Discharge Criteria, Impact of the Patient and the Procedure

What the Oral Surgeon Should Know

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KEYWORDS

• Discharge criteria • Anesthesia • PONV • Recovery

KEY POINTS

- There is a definite need for the use of objective criteria to assist with assessment of a patient deemed ready for discharge.
- The use of a standardized discharge criteria checklist is recommended but must be further individualized for each patient.
- The development of a rational plan for postoperative pain management and prevention/management of postoperative nausea and vomiting is essential for success.
- A thorough understanding of the pharmacodynamics and pharmacokinetics of medications administered is crucial for patient safety.
- Early identification of potential problems and proper intervention help minimize patient risk.

GENERAL OVERVIEW OF DISCHARGE CRITERIA

Although the intraoperative periods involving the delivery of local anesthesia as well as the completion of the surgical procedure itself remain the most likely times requiring emergency intervention, the recovery or immediate postoperative period is also of key importance.[1] In fact, one of the weakest links regarding patient safety for sedation and anesthesia in the dental ambulatory setting is determining when the patient can safely be discharged from supervised care. This is mainly due to the patient transitioning from a highly supervised area, where the clinician can easily identify potential complications and provide early intervention, to areas in which the patient is far removed from skilled care, such as their home or automobile. It is precisely because of these concerns that the clinician must use the utmost care and skill in identifying which patients are ready for discharge and those who require additional monitored time to recover. In 2002, the American Society of Anesthesiologists published guidelines for the use of sedation and anesthesia by nonanesthesiologists that detail recovery parameters and discharge criteria.[2] Furthermore, specific criteria regarding the recovery and discharge of dental patients undergoing sedation and anesthesia have been published by the American Dental Association and the American Association of Oral and Maxillofacial Surgeons.[3–5] Ideally, this decision-making process should include not only the practitioner's own professional judgment, but also a system using clear, objective findings. There have been several systems developed to assist with this task, such as the Glasgow Coma Scale, Aldrete and Modified Aldrete Score, Postanesthesia Discharge Scoring System (PADSS), Pediatric Discharge Scoring System (Ped-PADSS), and the Postoperative Quality Recovery Scale.[6–8] Although the final decision to discharge a patient

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always remains with the individual clinician, any and all auxiliary support staff should be encouraged to notify the practitioner of any concerns or questions they have regarding the stability of the patient's recovery. A systematic approach, which will be discussed in further detail, provides built-in redundancies that help prevent a patient from being discharged from the dental ambulatory setting prematurely, thereby helping reduce the likelihood of an emergency arising that cannot be easily treated by the practitioner.

STANDARD DISCHARGE CRITERIA

A crucial aspect of a comprehensive, time-based anesthetic record should include a section covering the recovery period as well as identification of a standardized set of discharge criteria that must be documented before the patient's discharge. These discharge criteria are detailed in **Box 1**. It is of key importance to understand that these criteria, although standardized, must be altered when necessary based on the patient's medical comorbidities, the surgical intervention, and the anesthetic management. It is the clinician's responsibility to identify potential concerns, adjust the standardized criteria when necessary, and document these changes once the patient fulfills them satisfactorily. An example of an alteration may include a pulse oximetry reading of 95% on 1 L of oxygen, which mirrors the patient's baseline preoperative state.

Ideally, part of any standardized anesthetic record should incorporate a section covering the immediate postoperative period, including the full extent of the recovery time before discharge. Many records use checkoff boxes that specifically state the criteria listed in **Box 1** to help prevent accidentally omitting a key component. The record also should include the actual time the patient was deemed ready for discharge from the office in addition to the actual discharge time, if there was any difference due to a non–medically related delay. If a delay was due to an unforeseen medically related issue, necessitating further monitoring and/or care, the record should be amended as such. Finally, the discharge section also should include a note indicating in whose care the patient was discharged from the office.

Box 1
Standard discharge criteria checklist

- ☐ Awake, responsive, and oriented
- ☐ Minimal/no postoperative nausea and vomiting
- ☐ Instructions discussed: escort/patient
- ☐ Received written postoperative instructions
- ☐ Heart rate and blood pressure within 20% of baseline
- ☐ SpO_2 >90%
- ☐ Postoperative pain controlled
- ☐ All questions answered before discharge
- ☐ Patient discharged from clinic in care of: _____

REVIEW OF SPECIFIC DISCHARGE CRITERIA

Level of Consciousness

The patient's level of consciousness following the delivery of any sedatives or anesthetics must return to their baseline or preoperative state before discharge home. Recovery times can vary significantly between patients and even between appointments for the same patient, depending on the specifics of the anesthetic and surgical plan. The patient should remain in the treatment area under the immediate supervision and monitored care of the anesthesia provider until consciousness has been regained. Then, assuming the patient is otherwise stable, the patient may be safely transported to an alternative recovery area under the immediate monitored care of trained staff if desired. Many dental offices lack a separate dedicated recovery or postanesthesia care unit area and elect instead to recover and discharge the patient directly from the treatment area/operatory. The surgeon or anesthesia provider must remain on the premises until the patient is discharged in case immediate intervention is required.

The timing of when the intravenous catheter (IV) should be discontinued remains somewhat controversial. Some practitioners elect to remove the IV catheter early after emergence from sedation or anesthesia, mainly for pediatric patients. The main reasons for discontinuing the IV so early is to help calm the patient and/or parents and to minimize discomfort associated with the removal of the IV catheter. However, this practice is not highly recommended, because an unforeseen complication occurring after removal of the IV catheter may require subsequent cannulation attempts to enable appropriate patient management. This may become a highly difficult or impossible task to complete in a timely manner if the patient is uncooperative or has poor venous access, thereby possibly compromising an effective response. Far more often, the risk-benefit analysis tends to favor maintaining IV access throughout the recovery period. The vast majority