

## G113 CT Autopsy Imaging in the State Medical Examiner Setting: Logistic Issues, Techniques, and Findings

## Kyle Shaw, MBBS\*, David R. Fowler, MD, Zabiullah Ali, MD, and Jack

*L.* Titus, MD, Office of the Chief Medical Examiner, 111 Penn Street, Baltimore, MD 21201; Mary G. Ripple, MD, 68 Bluebird Road, Port Deposit, MD 21904; Barry Daly, MD, Radiology Department, University of Maryland Medical Center, 22 South Greene Street, Baltimore, MD 21201; and Clint W. Sliker, MD, University of Maryland Medical Center, Diagnostic Imaging Department, 22 South Greene Street, Baltimore, MD 21201

The goals of this presentation are to describe this research experience with logistic and technical aspects of the development of a CT autopsy imaging service for the state medical examiner's (ME) investigation of traumatic death, describe and compare CT imaging autopsy appearances with the ME's autopsy findings, and consider the future potential of CT imaging autopsy.

The logistic and technical challenges to the development of a CT autopsy imaging service require educational efforts and infrastructure development. Imaging autopsy is an accurate tool for the detection of most major injuries and causes of death resulting from blunt trauma or drowning. This presentation will impact the forensic science community by demonstrating how CT imaging autopsy has the potential to replace conventional medical examiner autopsy in some deaths resulting from accidental blunt trauma and may facilitate rapid retrieval of ballistic fragments in cases where forensic autopsy is required.

The medical examiner community has shown interest in the use of CT autopsy imaging, but faces problems of access due to financial, technical, transportation, interpretation, and related difficulties in incorporating this tool into regular practice as compared to CT imaging

in the clinical care of the living. Sharing collective experience, both positive and negative, in addressing these issues is important in identifying its long-term role in the medical examiner setting.

The logistic and technical challenges to the development of a CT autopsy imaging service require educational efforts and infrastructure development. Imaging autopsy is an accurate tool for the detection of most major injuries and causes of death resulting from blunt trauma or drowning. CT imaging autopsy has the potential to replace conventional ME autopsy in some deaths resulting from accidental blunt trauma and may facilitate rapid retrieval of ballistic fragments in cases where forensic autopsy is required.

**CT Imaging, Autopsy, Logistics**