specialist Anaesthesiologist
Al Zahra Hospital, Sharjah, UAE.
Email: pallavilande@gmail.com

References

1. Haynes A , Weiser T, Berry W: A surgical safety checklist to reduce morbidity and mortality in global population The New England Journal of Medicine. 2009; 360; 491-499.

2. Neily J, Mills P et al: Association between implementation of a medical team training programs and surgical mortality.The Journal of the Amercian Medical association 2010, 304,(15):1693-1700.

3. WHO surgical safety check list and implementation manual 2008

4. Durbach D, Govindrajan A, Saskin R et al: Introduction of surgical safety checklist in Ontario, Canada.The New England Journal of Medicine 2014; 370;1029-1039.

5. Leape Lucian: The Checklist Conundrum, Editorial, The New England Journal of Medicine 2014: 370:1063-1064.

6. Implementation Manual WHO surgical safety checklist 2009.

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References