

The Diagnostic Value of Routine Post-mortem Histological Examination: A 10-year Retrospective Analysis at Two West Indian Hospitals (2003-2012)

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ABSTRACT

BACKGROUND: The diagnostic value of post-mortem histology is of relevance in autopsy suites worldwide. Although many pathologists generally view autolysed tissues as unrewarding, objective studies are lacking.

STUDY AIM: To determine the diagnostic value of post-mortem histology inclusive of autolysed tissues.

METHODS: A retrospective study of completed, adult autopsy reports from the University Hospital of the West Indies (UHWI) in Kingston, Jamaica (n=152); and Princess Margaret Hospital (PMH) in Nassau, Bahamas (n=220), from January 2003 to December 2012, was conducted. Parameters assessing histological usefulness were determined, then gross and histologic findings for lung, heart, liver, kidney, spleen, and/or brain were assessed noting consequent changes to provisional anatomical diagnosis (PAD) and/or cause of death (COD). The data were analysed using PSPPIRE statistical software version 3.

RESULTS: Cases from PMH and UHWI included 128 males/92 females and 83 males/69 females respectively. Death to autopsy interval varied between the two institutions. Approximately 21% of post-mortem tissues were useful for adding information to the PAD, with <1% derived from autolysed tissues. Up to 52% of tissues confirmed gross findings, and up to 33% were not useful. Although as much as 22% resulted in changes to the COD, overall, less than 1% of these cases involved autolysed tissue.

CONCLUSION: While post-mortem histology was useful in 21% of cases, 52% only confirmed gross findings, and 33% were useless, especially autolysed tissues. Directed post-mortem histology is therefore recommended.

ACKNOWLEDGMENTS

Several persons have been instrumental in making this research project a success. Special thanks to:

Dr. Elaine Williams, the principal investigator, for her guidance and advice throughout the entirety of this project.

Professor Carlos Escoffery and Dr. Nadia Williams for their input during the formative stages.

The secretaries at the University of the West Indies Department of Pathology who assisted with locating the autopsy reports.

Dr. Christine Walters for her advice and assistance with the statistical analysis.