Perioperative Surgeon-Family Communication: Is There an Ideal Time?

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Purpose: Studies have shown that perioperative communication is important in reducing anxiety and improving the overall experience of family members waiting for surgical patients. Presently, there is no agreed upon standardized time to deliver updates to families. We aimed to determine the effect of strategic communication with families during the perioperative period on their satisfaction, anxiety, and overall experience. We hypothesized that frequent updates would enhance the satisfaction and decrease the anxiety levels of the family members during the perioperative period.

Methods: All patients undergoing elective and urgent trauma, arthroplasty, and spine orthopaedic procedures were eligible. Patients were excluded if they were under 18 years of age, non-English-speaking patients and/or families, and patients without family members present. Enrolled patients were randomly assigned to a communication pathway. In the control pathway, the surgeons communicated with the family only once near the completion of the surgery. In the intervention group, the family received additional standardized updates via pagers at 3 pivotal moments: (1) Initial skin incision has been made; (2) critical part of the case is completed, and closure is about to begin; and (3) closure is complete, and patient will be transferred to the recovery room when ready. A postoperative survey was administered rating their satisfaction and anxiety levels on a scale of 0-5.

Results: A total of 101 surveys were completed (control: n=51, intervention: n=50). Overall satisfaction did not differ significantly between the groups (control: 4.61 ± 0.786, intervention: 4.68 ± 0.713, $P = 0.654$). The level of anxiety was significantly lower in the intervention group (control: 3.14 ± 1.385, intervention: 2.49 ± 1.474, $P = 0.026$). Satisfaction with updates was significantly higher in the intervention group (control: 3.16 ± 1.848, intervention: 4.47 ± 0.844, $P = 0.0001$). With regard to update frequency, 47.1% of subjects in the control group, versus 10% of subjects in the intervention group, stated that the updates were too infrequent.

Conclusion: The overall level of satisfaction of the family members was independent of the frequency of intraoperative electronic surgical updates. However, anxiety and satisfaction with perioperative updates was significantly improved by additional updates. The results of this study suggest that additional, strategic perioperative updates would improve the experience of family members.