

Incidence of Post-Anesthesia Symptoms, Surgical Events and Length of Stay for Surgical Oncology Outpatients

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Introduction: The Main Post Anesthesia Care Unit (PACU) at Memorial Sloan Kettering utilizes a two-step recovery process which provides acute post-operative care during Phase I recovery, and less acute care during Phase II recovery which focuses on preparing the surgical outpatient for discharge.

Identification of the problem: The perianesthesia nursing staff identified several post-operative symptoms including nausea, vomiting, dizziness, somnolence, pain and impaired wound integrity which delayed outpatient discharge and contributed to increased PACU II length of stay (LOS).

Purpose of the Study: This study examined the incidence of post-anesthesia symptoms, post-operative events and length of stay for surgical oncology outpatients during Phase II recovery at three time periods between 4/1/2017 and 8/5/2018.

Methodology: A retrospective analysis of data was used to examine post-surgical records at three time periods: before, one month after, and one-year after PACU I discharge criteria were revised. Records of outpatients receiving regional pain control or pre-operative antiemetics were excluded. Institutional Review Board approval was obtained (19-308). Records (n=1091) were examined for missing and duplicate data. Univariate analysis was conducted to identify relationships between study variables as well as covariant influences on length of stay. Findings were summarized in tables.

Results: Significant decreases in PACU II LOS were found between T-1(30 min), T-2(28 min) and T-3 (27min) ($P<0.001$). The incidence of dizziness inconsistently decreased from 12% (T-1), 3.8% (T-2) to 5.6% (T-3). Although blood pressure fluctuations decreased between each time — 1.4% (T-1), 0.3% (T-2), and 0.2% (T-3) — post-anesthesia symptoms of dizziness, pain and nausea decreased from T1 to T2, with an anticipated increase in T-3. The use of Fentanyl and continuous IV fluids decreased between all time periods.

Discussion: Although there were some inconsistencies in the incidence of certain post-anesthesia symptoms between time points, the use of measurable clinical criteria can improve patient outcome.

Conclusion: Improving PACU discharge criteria decreased the incidence of post-operative symptoms and overall PACU II LOS.

Implications for perianesthesia nurses and future research: Monitoring key variables related to patient outcomes ensures sustained practice changes and an optimal surgical experience for oncology outpatients.