

Original Research Paper

Anesthesiology

PATIENT SAFETY - AN AUDIT OF ANAESTHESIA SERVICES

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KEYWORDS:

Background

The concept of measuring quality of anaesthesia service is still gestating in our country and hence there are no standards for comparison of our data.

Aim and objectives

Measure and monitor the quality of anaesthesia care.

Research evidence/best practice

Millions of patients are anaesthetized every year. Mortality and morbidity from anaesthesia has declined to levels where mortality is no longer seen as a good quality indicator. The "Patient Safety First Campaign" achieved a transition in the mind set to "No Avoidable Death And No Avoidable Harm". "It brought to focus the relevance of measuring and reporting of quality indicators for patient safety, effectiveness and patient experience in all domains of patient service. Focused monitoring of quality of anaesthesia service is vital to improve standards of patient safety.

Suggested indicators

- 1. Pre-operative evaluation by anaesthesiologist. (2)
- 2. Use of minimum mandatory monitoring till recovery from anaesthesia. $^{\tiny{(3)}}$
- 3. Change of anaesthesia plan.
- 4. Unplanned ventilation.
- 5. Stay in recovery area > 2hours.
- 6. Unplanned ICU admissions after anaesthesia.
- 7. Mortality within 24 hours of anaesthesia.
- 8. Post-operative pain.
- 9. PONV.

Method

Nine quality indicators were applied and 4147 patient records, pooled from three large city hospitals for the period from 01 Aug 2019 to 31 Oct 2019, were audited covering the entire perioperative period.

Results

Audit was conducted from the manually filled anaesthesia charts. Audit was done on 4,147 patients of which 60.9% (n=2,528) were females with an average age of 39 years and 41.4% (n = 1,717) were ASA group I patients. All patients had a pre-anaesthetic evaluation by an anaesthesiologist. 96.14% (n = 3987) were revisited by the anaesthesiologist administering the anaesthesia. 96.45% (n=4000) had the minimum mandatory monitoring intra-operatively. Modification of anaesthesia occurred in 13.72% (n = 569) on account of inadequate or patchy regional or neuraxial block, unoptimised co-morbidities and patient preference of a different type of anaesthesia. Unplanned ventilation occurred in 1.08% (n = 45) due to prolongation of the planned duration of surgery and change of surgical plan due to unexpected surgical pathology. Prolonged stay in recovery area was found in 2.96% (n = 123) due to delayed return of consciousness and or hypotension. ICU support was provided to 7.83% (n=1,161) in order to provide ventilator and or vasopressor support.

There were no mortalities in our audit cohort. The incidence of PONV in the cohort was 11.69% (n = 485) which relieved spontaneously with a single dose of dexamethasone within 04 hours. 98.1% (n = 4,068) had a numerical scale pain rating <4.

Conclusions

There were several areas which needed improvement and strengthening of processes could be done. Quality of anaesthesia services need to be monitored through structured quality assurance programs using quality indicators which will improve anaesthesia delivery services.

Recommendations

- 1. Improvement is needed in communication with patients to ensure that the patient fully understands the choices of anaesthesia and is able to make a learned decision.
- 2. Rota of the anaesthesiologist needs to be optimized to ensure that the anaesthesiologist administering the anaesthesia is also the one to visit the patient pre-operatively.

References

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