

## Dallas County SOUTHWESTERN INSTITUTE OF FORENSIC SCIENCES at Dallas

Office of the Medical Examiner 2355 N Stemmons Freeway Dallas TX 75207

## RESPONSE OF JILL URBAN, M.D.

Nikki Curtis was admitted to the hospital on January 31, 2002 with a diagnosis of severe closed head injury including subdural hematoma. She progressed to brain death and life support was discontinued. She was pronounced dead at 7:04 pm on February 1, 2002. The autopsy was performed the following morning at 7:30 am.

Autopsy findings were significant for contusions and an abrasion on the face. The upper frenulum was lacerated. There were numerous, discreet foci of subscalpular and subgaleal hemorrhage in the vertex of the scalp, occipital region and left temporal region, removed from the portion of scalp through which a therapeutic intracranial pressure monitor passed. There were no skull fractures. 25 mL of subdural hematoma were observed overlying the right side of the brain, and a thin film of left parietal subdural blood was also identified. Patchy fresh subarachnoid hemorrhage was seen. There was generalized cerebral edema, with associated bilateral infarcts of the border zone and posterior cerebral artery territories, as well as the basal ganglia and orbital frontal regions. Both eyes showed perioptic nerve hemorrhage and small foci of retinal hemorrhage. Otherwise, autopsy examination was significant for contusions of the posterior right upper shoulder and abrasions of the left arm and left foot. Hemorrhage into the proximal thoracic and distal cervical erector spinae muscles on the right side was also seen. The anogenital region was unremarkable. No organ injuries within the trunk were identified, and the bones of the trunk and extremities were free of fracture.

The brain, dura and spinal cord were retained in formalin and examined in neuropathology conference on February 2, 2002 by the Department of Neuropathology at the University of Texas Southwestern Medical Center. Sections of the left border zone, body of the corpus collosum, splenium, right hippocampus, internal capsule, right insula, midbrain, pons, cervical spinal cord, thoracic spinal cord, lumbar spinal cord, cerebellum and dura were examined using hematoxylin and eosin stains. These stains showed patchy acute neuronal necrosis of the neocortex, deep grey matter and brainstem. Amyloid precursor protein axonal staining was also performed on sections from the border zone, corpus collosum, internal capsule/thalamus, hippocampus, midbrain, pons, medulla, spinal cord and cerebellum and showed multi-focal axonal injury.

These autopsy findings are all consistent with blunt impact. The facial contusions are evidence of blunt impact. The multiple, discreet foci of subscalpular/subgaleal hematomas are consistent with impact sites.

The motion for the stay of execution as well as the defense expert opinions offer several alternative explanations for the autopsy findings of Nikki Curtis. In the Declaration of Harry J. Bonnell, M.D., he raises the possibility that the autopsy findings were the result of meningitis and a central vein or sagittal sinus thrombosis. The dura was examined in



neuropathology conference by a board certified neuropathologist and neuropathology fellow in the presence of other medical examiners, and no sagittal sinus or central vein thrombus was identified. Multiple sections of brain were reviewed, again by a neuropathologist, a neuropathology fellow and myself, and there is no evidence of meningitis. These slides are available for review by retained experts should they so desire.

The Declaration of Kenneth L. Monson, Ph.D. states that "The medical examiner, Janet (sic) Urban, concluded that the cause of death was "blunt force" defined as the result of impact and violent shaking. She stated it was 'not unusual' that this kind of serious injury was not accompanied by any fractures to the skull, because it is the shaking that causes the injuries that ultimately killed the child." That it is an incorrect characterization of my testimony. While I did explain the theoretical mechanism of shaking causing injuries, in this case I quite clearly defined multiple impact sites to the head and ruled that the death was due to blunt force injuries. I also provided a list of possible reasons a lethal head impact would not also result in a skull fracture. At no point did I indicate that the decedent had a "triad of symptoms-retinal hemorrhages, subdural hematoma and cerebral edema-that indicate shaken baby syndrome" or that the lack of skull fractures was indicative of shaken baby syndrome.

Several experts consulted in this case (Declarations of John Plunkett, M.D. and Dr. Monson) offered an explanation of a short fall as causing the death. While this view is controversial in the forensic community, a short fall should result in a single impact, rather than the multiple discreet impact sites seen upon reflection of the scalp in this case.

The declarations provided dispute the diagnosis of "shaken baby" in this case. However, it was my testimony that multiple impact sites were identified at the time of autopsy, and that this child died as a result of blunt force head injuries. While I was asked on the witness stand to describe the mechanism of shaking, my testimony was that I could definitively identify impact sites at autopsy. While I could not rule out a shaking component, I ruled in my autopsy that the death was a result of blunt force head injuries, and emphasized head impacts in my testimony.

Medical Examiner

Before me, the undersigned authority, personally appeared Jill Urban, M.D. who, being by me duly sworn, deposed as follows:

My name is Jill Urban, M.D. I am of sound mind, capable of making this response, and personally acquainted with the facts herein stated.

STATE OF TEXAS COUNTY OF DALLAS

SWORN TO AND SUBSCRIBED before me on the 18th day of November, 2016.

MELINDA D HIGH Notary Public ... STATE OF TEXAS

My Comm. Exp. Mar. 12, 2017

MELINDA D. HIGH Printed Name of Notary

COMMISSION EXPIRES: 03-12-2017