



Pathology Biology Section – 2006

G43 Effectiveness of Death Investigation in Cases of Potential Elder Abuse

Diane C. Peterson, MD, and Richard E. Powers, MD, P220 West Pavilion, Department of Pathology, 619 19th Street South, Birmingham, AL 35233; James N. Robinson, BA, University of Alabama at Birmingham Medical School, VH P-100, 1530 3rd Avenue South, Birmingham, AL 35294; and Gregory G. Davis, MD, Jefferson County Coroner/Medical Examiner Office, 1515 Sixth Avenue South, Room 611, Birmingham, AL 35233-1601*

After attending this presentation, attendees will learn a means to examine the effectiveness of a medical examiner system at detecting cases of elder abuse.

This presentation will impact the forensic community and/or humanity by showing a means for evaluating the effectiveness of a medical examiner office at investigating cases of elder abuse.

RATIONALE: A primary means of detecting foul play is the examination by the medical examiner of the bodies of all individuals who die unexpectedly. Death in the elderly, however, is not necessarily unexpected, and it is possible that foul play is more easily hidden in the elderly by a claim that death was expected, thus bypassing the jurisdiction of the medical examiner. The rate of referral to the medical examiner's office of suspected lethal abuse or neglect in the elderly by all reporters or first responders is unknown. Reasonable conservative estimates exist, however, of claims of elder abuse substantiated upon investigation. Researches wished to assess the effectiveness of the existing medical examiner system in Jefferson County, Alabama at capturing all cases of physical abuse in the elderly. The authors compared the number of cases of suspected elder abuse investigated by the medical examiner office to the number of cases of elder abuse expected to occur in order to determine whether present reporting network and investigative guidelines are sufficient for recognizing cases involving physical abuse in the elderly.

METHODS: The authors conducted a retrospective study of deaths investigated by the Jefferson County Coroner/Medical Examiner Office, Alabama from January 1, 2003 to December 31, 2004 and reviewed the deaths that occurred in decedents 65 years of age or older, looking for evidence of assault or physical abuse. During this time criteria for accepting cases remained unchanged. The findings were compared with an estimate based on the estimated number of cases of physical abuse that should have occurred during this time span. The estimate was made using data from the Adult Protective Services Division of the Alabama Department of Human Resources, the United States Census estimates for the state and county populations, and the mortality statistics for Jefferson County. During fiscal year 2004 Adult Protective Services conducted 4,754 investigations into allegations of abuse, of which 16% included allegations of physical abuse. Half of these allegations were substantiated upon investigation. Given a random distribution of cases, use of population and mortality data indicate that the Jefferson County Office should expect to investigate about six cases with allegations of physical abuse and three cases of substantiated physical abuse in the elderly per year.

RESULTS: From 2003-2004 the Jefferson County Coroner/Medical Examiner Office examined 198 individuals age 65 years or older, and suspicion of abuse was reported or found in eight cases. In three cases the abuse was not substantiated at postmortem examination, and in five cases the death was a homicide. Based on the estimates given above, the expected number of cases for two years was 12 cases of suspected abuse and 6 cases of substantiated abuse, so the office investigated roughly the number of cases that might have been expected over the course of this study. Because a case more or fewer would make such a large difference when dealing with such small numbers, we looked at the number of homicides in individuals 65 years of age or older by year during the past decade (1995-2004), during which criteria for accepting jurisdiction were identical to the criteria used for the years of review. It was found that the number of homicides in individuals 65 years of age or older per year ranged from a high of 12 (in 1997) to a low of 0 (2004), with a mean of six cases per year.

CONCLUSION: Using published reports of the incidence of substantiated investigations of physical abuse in the elderly, the authors investigated about the number of cases of physical abuse that were predicted by a model. The number of deaths suspicious for elder abuse investigated by the medical examiner is in keeping with the number of allegations and substantiations for elder abuse in Alabama. The authors' approach to case selection and assumption of jurisdiction appears to be adequate for the investigation of physical abuse in the elderly.

Elder, Abuse, Homicide