



Pathology Biology Section - 2012

G119 The New INFOR (International Network for Forensic Research) Classification of Asphyxia: Towards an International Agreement

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After attending this presentation, attendees will know about the new INFOR Classification of Asphyxia.

This presentation will impact the forensic science community by standardizing the classification of asphyxia.

Introduction: The classification of asphyxia and the definitions of subtypes are far from being uniform, varying widely from one textbook to another and from one paper to the next. Unfortunately, similar research designs can lead to totally different results depending on the definitions used. Closely comparable cases are called differently by equally competent forensic pathologists/medico-legal doctors.

In response, a unified system of classification was recently proposed. This standardized classification was pieced together by drawing mainstream definitions from a thorough review of forensic textbooks and literature. In the present study, an international consultation on this unified classification was undertaken in an attempt to achieve a global agreement on a standardized classification of asphyxia.

Material and Methods: A questionnaire was designed to evaluate which parts of the standardized classification and which definitions the international forensic community is ready to adopt and which parts need to be revised.

Results: Two hundred and three surveys were compiled: 110 from North America, 65 from Europe, 10 from form Asia, 5 from Oceania, four from Central and South America, four from Africa, and 5 from Middle-East.

There is a large majority in favor of adopting the overall standardized classification and the following definitions: suffocation (79%), confined spaces/entrapment/vitiated atmosphere (79%), strangulation (85%), hanging (84%), ligature strangulation (79%), positional asphyxia and traumatic asphyxia (74%), and drowning (78%).

The epiglottis as the anatomical landmark between smothering and choking is agreed with a small majority (57% worldwide, 75% in Europe, 80% in North-America).

There are two elements of the classification that will have to be further worked on. First, there is no consensus if the category of asphyxia labelled confined spaces/entrapment/vitiated atmosphere should be further subdivided (37% worldwide, 28% in Europe, 39% in North-America) or not (48% worldwide, 62% in Europe, 43% in North-America) (note: the sum of the % for yes and no do not add to 100% because of a small % of abstentions). Second, it is not clear if a hanging accompanied by a fall from height should be part of the classification of asphyxia (46%) or not (47%). Third, it is not clear if mechanical asphyxia is a broad term encompassing several types of asphyxia caused by various mechanical means (33% worldwide, 58% in Europe, 11% in North-America) or is a term that designates asphyxia by restriction of the respiratory movements either by the position of the body or by external chest compression (60% worldwide, 31% in Europe, 84% in North-America).

Discussion: Mutual concessions are going to be necessary to achieve international agreement; but as a scientific community, we cannot continue to use different definitions and classifications depending on our geographical location or depending on our favourite textbook. As a scientific community, forensic pathologists and medicolegal doctors need to agree on a standardized classification of asphyxia. The practice of forensic pathology and legal medicine has been for a long time part art and part science. To grow as a scientific discipline, an effort has to be made to shift away from art and move toward a more scientific approach, and the standardization of classifications and definitions is an important step in that direction.

Asphyxia, Classification, Forensic