



Physical Anthropology Section – 2008

H30 Decomposition and Postmortem Interval: A Critical Analysis of British Medico-legal Investigation and Trends in South Yorkshire, 1995-2002

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This paper offers a systematic review of decomposition cases in a British urban environment, and analyses the efficacy of reporting decomposition by Home Office pathologists. Upon completion, participants will have a broad overview of the nature of the decomposition cases encountered by Home Office pathologists in South Yorkshire, and how this compares to the nation as a whole. There will be a clear break down of the different types of decomposition cases regularly seen in a British context, and a discussion of how the extent of decomposition visible on the body varies with time since death, and thus how it is valuable to the estimation of postmortem interval. The participants will learn how this potentially valuable resource is used by British pathologists, and how improvements can be made to ensure that the maximum amount of information is gathered. Suggestions will be made about increasing the depth of co-operation between pathologists and anthropologists in order to optimise decomposition data, and it is hoped that the participants will draw conclusions about the significance of such collaboration.

This paper represents a critical assessment of the degree to which the extent of decomposition is used routinely in the estimation of postmortem interval. It confronts some of the existing problems with recording standards, and offers suggestions for improving reporting techniques and quantitative analysis of decomposition data. It should impact the forensic science community by challenging the status quo in Britain at the moment and advocating a more far-reaching, deeper collaboration between pathologists and anthropologists, to make the most of multidisciplinary expertise in everyday forensic cases. It highlights the differences between decomposition research in Britain and elsewhere, and analyses the translation of academic decomposition data into the practical forensic context. It is hoped that this presentation will pave the way for discussion and collaboration between forensic pathologists and anthropologists to improve estimation of postmortem interval.

Estimations of postmortem interval based on the extent of decomposition are often sketchy and can be reliant on comparisons with case histories, data using less-than-ideal animal analogues, or on data from environment-specific collections. The authors suggest methods of addressing this problem by improving recording standards of decomposition cases through cooperation between forensic anthropologists and pathologists, to facilitate cross-region comparisons and research. This paper offers a systematic review of decomposition cases in a British urban environment, and analyses the efficacy of reporting decomposition by Home Office pathologists. It represents a critical assessment of the degree to which the extent of decomposition is used routinely in the estimation of postmortem interval, and offers suggestions for improving standardisation of reporting and quantitative analysis of decomposition data. Individuals resident in South Yorkshire whose postmortem examinations were performed at the Medico-Legal Centre, Sheffield, were studied. Cases were chosen for inclusion in the study based on home address and a reported presence of decomposition. The reporting of decomposition according to time since death is compared against an expected model for indoor and outdoor cases. The quality of assessment made by the investigators is discussed, with reference to the opportunity for cooperation between pathologists and forensic anthropologists to improve the application of decomposition data to routine cases.

Decomposition, Forensic Anthropology, Postmortem Interval