Establishing ‘quality of life’ parameters using behavioural guidelines for humane euthanasia of captive non-human primates

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Abstract

Chronic pain and distress are universally accepted conditions that may adversely affect an animal’s quality of life (QOL) and lead to the humane euthanasia of an animal. At most research institutions and zoological parks in the USA, a veterinarian, who has physically examined the animal and reviewed the clinical records, ultimately decides when an animal has reached a humane endpoint. To aid in the difficult process of interpreting pain and distress, we have developed specific behavioural guidelines, in addition to standard clinical information, to help define unique characteristics and traits of primates to assess and promote discussion of an individual primate’s QOL, and thereby, to assist in the decision-making process regarding euthanasia. These guidelines advocate the creation of a QOL team when the animal is diagnosed with a life-threatening or debilitating chronic condition, or at the time the animal is entered into a terminal study. The team compiles a list of characteristics unique to that individual animal by utilising a questionnaire and a behavioural ethogram. This list enables the team to quantitatively assess any deviations from the established normal behavioural repertoire of that individual. Concurrently, the QOL team determines the number of behavioural deviations that are needed to trigger an immediate discussion of the necessity for humane euthanasia of the animal. The team remains intact once created, and revisits the animal’s condition as frequently as deemed necessary. This process improves animal welfare by continuing the quest to optimally define QOL for captive primates, and potentially for all captive animals.

Keywords: animal welfare, behavioural assessment, captive management, euthanasia, non-human primates, quality of life

Introduction

Utilisation of euthanasia to end prolonged suffering in human beings has been the source of philosophical debate for centuries and continues to be one of the most active areas of research in contemporary bioethics (Emanuel 2002; van der Heide et al 2003; Dickinson et al 2005; Engstrom et al 2006; Rebuelto 2008; Orfali 2011; Prokopetz & Lehmann 2012). Similarly, although euthanasia of animals is generally considered an acceptable practice, the appropriate timing of euthanasia for animals afflicted with chronic debilitating conditions remains an ongoing discussion (Lindburg 1999; Manette 2004; Budke et al 2008; Jarvis 2010; Lynch et al 2011; Freeman et al 2012).

To that, it cannot be denied that some people still view euthanasia of animals as a last resort. Furthermore, the individuals with the most extreme views on this side of the argument feel it is inhumane to euthanise an animal without first trying to provide every medical treatment available to prolong life. On the opposite end of the spectrum, there remain people who feel that the act of extending an animal’s life through any form of prolonged medical treatment is inhumane. In reality, the views of most reasonable individuals tend to fall somewhere between these extremes and, in turn, most people involved in animal care would generally acknowledge that life should be maintained only for as long as the animal has a reasonable quality of life.

But how does one define quality of life (QOL) for captive non-human primates? At most research institutions and zoological parks, the veterinarians typically follow well-established euthanasia guidelines set forth by the American Veterinary Medical Association (AVMA Guidelines on Euthanasia 2013), their own institutional animal care and use committee (IACUC) and, where appropriate, The Guide for the Care and Use of Laboratory Animals (Institute for Laboratory Animal Research 2011) in deciding when an animal should be euthanised based on a perceived loss of quality of life. The guidelines contain descriptions of the process for making morbidity and mortality observations, as well as the method of, and procedure for, euthanasia. They further describe the clinical symptoms (eg movement, skin and hair condition, breathing, bodyweight, appetite, etc) to be monitored in a moribund animal, as well as the personnel responsible (the veterinarian) for making the decision to euthanise. It is further recognised that the inability to participate in ‘activities of daily living’ (eg eating, drinking, urinating/defaecating, species-typical locomotion, and living