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Outpatient Dismissal With a Responsible Adult Compared With Structured Solo Dismissal: A Retrospective Case-Control Comparison of Safety Outcomes

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Abstract

Objective: To test the hypothesis that patients dismissed alone in a sedation dismissal process (SDP) have no greater risk of adverse outcome compared with those who were dismissed with a responsible adult.

Patients and Methods: We compared 2441 SDP patients undergoing 2703 procedures with 4923 unique control patients who underwent 5133 procedures between June 1, 2012, and March 31, 2017.

Results: The rate of unplanned readmission related to the procedure was 0.11% (n=9), and there was no difference between SDP (0.07%) and controls (0.14%). Similarly, there was no difference in complication rates between SDP patients and controls when restricting to "all causes" unplanned readmissions within 24 hours and unplanned readmissions related to procedure.

Conclusion: With proper preparation, short-acting anesthetic/sedation medications, and sound clinical judgment, the presence of a responsible adult escort is not associated with reduced risk following discharge after ambulatory anesthesia. This practice may lessen the hardships reported by patients in needing to obtain an escort and the inconveniences and delays experienced by ambulatory procedural facilities when patients arrive without a designated escort.

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The past 2 decades have seen a shift from inpatient care to outpatient care, resulting in an increasing number of procedures requiring anesthesia services occurring in both ambulatory and office-based settings.[1,2] This change in procedural demographic characteristics stems in part from advances in shorter-acting anesthetic agents (eg, propofol) that help limit cognitive impairment and thereby enable patients to return to their normal daily activities more readily.[2] Although many studies have pointed to limited long-term cognitive and functional impact from undergoing these shorter procedures under anesthesia, professional society guidelines vary as to requirements for patients leaving with an escort.[3,4] Furthermore, there remains no clear and consistent definition as to who this escort should be and how long a responsible person should remain with the patient after their procedure.[4]

Requiring escorts and other responsible persons to help monitor the patient upon dismissal from an ambulatory procedural setting does not come without potential hardship. It may require these individuals to take time off from work and rearrange family responsibilities, all with potential economic and social burden. Furthermore, as the US population ages, there are increasing numbers of older patients who have no one available to accompany them. For hospitals and ambulatory surgery centers, securing an escort can also lead to delays and cancelations.

Since 2012, our institution has used a program known as sedation dismissal process

(SDP) to enable patients who arrive without a designated escort to still undergo their outpatient procedure under anesthesia. Many of our patients travel from afar for routine medical evaluation and end up needing a procedure that requires sedation and/or anesthesia care. If these patients have traveled alone, in the past, these procedures had to be canceled or rescheduled to a later time when the patient could bring along a responsible adult for accompaniment postprocedure. The SDP program allows the unaccompanied patient to have his or her procedure even if alone. Information about this program is detailed in the patient's preoperative education materials. If the patient is staying at a hotel, the patient must check to see whether shuttle service is offered to/from the hospital. A hotel shuttle bus is considered safer than taxi or ride-share services because the destination is fixed in advance, and monetary transaction is not needed. If the patient's hotel does not offer this service, the patient may still stay at the hotel, but needs to make arrangements with a medical transport service postprocedure to return to the hotel. Medical transport service ensures that the driver is competent in assisting patients safely to their destination and that they have passed security background checks. Medical transport services also provide door-to-door service for the patient, which is important to ensure that the patient safely arrives inside of their residence, instead of taxi or ride-share services, which may drop the patient off at the sidewalk.

The patient also has the option to hire a nonlicensed care provider such as a nurse's aid or patient care assistant to provide transport and other comfort/safety check measures at the hotel postprocedure. If the patient resides close by, a friend/family member can also transport the patient home and get them settled. The driver's phone number is contacted *before* the intake process and the nurse verifies that the driver is available to pick up the patient and transport them home.

On the day of the procedure, if a patient arrives unaccompanied, the intake or charge nurse will work with the patient to ensure that they have the proper arrangements with an SDP hotel that offers shuttle service, a family member/friend to take them home postprocedure, or a nonlicensed care provider such as a nurse's aid or patient care assistant. If a proper resource is identified, the SDP process is initiated and a wristband is used to identify the patient as SDP. A series of consistent hand-offs ensures that patients are safe until they are in their hotel or residence after a procedure.

Although we have anecdotal evidence that no patients have suffered major adverse events since implementation of the SDP program, the purpose of this study was to test the hypothesis that patients dismissed alone have no greater risk of adverse outcome compared with those who are dismissed with a responsible adult.

PATIENTS AND METHODS

This study was approved by the Mayo Clinic Institutional Review Board. Inclusion criteria were age 18 years or older and completion of same-day elective, diagnostic, or therapeutic procedures involving patients approved for the SDP program between June 1, 2012, and March 31, 2017, retrospectively identified using an institutional electronic patient and procedure tracking program. For patients undergoing multiple procedures during the time frame, all encounters were included for review. Patients who were younger than 18 years or denied Minnesota research authorization (Minnesota Statute 144.335) were excluded. Patients admitted to the hospital postoperatively were also excluded from the study. Each encounter was matched with 1 to 2 control encounters on the basis of date of surgery (within 4 years), procedure, patient age (within 10 years), type of anesthesia/sedation, and the American Society of Anesthesiologists (ASA) physical status (1 or 2 vs 3 or 4 vs unknown). Control encounters were selected without regard to patient identification, so that a patient was allowed to be selected as a control for multiple encounters.

Unplanned readmission within 96 hours was defined as either unplanned hospital admission or unplanned visit to the emergency department within 96 hours of the procedure. For each procedure included in the analysis, all hospital and emergency department admissions within 96 hours were identified using an institutional electronic record research data program. Follow-up was truncated for patients who returned for a planned hospital admission