Updates in Perioperative Care: Ideas from the Human Field

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KEYWORDS

• Patient preparation • Environmental adjustment • Monitoring • Evaluating

KEY POINTS

- Knowledge of the natural history is a key point in the preparation of the patient.
- Providing adequate care prior, during, and after the anesthetic event is of equal importance.
- Being able to read the patient, and signs of discomfort, is important to avoid a crisis.

INTRODUCTION

The art of medicine consists of amusing the patient while nature cures the disease
—Voltaire (1694–1778)

In order to provide adequate surgical service, the focus on adequate perioperative care is of utmost importance for the exotic animal patient. In order to address this topic within the context of veterinary medicine, it is important to understand the definition, the basics, and the consequences of perioperative care. It is hoped that the following text provides proper guidelines and insight on how to improve patient care during this vulnerable period of the hospital stay. Many of the newer ideas regarding perioperative care in veterinary medicine have already been implemented successfully in human medicine. Because humans can easily communicate what and how they felt prior, during, and after the anesthetic event, recommendations on how to minimize human discomfort or anxiety can be implemented faster and easier than in veterinary medicine, whereby the patient-doctor communication is less straightforward. This

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article borrows a significant number of recommendations from human medical texts and ideas, in the hope of inspiring a new way of approaching perioperative management of veterinary patients. The article tries to highlight a few of these ideas, which can easily and should be partly incorporated into the routine of a modern veterinary clinic.

DEFINITION OF PERIOPERATIVE PERIOD AND CARE

In human medicine, the term perioperative refers to the total surgical experience of a patient and includes the preoperative, intraoperative, and postoperative phases of the patient's surgical journey.[1] For the purpose of this article, the term perioperative period is defined as the minute plans begin to anesthetize a patient for a surgical, medical, or diagnostic imaging procedure through the moment of hospital discharge.

Patient Preparation

Patient hospitalization

It has been shown in human medicine that visitation of patients in the preoperative period can reduce anxiety,[2] so the same fact is most likely true for many exotic veterinary patients. Many exotic pet species are prey animals and naturally nervous in a novel area where other sounds, smells, and views dictate the daily routine. Due to the fact that many veterinary patients are heavily driven by their senses, appropriate considerations before the surgical event can have a tremendously positive impact on patient well-being. Preparing the perioperative environment in order to minimize potential sources of stress should start before the patient arrives. Turner and colleagues[3] described the perioperative environment for humans as potentially one of the most hazardous of all clinical environments.[3] It could be argued that this is equally, if not more, important for exotic pets, which are prey species. Allowing the mate of a bonded pair to be in the same cage or in close proximity might provide additional psychological comfort for the sick animal.

Housing a rodent or rabbit in a quiet, calm, and darkened area before the surgery can help to provide an adequately soothing environment (**Fig. 1**). Housing prey animals away from barking dogs will help decrease stress. Housing a rabbit in close proximity to a ferret might cause anxiety for the rabbit. Many rodents have a limited visibility of the red light spectrum and this fact can be used to optimize a calm and secure

Fig. 1. A rabbit housed under a red light environment. Many small mammals are not able to see red light spectrum and it appears dark to them, potentially reducing stress. (*Courtesy of* Dr J. Mayer, UGA.)