



G126 Challenges in Evaluating Cause and Manner of Death in Palliative and End-of-Life Care Patients

Elizabeth A. Laposata, MD, and Cristina M. Padilla, MS*, Biomedical Forensic Sciences, Boston University School of Medicine, 72 East Concord Street, Boston, MA 02116

After attending this presentation attendees will be educated on the ethical, legal, and medical issues in suspicious deaths of terminally ill patients and provide the forensic pathologist guidelines for complete review and interpretation of evidence.

This presentation will impact the forensic science community by providing guidelines for the forensic pathologist to investigate cases of suspicious deaths of terminally ill patients.

Medicolegal death investigations of death in the end-of-life and palliative care setting are challenging and will become more numerous as the population ages. More than 90% of the 500,000 deaths in critical care units in 2007 were preceded by withdrawing or withholding life support treatments. Further, in 2008 more than 40% of all decedents in the United States received hospice care. And increasingly, end-of-life care is provided in non-institutional settings.

The forensic pathologist who is called upon to investigate such deaths must have the ability to differentiate compassionate care from malpractice and even murder in these complex cases. Further, competent and comprehensive death investigation may also be a cornerstone for assessing of quality of care in end-of-life care setting where such traditional indicators of quality of health care as death and recovery rates are not appropriate.

The intentions of clinicians who manage end-of-life-care are often scrutinized because of the role they play in shifting care from curative to palliative measures. Frustration or misperception fueled by powerlessness on the part of even a single family member or ancillary health care provider can give rise to allegation of euthanasia or murder. Moreover, hospice providers point out that families often believe that the death of their loved one was premature.

No comprehensive methodology exists to guide the forensic pathologist in evaluating suspicious deaths of terminal patients. On reviewing the standard practices in the palliative care community and examining controversial cases in the literature of physicians accused of euthanasia, we propose a set of guidelines to assist the forensic pathologist in answering the question: What information should be studied in order to derive a complete evaluation and interpretation of the evidence available?

Determining cause of death in these patients is difficult since the death may occur from the disease process, a complication of the disease process, a withdrawal of life-sustaining therapies, the medications administered, or any combination thereof. One difficulty in enforcing adherence to proper end-of-life-care policy and standards is having the data necessary to establish the intent or motivation of the healthcare provider (i.e. intent to kill, to shorten the dying process, to relieve pain, etc.). This is a multi-layered and complex task. It involves a careful review of medical records, autopsy findings, toxicology results and witness accounts. The medical records establish the foundation and context for the investigation. The autopsy provides information about the physical manifestations of the disease and eliminates other potential causes. Postmortem toxicology must be interpreted with caution because of potential drug interactions, drug tolerance and disease-altered drug clearance unique to each case. Inappropriately low levels of pain medication should raise the question of drug diversion by caretakers or family. Witness accounts given by family and friends who followed the care of the decedent can help determine whether the standard of care was met. The forensic pathologist must understand the symptom manifestations and pathophysiology of the dying process. Rarely does a single piece of evidence reveal the intent of the healthcare provider.

Understanding the bioethical aspects involved in treatment, such as the rule of double-effect, and using clear definitions of terms such as terminal sedation, active euthanasia, passive euthanasia and physician assisted suicide are essential are essential for proper determination of manner of death.

The goal of this study, is that the forensic pathologist will have the knowledge and structured format to investigate deaths in the end-of -life care setting. A competent death investigation will protect the vulnerable, dying patient population; protect practicing physicians from the distress of false accusation; and prevent terminal health care being used as a cover for euthanasia.

Palliative Care, Terminal Sedation, End-of-Life Care