G109 Compressional Asphyxia Due to Prone Restraint Hold in a Child

Robert F. Corliss, MD, Andrew M. Baker, MD, and Kathryn K. Berg, MD, Hennepin County Medical Examiner's Office, 530 Chicago Avenue, Minneapolis, MN 55415*

After attending this presentation, attendees will learn the dangers of prone restraint with compression, particularly in children, and how to approach the autopsy and investigation of such cases.

This presentation will impact the forensic community and/or humanity by helping forensic scientists question the role of prone restraint for behavior modification in children and consider alternative restraint procedures and monitoring for combative children.

This presentation reports a case of compressional asphyxia due to a prone restraint maneuver that occurred in a day treatment facility for children with behavioral problems. The decedent was a 7-year-old female with a history of aggressive behaviors since the age of two. She was enrolled in the treatment facility for approximately one month, during which time several disciplinary actions, including prone restraint, were employed for behavior modification. During extended prone restraints, staff noticed she would appear to "fall asleep" after calming down, but was easily awoken. On the day of the fatal restraint, she was displaying improper table manners and reportedly "gargling" her drink during lunch. After repeatedly ignoring staff requests to cease the behavior, she was taken for a five minute "cool-down" in a separate room. She became aggressive, and was placed in a prone restraint control hold on the floor. A small towel was placed under her head and two staff members employed the restraint with one laying across the calves and holding the left wrist, with the other staff semi-prone across the back controlling the right arm and torso and monitoring the head.

The two staff initiating the restraint were each relieved by another staff member at different times. The entire restraint was longer than an hour. The second staff controlling the torso was a 240-pound male who relieved his co-worker 30 minutes into the restraint. He noticed the child to be combative and resisting when he took over. The child claimed she needed to use the bathroom, and that she felt like she was going to throw up. It was apparently not uncommon for restrained children to make such claims, and this child had recently vomited during a previous prone restraint. The restraint continued uninterrupted, and the child calmed down, apparently falling asleep. It was noticed that she had urinated in her pants. After a reported period of about 30 minutes of no resistance, the staff began processing the release. The child was not responding, and when turned over she appeared blue around the mouth and lips. Resuscitative efforts were employed, and the child was air lifted to a children's hospital from the local emergency room. She showed no neurological recovery and was removed from life support approximately 50 hours following the restraining incident.

At autopsy a 67 pound, normally developed female child was examined. A recent abrasion to the left face and healing abrasions to both knees were seen. Serosal petechiae of the thymus and hilar visceral pleura were present. An area of localized intra-abdominal serosal hemorrhage involved the mid transverse colon, distal stomach and pancreas with intrapancreatic extension. These findings were interpreted as possible manifestations of compressional force, but may have resulted from aggressive or misguided resuscitation. Early bilateral bronchopneumonia was also identified.

Deaths during prone restraint are generally associated with police custody, with elements of excited delirium or illicit drug toxicity as potentially contributing factors. The importance of this case lies in the fact that the restrainee was a child, with significant weight and size disparity from the restrainers. This restraint protocol placed significant weight over the torso of the child, and did not allow adequate visualization of the face to monitor breathing and consciousness.

Prone Restraint, Compression, Asphyxia

 ** Presenting Author*