

Global overview of the utilization of postmortem imaging in medicolegal casework

de Heus G ^{1,2}, van Langen K ^{1,2}, Latten B ^{1*}, Decker S ⁴, Dedouit F ⁴, Hyodoh H ⁴, O'Donnell C ⁴, Ruder T ⁴, Rutti G ⁴, Thali M ⁴, Wozniak K ⁴, van Rijn R ^{1,4}

1 Netherlands Forensic Institute, The Hague, the Netherlands

2 Maastricht University, Maastricht, the Netherlands

3 University of Amsterdam, Amsterdam, the Netherlands

4 ISFRI

*lead presenter: b.latten@nfi.nl, Netherlands Forensic Institute, the Netherlands

Over the last decade the utilization of postmortem imaging in forensic casework has increased, as is indicated by the increase in publications addressing this subject. During the 2023 International Society of Forensic Radiology and Imaging (ISFRI) congress in Toulouse, an inspiring discussion amongst the attendees arose on how often an autopsy is still performed after a whole-body PMCT has been obtained. The primary objective of this ISFRI endorsed study is to provide a global outline of the current application of postmortem imaging techniques, especially PMCT, in relation to autopsy practices within forensic casework.

An online survey using Qualtrics® was created addressing the use of postmortem imaging in forensic casework. To ensure a global perspective, the aim of this study was to receive one response from organizations or institutes conducting or using postmortem imaging in forensic casework. Therefore, the online survey was sent to current ISFRI members, an attendance list of an ISFRI congress as well as to corresponding authors of recent publications (2013 to 2023) addressing forensic imaging with a deadline on March 1st 2024. An anonymous link was used making it possible for every approached individual to share this link with any individual, organization, or institute they deem should participate. The link was also shared on LinkedIn.

(expected) Results

The survey included questions about which postmortem imaging techniques are applied, the average amount of postmortem imaging studies performed, who reads and reports the PMCT images, who decides whether or not to perform a full autopsy after PMCT, the legal aspects of this decision, in what kind of cases is postmortem imaging applied, and if the use of postmortem imaging affects the autopsy rate.

We expect that with the diversity of questions from this survey the results will show a variety of approaches on how to implement postmortem imaging in different forensic cases within a variety of legal systems. It will provide crucial information that will enhance our understanding of the application of these methods in forensic casework and can therefore contribute to national and international guidelines.