



E51 Shaken Baby Syndrome/Abusive Head Trauma (SBS/AHT) Mortality in Sweden

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After attending this presentation, attendees will better understand data of the mortality and specifics of cases of suspected SBS/AHT in Sweden. This is the first study on SBS/AHT based on national population registries.

This presentation will impact the forensic science community by illustrating a far lower mortality rate than expected from previous studies in other western countries together with a high prevalence of various diseases in deceased infants diagnosed with AHT. The present study underlines the need for further epidemiological mortality research and therefore a cautiousness in relying on currently established mortality data.

Objective: On the basis of extrapolation from international studies on mortality related to SBS or infant AHT, it has been suggested that the incidence of lethal SBS/AHT as reported in the Swedish official death statistics is falsely low. The present study investigates the possibility of unrecognized lethal AHT in Sweden.

Design: All death certificates of infants 12-months-old or younger ($n=733$) examined at any of the six Swedish departments of forensic pathology during the period 1994-2013 were retrospectively reviewed for identifying subdural hematoma or an SBS/AHT diagnosis. In order to exclude possible misclassification of SDH related to accidental impact or disease/developmental vulnerability as SBS/AHT, confessed abuse, evidence of blunt force/impact, disease, prematurity, and multiparity were registered. The possibility of non-reported subdural hematoma in infant deaths was evaluated by scrutinizing the autopsy protocols for all infants diagnosed with unknown cause of death during 2006-2013 ($n=167$).

Results: Of the 733 forensically examined cases, fourteen (1.9 %) had SDH. Four were witnessed accidents, one infant had been thrown from great height, and nine were considered as SBS/AHT. Seven AHT-classified infants were premature and/or twins and/or had significant morbidity. In one case, the caretaker confessed to AHT; the infant in this case had findings consistent with impact. There was no case of non-reported subdural hematoma in the group with unknown cause of death. National statistics on cause of death included 89 cases diagnosed as death from an unknown cause in which the infant did not die within the first week of life and which had not been reviewed by a forensic pathologist. This group could not be examined in this study setting and needs to be reviewed in the future.

Conclusion: The present study does not support the notion that there might be unrecognized lethal AHT in Sweden, but rather suggests the opposite — that there may have been infant deaths wrongly diagnosed as caused by AHT.

Abusive Head Trauma, Shaken Baby Syndrome, Sweden