SUDI or “undetermined”: does it matter?

Roger W. Byard

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In this special pediatric forensic issue, a range of papers have been selected to demonstrate the diversity of research activities and associated topics that may be encountered in this evolving discipline. A review of neuroimaging in inflicted pediatric head trauma by Frasier et al. provides an up-to-date overview of recent developments, followed by original papers dealing with infant death classification by Kinney et al. and markers for SIDS, and possible associations with viral infection. The latter paper by Niklasson et al. is reviewed in a special Commentary by Krous and Langlois. The issue of youth suicide is dealt with by Boumba et al., and a series of case reports deal with a variety of aspects of unexpected death in the young. A focus of this editorial is, however, on an area that is not often discussed in the literature, and that is the impact that forensic procedures and terminology may have on grieving families.

The field of pediatric forensic pathology and medicine is one that is quite high risk for practitioners. Injuries and diseases may be subtle, and lethal mechanisms may be either unknown or intensely debated [1, 2]. Two prime examples of this are sudden infant death and shaken impact syndromes where the consequences of errors and omissions in diagnosis may be severe and long lasting. This was clearly demonstrated in the findings of the Inquiry into Pediatric Forensic Pathology in Ontario into a series of pediatric autopsies performed in Toronto, Canada by Dr Charles Smith. The report published in October 2008 described how inadequate analyses of cases and inappropriate conclusions led to

miscarriages of justice. This and similar cases in other countries have led to intense examination of the manner in which pediatric pathology is practiced.

In striving to avoid these pitfalls, however, it is sometimes forgotten by those involved in the practice of pediatric forensic pathology that the foundation of all of the casework that is continually being examined, evaluated and described, is one of unimaginable family loss. Unfortunately, failure to recognize this, or to approach cases with this in mind, has resulted in considerable and unnecessary suffering for families over the years. Apparently minor ‘slips of the tongue’, such as referring to a death scene as a ‘crime’ scene, or to an infant boy or girl as ‘it’ rather than ‘him’ or ‘her’, may have devastating effects on families already severely traumatized by the unexpected death of their child.

The Commentary by Baker and Crandall in this issue of whether parents should be permitted to hold their infant prior to an autopsy exemplifies a situation where parental needs may be over-ruled by what is perceived to be best medicolegal practice. While prolonged viewing at room temperatures may result in loss of tissue detail for histology, or excessive bacterial overgrowth that invalidates postmortem microbiology, many other reasons for not allowing parental contact with an infant do not appear valid. For example, the potential for loss of trace evidence in a non-suspicious case, where the body has already been moved several times by a number of people, is usually minimal.

Another issue which has arisen, concerns the use by pathologists and others of particular terminology. For example, many pathologists are now using the terms ‘undetermined’ or ‘unascertained’ rather than SIDS, as this is thought to best reflect the lack of pathognomonic features in these cases, without giving the impression of

R. W. Byard (✉)
Department of Pathology, The University of Adelaide and
Forensic Science, Level 3 Medical School North Building,
Frome Road, Adelaide, SA 5005, Australia
e-mail: byard.roger@saugov.sa.gov.au

having made a specific diagnosis. These terms may also be used in cases of unexpected infant death where the features are not typical of SIDS, but where no definite conclusion can be reached. Essentially these terms indicate that no specific diagnosis has been, or can be, made.

However, questions are now being asked by families and support organizations concerning the impact of such terminology. Parent organizations have called the terms ‘stigmatizing’ and suggest that ‘undetermined’ carries with it in the eyes of others the implication that in such cases “there is just not enough evidence to prosecute”. A letter to SIDS and Kids in Australia from parents illustrates clearly the negative impact that such terminology may have: “As a parent to lose a child is unimaginable, but then to receive the death certificate with no classification broke our hearts even more.....” and “The term ‘unascertained’ still brings tears to our eyes when we see it.....”; These statements indicate that this is not an insignificant issue.

As our terminology may have very significant impact beyond the cloisters of the mortuary it may be time to make changes that can remedy this situation. Perhaps one step that could be taken would be to abandon terms such as ‘undetermined’ as a cause of death and leave this designation for the manner of death. While this leaves us with the problem of finding an appropriate term to replace it, this is where the term SUDI or sudden death in infancy could play a role.

SUDI has had various definitions, with the most widely accepted being that formulated by the CESDI (Confidential Enquiry into Stillbirths and Deaths in Infancy) study in the United Kingdom. This includes deaths between 7 and 365 completed days of life that fulfil the following criteria: deaths that were unexpected and unexplained at autopsy, deaths during an acute illness that was not recognised as life-threatening, deaths due to an acute illness of less than 24 h duration in a previously healthy infant (or death after this if life had only been prolonged by intensive medical

care), deaths from a pre-existing occult condition, and deaths from any form of accident, trauma or poisoning [3, 4].

Although some pathologists raise the concern that the term SUDI is ‘meaningless’, it would appear to have no less meaning than the designation ‘undetermined’. Pathologists classifying a case as SUDI would still be able to voice their opinions in an attached comment that lists risk and predisposing factors, possible differential diagnoses, and concerns and issues about the case. Thus, the use of a designation such as SUDI could provide parents with a term that has definition and therefore is far more acceptable to them, but that still enables pathologists to discuss the details of the case without being compromised—a situation that serves the needs of both parties.

Before this suggestion is rejected as being a mere semantic exercise, let us turn to a final comment from parents: “We just ask that our son’s death not be classified as nothing, he deserves it and so do we”, and then let us look at an aphorism from medicine: “First do no harm”. It would seem that the choice to help these families is ours.

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