



### E7 The Sensitivity of Pediatric Organ Donation: Ways to Decrease the Decline Rate From Coroners/Medical Examiners

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After attending this presentation, attendees will understand there are higher rates of organ procurement denials of pediatric cases than adults and the repercussions this has on pediatric patients on the organ waitlist.

The presentation will impact the forensic science community by providing options and process improvements to ensure a thorough death investigation while improving the “organ gap.”

Each year, the number of potential organ donors increases while recipients added to the wait list increase astronomically. The “organ gap” is a major concern for all Organ Procurement Organizations (OPOs) and transplant surgeons. The main objective for Coroners/Medical Examiners (C/ME) is to complete a thorough death investigation on behalf of the decedent no matter the cause of death. Higher levels of sensitivity lead to higher denial rates for pediatric cases that are under their jurisdiction. When death investigation and organ donation cannot be accomplished simultaneously, the consequences are serious as one OPO reported that more than 40% of potential organ donors were lost in one year because of medical examiner and coroner denials.<sup>1</sup> An emerging subset of the “organ gap” with a substantial amount of denials are pediatric organ donors.

There are more than 117,000 recipients on the national waitlist, including 2,000 pediatric patients on the organ list.<sup>2</sup> There has been a steady decline in the number of organ procurements from persons under the age of 17 years. Denials in pediatric potential organ donors remain a serious issue because of the inability of many children to receive organs from adult donors.<sup>1</sup> After guardians, C/ME are vital to reducing the denials for potential pediatric donors. From 2014-2016, South Carolina coroners denied 6% of the pediatric organ referrals vetted at the time; this is significantly higher when 0.3% of adults were denied. The “sensitivity” usually occurs when the death is thought to be homicide by child abuse, sudden and unexpected death, or accidental death. When death occurs under these circumstances, C/ME are more likely to decline organ donations. ME/C should permit the recovery of organs and/or tissues from decedents falling under their jurisdiction in virtually all cases, to include cases of suspected child abuse or other homicides and sudden unexpected deaths in infants. It is recognized that blanket approvals may not be possible in every case and may require an “approval with restriction(s).”<sup>3</sup> The final decision after obtaining parental consent lies on the C/ME.

Occasionally, postponing a denial in the case of homicide or accidental pediatric deaths can be beneficial for collecting evidence for the death investigation. The main reason for the refusal is often associated with the death investigation and subsequent legal proceedings. There are very rare instances that organ donation altered the chance of prosecution. The forensic pathologist/ME/C has the responsibility of educating the attorneys regarding the procurement process and assuring them that a complete and accurate examination can be accomplished and all necessary evidence and specimens will be able to be collected.<sup>3</sup>

Death investigation is a priority, and establishing a set of guidelines between coroners, forensic pathologists, and OPOs based on ethics, investigation, and state statutes can be effective in creating a good rapport. The “comfort index” of medical examiners, not to say prosecutors and law enforcement officials, would necessarily have to be measured and the proper groundwork laid.<sup>4</sup> The construct of a “comfort index” can be useful in determining approval of donation for cases of child abuse, traffic accidents, natural diseases, and anencephaly. Communication can include educational seminars that highlight the process of the OPO and include photography tutorials that will aid the coroners’ investigations. Process improvement and communication will be pivotal in optimizing organ donations and increasing recovery for pediatric recipients on the wait list. Some ME/C offices currently have “zero denials” and this should be the goal of every ME/C office.<sup>3</sup>

A case in which the OPO gained consent from the guardians, but received an initial decline for organs and tissue from the coroner, will be presented. Documentation by the OPO while the coroners gathered witness statements and completed their death investigation was beneficial in this accidental death of a 14-month-old child. The coordination with the coroner, forensic pathologist, and OPO led to a reversal and successful donation of a heart, liver, and kidneys. It is hoped that this case can serve as an example that organ procurement does not obstruct the sensitivity of pediatric death investigation. Conferring with the forensic pathologist to ensure organ procurement will not skew the autopsy was applicable in this case and will be on future cases.

#### Reference(s):

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#### Pediatric Organ Donation, Coroner/Medical Examiner, Organ Waitlist