

CONCLUSION

Various methods of euthanasia have been described and the need for further research and refinements where appropriate have been emphasized. This report would be incomplete, however, without stressing what the Humane Society of the United States considers to be one of the most important variables in humane euthanasia: namely, the human factor. No matter how humane a particular method of euthanasia is, in the wrong hands, it may be quite inhumane. For example, rough handling and restraint, over-crowding too many animals together in a gas or decompression chamber, inadequate routine checking and maintenance of equipment can, singly or in combination, make any given method of euthanasia distressing and inhumane. For an overly distressed or excited animal, the whole euthanasia process will take longer and often result in even more distressing side effects. No matter what agent, drug or method is used to cause death, the way in which it is used may be even more important than the relative merits of one method over others. Once a particular agent, drug or method is selected for use, two controls to reduce the probability of improper use must be instigated; namely: educational instruction of personnel and frequent supervisory scrutiny and re-evaluation; routine maintenance and "spot" tests for the working efficiency and accuracy of all equipment and monitoring devices (pressure gauges, flow meters, etc.). In some states in the United States, laws have had to be enacted to insure proper use and maintenance of such equipment, but without adequate enforcement and frequent supervisory scrutiny and "spot checks" of personnel and equipment alike, there is no way to guarantee that any given method of euthanasia is always humane. These considerations should always be kept foremost in mind in the application of current methods of euthanasia and in the development of future refinements and new methods.

Postscript

In developing more humane methods of euthanasia, and especially in developing more accurate techniques to assess the degree of consciousness, we should be mindful of the following phenomenon: that under apparently deep anesthesia, some human patients may have periods of total awareness as to what is going on in the operating room. We still have much to learn about various states of consciousness in humans and other animals and this is of particular concern in those methods of euthanasia where there is a relatively long latency between "unconsciousness" (as determined clinically or by EEG) and death, as there is more general concern over a long latency between consciousness and unconsciousness.

It is apparent from the foregoing review that there is not one ideal method of euthanasia. But on the basis of the criteria listed on page 17, sodium pentobarbital rates highest. Whenever possible, therefore, this agent should be used, since, on the basis of all available evidence to date, other techniques, especially decompression, fall short on many counts as being reliable and humane.

Reference

Mostert, J.W. (1975) States of awareness during anesthesia *Perspect Biology and Medicine*. Autumn, 68-75.