

IN THE COURT OF CRIMINAL APPEALS OF TENNESSEE
AT JACKSON
March 5, 2013 Session

STATE OF TENNESSEE v. SEAN M. LEIFER

**Appeal from the Circuit Court for Fayette County
No. 6567 J. Weber McCraw, Judge**

No. W2012-00320-CCA-R3-CD - Filed May 30, 2013

Appellant, Sean M. Leifer, was indicted for first degree felony murder and aggravated child abuse. A jury convicted him of reckless homicide and aggravated child abuse, and the trial court imposed concurrent sentences of four years and sixteen years, respectively. Appellant now challenges the sufficiency of the convicting evidence and the trial court's rulings with regard to the State's expert witness. Following our review, we affirm the judgments of the trial court.

Tenn. R. App. P. 3 Appeal as of Right; Judgments of the Circuit Court Affirmed

ROGER A. PAGE, J., delivered the opinion of the court, in which JOSEPH M. TIPTON, P.J., and JERRY L. SMITH, J., joined.

Claiborne H. Ferguson, Memphis, Tennessee, for the appellant, Sean M. Leifer.

Robert E. Cooper, Jr., Attorney General and Reporter; David H. Findley, Senior Counsel; D. Michael Dunavant, District Attorney General; and Walt Freeland and Lisa Borden, Assistant District Attorneys General, for the appellee, State of Tennessee.

OPINION

This case involves the death of a nine-month-old child in December 2009. Appellant was indicted in November 2010, and the case was tried in August 2011.

At trial, Barbara Fergie, an emergency medical technician with the Oakland Ambulance Service, testified that she and her partner, paramedic Lori Tandy, responded to a call to 490 Mebane Street in Oakland, Tennessee, on the morning of December 25, 2009. After they arrived, Ms. Tandy went into to the home first and emerged carrying the victim, a nine-month-old male child. Ms. Fergie and Ms. Tandy attempted to render assistance to

the child in the ambulance; however, Ms. Fergie stated that the victim was “cool to the touch” and was, in her opinion, already deceased.

On cross-examination, Ms. Fergie acknowledged that responders from the Oakland Fire Department were either on the scene already or arrived at the same time. The dispatcher had informed her that the family was attempting CPR on the victim when the call was placed. Ms. Fergie continued CPR efforts by “bagging” the victim, and Ms. Tandy placed electrodes on the victim’s chest. Soon thereafter, they left with the victim to meet a helicopter (“the Wing”) that was going to fly the victim to LeBonheur Children’s Hospital in Memphis. They were still performing CPR when they arrived at the landing site. Crew members from the Wing helped them open the victim’s airway and establish an IV before placing him on a stretcher, wheeling him to the helicopter, and preparing for flight.

Jamie Kennedy, mother of the victim and wife of appellant, testified that she and appellant lived with appellant’s father in December 2009. Their other two children also lived there, as well as appellant’s step-mother and thirteen-year-old half-brother. Approximately one week before Christmas, Ms. Kennedy moved out of her in-laws’ home and into the home of her sister and brother-in-law. She did not take any of her children with her when she moved. Ms. Kennedy stated that she went to the Oakland Police Department in an effort to gain custody of her children before Christmas but was unsuccessful.

Ms. Kennedy testified that on the morning of the victim’s death, she received a telephone call from an aunt, who advised that an ambulance was at her father-in-law’s house. Ms. Kennedy called the house, and someone informed her that she would have to go to LeBonheur Children’s Hospital to identify the victim’s body. She arrived at LeBonheur about 11:00 a.m. According to Ms. Kennedy, appellant placed the guilt for the victim’s death on their two-year-old child, appellant’s father, and appellant’s thirteen-year-old brother. Ms. Kennedy noted that prior to the victim’s death, “He was above a normal nine[-]month old . . . was standing up and starting to walk.”

On cross-examination, Ms. Kennedy testified that she could not remember whether she told police officers that she had taken prescription sleeping pills on Christmas Eve. She acknowledged that the victim was born on March 4, 2009, by emergency Caesarean section because he had a prolapsed cord, which impaired his breathing. He remained in the hospital about a week after birth for jaundice. She admitted that in March 2009, her in-laws had custody of the two older children and that she lived in her in-laws’ home while appellant was away at basic training. Ms. Kennedy recounted the victim’s acid reflux problems, as well as an episode in mid-April that resulted in an ambulance trip to LeBonheur Children’s Hospital. She said that changing the victim’s medication in July from Zantac to Nexium seemed to help his acid reflux. Ms. Kennedy recalled that in December 2009, the victim was being treated

for congestion or a cold and agreed that he was still having problems before she left the home.

Kenneth Michael Long with the Oakland Police Department testified that he was dispatched to the Leifer residence at approximately 10:22 a.m. on Christmas Day. Upon arriving, he was directed to a bedroom where he observed an older man administering CPR to an infant while a younger man stood next to the infant. Officer Long recalled appellant's saying that he awakened about 10:20 that morning and observed the child sleeping face-down in his crib. Appellant indicated to Officer Long that the last time appellant saw the victim responsive was approximately 3:30 a.m., when appellant gave him a bottle and put him back to sleep with no problems.

Officer Long, on cross-examination, testified that he was the first responder on the scene. He stated that paramedics arrived within minutes and removed the victim from the grandfather and took him to the ambulance. He recalled that the victim's grandmother was also present.

Angela Leifer, appellant's stepmother, testified that in December 2009, she and her husband, their adolescent son, appellant, appellant's wife, and the three children of appellant and his wife lived in their three-bedroom, 1400-square-foot home. Appellant's wife, Jamie, left their home around December 20, 2009.

Ms. Leifer stated that on Christmas Eve around 6:00 p.m., the entire family, including her daughter who was visiting overnight, traveled to a friend's house about five minutes away from her home. During the evening, the victim leaned forward on a sofa on which they were sitting and fell face-down on to the carpeted floor. She recalled that the victim cried for a minute but did not appear to be seriously injured. Ms. Leifer picked the victim up, held him, rocked him, "played with him a minute[,] and . . . laid him down." The victim never lost consciousness, and she did not observe anything out of the ordinary in the fall. Ms. Leifer testified that they all left her friend's house about an hour later, which was "around 10:30." After arriving at home, appellant carried the children inside. She stayed up and helped place the gifts on the fireplace for the next morning. Appellant got the children ready and put them to bed. Ms. Leifer recalled that she was the first person to go to bed, and she did not know who went to bed after her. She stated that her bedroom was directly across the hall from appellant's bedroom.

Ms. Leifer stated that appellant slept in a daybed, the one-year-old child slept in a crib, the two-year-old child slept in a toddler bed, and the victim slept in a playpen. Ms. Leifer testified that in the playpen, there were "a couple of blankets" but acknowledged that she did

not look in the playpen that night. She also acknowledged there were adult pillows in the room.

Ms. Leifer remembered that on Christmas morning, she first learned that something was wrong with the victim when her thirteen-year-old son entered her bedroom to announce that the children were awake but returned a few minutes later to tell her that the victim was not breathing. She recalled seeing her husband perform CPR on the victim and stated that although he did not know CPR, she saw him “trying to do something.” Ms. Leifer did not see or hear any response from the victim. Her thirteen-year-old son made the 9-1-1 call because she was trying to stay with the other two children. Ms. Leifer estimated that the ambulance arrived about five to ten minutes after the call. She recalled that Officer Long was one of the first responders and that someone carried the victim to the ambulance.

On cross-examination, Ms. Leifer testified that during the Christmas Eve get-together at her friend’s house, appellant was never threatening or upset with the children. Appellant participated in and was engaged in getting the children’s presents. She recalled that appellant seemed to be enjoying himself with the children. Ms. Leifer admitted the victim had a runny nose, was “a little fussy . . . ,” and had been sick for “[a] while.” She stated that appellant had gone Christmas shopping for his children and had presents for all of them. Ms. Leifer confirmed that when they arrived at home, appellant brought the children inside, “[c]arried them to the bedroom[,] [and] put them to bed.” According to Ms. Leifer, “[Appellant] was the primary person to do everything for the children.”

Mrs. Leifer stated that she did not hear the victim crying during the night but admitted that they slept with air filters in every room, which created noise. However, she would have heard yelling or loud voices. She stated that she had previously heard the victim cry at night and said, “I’ve heard him a couple of times, but nothing – not long” Ms. Leifer testified that she was awakened “[a]round ten” Christmas morning by her son’s announcing that the children were awake. At that point, nothing had happened that would have led her to believe she was going to find her grandson deceased. She stated that when she observed her husband performing CPR on the victim, she glanced briefly at the victim “over the side of the bed.” She explained that the two little ones were “running around,” and she “was just trying to keep them away and calm.”

On redirect examination, Ms. Leifer testified that on Christmas Eve, she did not consider appellant to be a danger or a threat to his children. However, she acknowledged that when police informed her that they were treating the victim’s death as a murder and that appellant was a suspect, she ran from the house “screaming, ‘Get him out – get him out – get him out.’” Ms. Leifer acknowledged a previous incident wherein appellant had placed a pillow over the victim’s face to quiet him while he was in bed, and appellant admitted that

he had done so. Ms. Leifer stated, “I found out about that incident two weeks after it had already happened[,] and the mother told us it was no big deal[,] and it wasn’t.” She did not personally hear appellant admit to the incident or state that he would not do it again, but she clarified, “It was between him and his father, a conversation they had.”

During recross-examination, Ms. Leifer acknowledged that she had never witnessed appellant do anything to injure or harm his children, but after the victim’s death, appellant was asked to leave the home. Appellant was not asked to leave the home after the “pillow incident” because “[the victim’s mother] told us it was nothing.” Because of Ms. Kennedy’s statement, Ms. Leifer did not feel there was any threat to the children and took no action to limit appellant’s access to the children.

Investigator David Webb of the Fayette County Sheriff’s Office testified that on December 26, 2009, appellant and his father, Miles Leifer, came to the Oakland Police Department for a noncustodial interview. According to Investigator Webb, appellant stated that after he put the children to bed, he began surfing the internet and “checking out” dating and social media sites. Appellant recounted to Investigator Webb that on Christmas morning, he was on the computer from around 1:00 a.m. until approximately 3:30 a.m., when the victim awakened and began to cry. Appellant left the computer and went into the bedroom. The other two children were in their beds. The victim was hungry, but appellant stated that it was normal for the victim to wake up for a bottle during the night. Appellant told Investigator Webb that he went into the bedroom and fed the victim, put the victim back to bed, laid him on his left side with his back against the side of the bed, and then went to sleep himself.

In addition to conducting interviews, Investigator Webb seized appellant’s computer and sent it to the Tennessee Bureau of Investigation (“TBI”) to be analyzed. He stated that he also obtained the bedding from the victim’s bed. Investigator Webb took photographs of the exterior of the house “to make sure that there was no forced entry to a window or anything such as that, and there was not.” In waiting eleven months to present this case to the Grand Jury, Investigator Webb testified, “We wanted to make sure that we did everything that we needed to do.”

Investigator Webb, on cross-examination, testified that on December 26th, he obtained evidence from an investigator with the Shelby County Medical Examiner’s office that the victim’s death was a homicide resulting from asphyxiation.

Oakland Police Department Sergeant Cliff Atkins testified that he collected blankets, pillows, and stuffed animals from the victim’s room to be sent to the TBI to test for the presence of any blood, vomit, or anything of that nature. No blood was present on these

items. He further testified that Miles Leifer gave consent for the computer to be collected, and he personally delivered it to the TBI for forensic analysis. Sergeant Atkins was with Investigator Webb during all of the interviews. He recalled that they were unable to further interview appellant despite several requests through the family attorney.

On cross-examination, Sergeant Atkins acknowledged requesting three judicial subpoenas for the victim's medical records: one for the Fayette County Health Department; one for Dr. Hamilton in Somerville; and one for LeBonheur Children's Medical Center. He received all of the medical records and offered to give Dr. Karen Chancellor a copy; however, during a meeting with her, she advised that she had her own copies of all the medical records.

The State called appellant's father, Miles Leifer, as its next witness. Mr. Leifer testified that his entire household attended a Christmas Eve party at the Gilberts' home, which was a couple of miles from his home. He recalled either standing or kneeling next to the couch when the victim leaned forward and fell head-first on to the carpeted floor. He noted that the victim screamed for a few minutes and stated, "I didn't see any injuries but[,] he was very, very upset." Mr. Leifer surmised that the victim's fall occurred around 9:00 or 9:30 p.m. The victim never appeared to lose consciousness, "but he did eventually go to sleep." He testified they all left the Gilberts' house between 10:00 and 10:30 p.m., and it was around 1:30 a.m. on Christmas Day when he went to bed. Mr. Leifer recalled that appellant put the children to bed that night. Mr. Leifer retired to bed after Ms. Leifer, leaving his thirteen-year-old son, his daughter, and appellant awake. To the best of his knowledge, there was nothing wrong with the victim when he went to bed.

Mr. Leifer further testified he was in his kitchen about 10:00 a.m. on Christmas morning, preparing to make a pot of coffee, when he heard appellant "yelling that [the victim] wasn't breathing." He stated, "My response was [that] I ran from the kitchen to the bedroom. [The victim] was laying [sic] on [appellant's] bed, on his back, with his [onesie] three-quarters of the way open. He was non[-]responsive, [and] he wasn't breathing. I couldn't get a pulse. I immediately started CPR." In retrospect, Mr. Leifer never felt that the victim was in danger of accidental suffocation from his playpen bedding or from the older children harming him.

On cross-examination, Mr. Leifer acknowledged having been awakened on previous nights by one of the babies' crying but denied hearing any crying or being awakened by anything this night. He explained that he was CPR-trained when he was a reserve officer with the Oakland Police Department. When he heard appellant's calling for him and observed appellant with the victim, he stated, "I first checked for vitals. I touched him . . . he was warm, and I started CPR."

Special Agent James R. Garnet, a computer forensics analyzer with the TBI Technical Services Unit, was accepted by the trial court as an expert in the field of computer analysis. The Leifer computer was brought to the TBI by the Oakland Police Department to be analyzed for internet activity from December 23, 2009, to January 1, 2010. Special Agent Garnet narrowed his analysis to the time frame beginning at midnight, or 12:00 a.m., on December 25th and testified, “And here appears to be Facebook activity during that time frame, some Yahoo Mail activity, eHarmony, singlesnet.com, and at approximately 3:31 a.m. on December 25th, that is where the web activity stops.”

On cross-examination concerning the time on the computer clock, Special Agent Garnet explained one of his initial steps in analyzing a computer is verifying the time setting of the computer with his local time, which he did. He found the clock to be exact.

Dr. Karen Elizabeth Chancellor, Chief Medical Examiner for Shelby County, was accepted by the trial court as an expert in forensic pathology and neuropathology. She described her findings of petechial hemorrhages on the right and left sides of the victim’s face as well as two hemorrhages in the left eye, which result from breakage of tiny blood vessels, or capillaries. Dr. Chancellor noted that she found “sparing,” or the absence of injury on a particular part of the body, of petechial hemorrhages on the nose and face area of the victim, which “indicated to [her] that there was the possibility of asphyxiation as a cause of death.” Dr. Chancellor agreed that attempted life-saving medical intervention could sometimes cause injuries to a victim but that in her opinion, the petechial hemorrhaging and the victim’s resulting death were not caused by the CPR.

As to Sudden Infant Death Syndrome (“SIDS”), Dr. Chancellor stated,

Today we, as pathologists, are not likely to use the term SIDS because we find other causes for a child’s death, especially for young infants two to three months old that are premature. They can be easily suffocated by inappropriate bedding materials and so that’s one of the causes. Some of the causes are still unexplained, but to investigate a child’s death thoroughly, a complete autopsy examination must be performed[,] and that was done in this case.

Dr. Chancellor stated that in reviewing the victim’s prior medical history, she saw nothing to make her change her mind about the cause of death and added that when she reviewed other findings, she remained “open to changing [her] mind and changing [her] opinion.” However, “after review of these medical records, [her] opinion [was] still that the cause of death [was] asphyxiation due to suffocation.”

Dr. Chancellor testified that overall, the victim's organs and systems "appeared normal." She found the cause of death to be asphyxiation due to suffocation and the manner of death to be a homicide. She agreed that the cause and manner of death were consistent with a pillow or soft object being placed over the victim's face, causing asphyxia by suffocation. Dr. Chancellor opined that due to the victim's physical development, health and age, it would be "extremely unusual" for him to become accidentally entrapped in nearby bedding material and suffer asphyxia by suffocation.

On cross-examination, Dr. Chancellor described her procedure of examining the bones and soft tissue for abnormalities, injuries, or hemorrhaging under the surface of the skin when there is a suspicion of abuse or injury in a child or infant. She testified that in this case, she found an old subdural hemorrhage and opined that "[it] was at least several weeks, probably months old." The only bruise she found was on the victim's frontal scalp. She did not recall being told prior to conducting the autopsy that the victim had fallen off a sofa or that he had a medical history of reflux or gastroesophageal reflux disease (GERD). Dr. Chancellor was aware of the Caesarean birth due to the prolapsed cord around the victim's neck, the development of jaundice, and the acute life threatening event (ALTE) that occurred during an episode of high fever in which the victim's oxygen level dropped, requiring oxygen intervention. After a number of examinations during the ALTE hospitalization, Dr. Chancellor stated, "[They] could not find any real abnormality of the child." She acknowledged that the victim's history of vomiting was "consistent with GERD." She further acknowledged that GERD in an infant can be fatal if the child aspirates, causing gastric contents to enter the airway. However, she noted that she did not find evidence of aspiration in this case.

At the conclusion of the autopsy, Dr. Chancellor notified law enforcement that her findings included a bruise and petechial hemorrhages and that in her opinion, the victim's death was suspicious.

Before redirect examination, Dr. Chancellor read a medical journal article provided by the defense. Upon questioning, she stated that the journal article did not change her opinion. She confirmed that, in her opinion, "this child died from suffocation" and that those were her "medical opinion[s] based on [her] findings and [her] review of the circumstances surrounding this death." At the conclusion of Dr. Chancellor's testimony, the State rested its case-in-chief.

The defense presented Dr. O. C. Smith, a forensic pathologist, as an expert witness. He began his investigation of this case by reviewing all the material furnished to him and then researching the medical literature. He stated that he had cause for concern after

reviewing the current Medical Examiner's work on the case and the manner in which the autopsy was conducted. In explaining his concerns, he stated,

Well, primarily, the autopsy being performed prior to having the medical record or the medical information caused – I think one of the big upsets is the fact that through the medical literature on this child, this child had [GERD] and also had an acute life threatening event which[,] by virtue of not having those records, the autopsy pathologist would be performing a standard autopsy. With gastroesophageal reflux disease, which can be lethal, that area of the body where the stomach meets the esophagus was not studied. However, other ancillary changes in the body would support the clinical diagnosis of gastroesophageal reflux disease by virtue of there having been changes in the lung and some changes in the trachea.

In reviewing the autopsy report, Dr. Smith testified he saw indications that the victim had GERD, and the histology slide confirmed “chronic inflammation at the windpipe.” Dr. Smith recounted his review of the victim's medical records from birth until death and stated that he would describe the victim as “a sick child.” He added,

that brings you to the point that one thing I really become leery of in autopsies is when you have a child that apparently has had a long illness, ever since the day they were born. When you have a child that is abnormal right since birth, it's always been a flag that there could be some other things coming, and in this case, there were.

Additionally, Dr. Smith stated his concern of testimony regarding “a little brown area in the brain” and explained, “[T]he finding of that would be indicative perhaps of a bleed during – during the brain during birth. Premature infants in such – especially when they have an emergency section and such, may be prone to have a small bleed.”

Dr. Smith testified to another concern, which was a photograph showing the two purported petechial hemorrhages in the lower lid of the victim's left eye. In observing this photograph, Dr. Smith's attention was focused on the “heavy green tissue forceps” being used to pull the eyelid down. He stated,

[T]hat type instrument is something we never used in manipulating the eye at autopsy, mainly because the ridges that are in the plier sections of the forceps are elongated triangle[,] and when I match that elongated triangle that's in the ridges of the tweezer, it seems to make two lines on the insides of the eyelid, so that if you damage the eyelid with the severe teeth of that forceps you could

mimic petechiae because the blood comes up and wells up in there, you get these little lines.

Dr. Smith testified that based on his literature review and experience working with children, he opined that CPR could cause petechial hemorrhaging. He stated that he found nothing in his research to support the opinion regarding “sparing around the face.”

Dr. Smith opined that the “most likely cause of [the victim’s] death” was “[m]ore likely than not, GERD.” He further stated, “The child can have an acute life-threatening event, which means an apneic episode from which he does not recover.”

On cross-examination, Dr. Smith acknowledged that he held Dr. Chancellor’s position until 2004 when he “resigned under pressure” and because of “some health issues.” Dr. Smith answered that he had performed five to ten autopsies within the last seven years.

In reviewing this case, Dr. Smith considered the following factors: the victim’s April 2009 treatment and diagnosis at LeBonheur involving an ALTE, suspected sepsis with negative workup GERD, and biogastritis; the victim’s multiple admissions; his premature birth; and the emergency delivery by c-section. Based on these factors, Dr. Smith found the victim “problematic” and stated, “[T]he cases typically don’t get better. They just get worse and worse because something went wrong at birth, something continues to be wrong, and that’s why you have at the end of the year a dead child.”

Dr. Smith acknowledged that he knew of the history of pillows being placed on the child’s face, but it did not change his opinion as to the cause of the victim’s death. He agreed that actually performing the autopsy and “looking at the body” is superior to reading the record.

Dr. Smith stated that after he reviewed the autopsy slides for an hour and a half to two hours, he found some inflammatory cells present in the lungs. He noted, “The damage to the lungs could be an indicator that the GERD had been affecting the child’s lungs.” Dr. Smith explained, “There was an aspiration event that consolidated some of the emboli, [and] [t]he aspiration is reinforced by the fact that the tracheitis is present.”

Dr. Smith acknowledged that in his past testimonies, he had placed great weight on the presence of petechiae to indicate asphyxia, and on numerous occasions, based on the presence of petechiae in the eyes, he had concluded that suffocation was the cause of death.

On redirect examination, Dr. Smith elaborated on the victim’s medical records and the concern that the victim suffered from GERD. He discussed incidents of “silent” GERD

wherein the characteristic vomiting is absent, but there is still aspiration of the stomach contents into the lungs. In summary, Dr. Smith stated, “[S]ince the primary pathology was not available[,] then the secondary pathology of the trachea and the lungs is the most important data that you have that this child is suffering from GERD.” At the close of Dr. Smith’s testimony, the defense rested.

After deliberating, the jury returned verdicts of reckless homicide and aggravated child abuse, for which the trial court imposed concurrent sentences of four years at thirty percent release eligibility and sixteen years at one hundred percent release eligibility, respectively.

II. Analysis

In this appeal, appellant challenges the sufficiency of the convicting evidence and the trial court’s rulings with respect to the State’s expert witness.

A. Sufficiency of the Evidence

The standard for appellate review of a claim challenging the sufficiency of the State’s evidence is “whether, after viewing the evidence in the light most favorable to the prosecution, *any* rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt.” *Jackson v. Virginia*, 443 U.S. 307, 319 (1979) (citing *Johnson v. Louisiana*, 406 U.S. 356, 362 (1972)); *see* Tenn. R. App. P. 13(e); *State v. Davis*, 354 S.W.3d 718, 729 (Tenn. 2011). To obtain relief on a claim of insufficient evidence, appellant must demonstrate that no reasonable trier of fact could have found the essential elements of the offense beyond a reasonable doubt. *See Jackson*, 443 U.S. at 319. This standard of review is identical whether the conviction is predicated on direct or circumstantial evidence, or a combination of both. *State v. Dorantes*, 331 S.W.3d 370, 379 (Tenn. 2011); *State v. Brown*, 551 S.W.2d 329, 331 (Tenn. 1977).

On appellate review, “we afford the prosecution the strongest legitimate view of the evidence as well as all reasonable and legitimate inferences which may be drawn therefrom.” *Davis*, 354 S.W.3d at 729 (quoting *State v. Majors*, 318 S.W.3d 850, 857 (Tenn. 2010)); *State v. Williams*, 657 S.W.2d 405, 410 (Tenn. 1983); *State v. Cabbage*, 571 S.W.2d 832, 835 (Tenn. 1978). In a jury trial, questions involving the credibility of witnesses and the weight and value to be given the evidence, as well as all factual disputes raised by the evidence, are resolved by the jury as trier of fact. *State v. Bland*, 958 S.W.2d 651, 659 (Tenn. 1997); *State v. Pruett*, 788 S.W.2d 559, 561 (Tenn. 1990). This court presumes that the jury has afforded the State all reasonable inferences from the evidence and resolved all conflicts in the testimony in favor of the State; as such, we will not substitute our own inferences

drawn from the evidence for those drawn by the jury, nor will we re-weigh or re-evaluate the evidence. *Dorantes*, 331 S.W.3d at 379; *Cabbage*, 571 S.W.2d at 835; see *State v. Sheffield*, 676 S.W.2d 542, 547 (Tenn. 1984). Because a jury conviction removes the presumption of innocence that appellant enjoyed at trial and replaces it with one of guilt at the appellate level, the burden of proof shifts from the State to the convicted appellant, who must demonstrate to this court that the evidence is insufficient to support the jury's findings. *Davis*, 354 S.W.3d at 729 (citing *State v. Sisk*, 343 S.W.3d 60, 65 (Tenn. 2011)).

To sustain the jury's verdict of guilt on the lesser-included offense of reckless homicide, the State must have proven beyond a reasonable doubt that appellant committed a reckless killing of another. Tenn. Code Ann. § 39-13-215(a) (2010). To sustain the conviction of aggravated child abuse, the State must have proven beyond a reasonable doubt that appellant "knowingly, other than by accidental means, treat[ed] a child under eighteen (18) years of age in such a manner as to inflict injury" and that "[t]he act of abuse . . . result[ed] in serious bodily injury." *Id.* at §§ 39-15-401(a), -02(a)(1).

In the light most favorable to the State, the jury heard evidence that on the morning of December 25, 2009, the nine-month old victim was found unresponsive in his playpen, which was located in the bedroom that he shared with appellant and his two young siblings. Officer Long responded to the scene at approximately 10:22 a.m. and found Mr. Leifer administering CPR to the victim as appellant stood by. Appellant told Officer Long that he awakened about 10:20 that morning and observed the victim sleeping face-down in his crib. Appellant said that he had last seen the victim responsive at approximately 3:30 a.m., when appellant gave him a bottle and put him back to sleep with no problems.

According to the victim's mother, Ms. Kennedy, prior to the incident, the victim "was above a normal nine[-]month old . . . was standing up and starting to walk." She outlined the victim's various medical problems, including a prolapsed umbilical cord at birth, jaundice, acid reflux problems, and an acute event that occurred the previous April and resulted in an ambulance trip to LeBonheur Children's Hospital.

Ms. Leifer testified that when the family arrived at home from an outing on Christmas Eve, appellant carried the children inside and readied them for bed. In appellant's bedroom, he slept in a daybed, the one-year-old child slept in a crib, the two-year-old child slept in a toddler bed, and the victim slept in a playpen. There were blankets in the playpen and adult-sized pillows in the bedroom. Ms. Leifer was the first adult to retire for the evening, followed by Mr. Leifer. On Christmas morning, she first learned that something was wrong with the victim when her thirteen-year-old son entered her bedroom to announce that the children were awake but returned a few minutes later to tell her that the victim was not breathing. She recalled seeing her husband perform CPR on the victim while her thirteen-

year-old son called 9-1-1. Ms. Leifer acknowledged a previous incident wherein appellant had placed a pillow over the victim's face to quiet him while he was in bed, and appellant admitted that he had done so. Because Ms. Kennedy told her that "it was no big deal," Ms. Leifer did not feel that appellant posed a threat to the children and took no action to limit appellant's access to the children.

Dr. Chancellor performed the autopsy and found petechial hemorrhages on the right and left sides of the victim's face as well as two hemorrhages in the left eye, which resulted from breakage of tiny blood vessels, or capillaries. Dr. Chancellor noted that she found sparing, the absence of injury on a particular part of the body, of petechial hemorrhages on the nose and face area of the victim, which "indicated to [her] that there was the possibility of asphyxiation as a cause of death." Dr. Chancellor did not believe that the petechial hemorrhaging or the victim's resulting death were caused by the CPR.

Dr. Chancellor testified that overall, the victim's organs and systems "appeared normal." She found the cause of death to be asphyxiation due to suffocation and the manner of death to be a homicide. She agreed that the cause and manner of death were consistent with a pillow or soft object being placed over the victim's face, causing asphyxia by suffocation. Dr. Chancellor opined that due to the victim's physical development, health and age, it would be "extremely unusual" for him to become accidentally entrapped in nearby bedding material and suffer asphyxia by suffocation.

On cross-examination, Dr. Chancellor testified that in this case, she found an old subdural hemorrhage and opined that "[it] was at least several weeks, probably months old." The only bruise she found was on the victim's frontal scalp. Dr. Chancellor was aware of the Caesarean birth due to the prolapsed cord around the victim's neck, the development of jaundice, and the acute life threatening event (ALTE) that occurred during an episode of high fever in which the victim's oxygen level dropped, requiring oxygen intervention. Dr. Chancellor stated that after a number of examinations during the ALTE hospitalization, "[They] could not find any real abnormality of the child." She acknowledged that although the victim's history of vomiting was "consistent with GERD" and that GERD in an infant can be fatal if the child aspirates, she did not find evidence of aspiration in this case. Dr. Chancellor held fast to her opinions in this case after being cross-examined about a medical journal article. She adhered to her statements and reiterated, "My opinion is still that this child died from suffocation . . . based on my findings and my review of the circumstances surrounding this death."

Although the defense presented Dr. Smith as an expert witness to contradict Dr. Chancellor's findings, Dr. Smith acknowledged that in other cases, he had placed great weight on the presence of petechiae to indicate asphyxia, and on numerous occasions, based

on the presence of petechiae in the eyes, he had concluded that suffocation was the cause of death. The jury heard competing theories from the State's expert and the defense expert and credited the State's expert, as was its prerogative. Based on the testimony of the expert and lay witnesses, the jury clearly had sufficient evidence by which to convict appellant of reckless homicide and aggravated child abuse. Appellant is not entitled to relief.

B. Whether the Trial Court Properly Admitted the Medical Examiner's Testimony

Appellant argues that the trial court erred in allowing the medical examiner to testify regarding the victim's cause of death because her opinion was not supported by a reliable scientific basis.

We begin our analysis with the proposition that admissibility of expert testimony is governed by the Tennessee Rules of Evidence:

If scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise.

Tenn. R. Evid. 702. Our supreme court has further defined the role of the trial court in assessing the propriety of expert testimony:

Trial courts act as gatekeepers when it comes to the admissibility of expert testimony. Their role is to ensure that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field. A court must assure itself that the expert's opinions are based on relevant scientific methods, processes, and data, and not upon an expert's mere speculation. The court's reliability analysis has four general inter-related components: (1) qualifications assessment, (2) analytical cohesion, (3) methodological reliability, and (4) foundational reliability.

State v. Scott, 275 S.W.3d 395, 401-02 (Tenn. 2009) (internal citations and quotation marks omitted).

The trial court is vested with broad discretion in resolving questions regarding the admissibility of expert testimony. *State v. Copeland*, 226 S.W.3d 287, 301 (Tenn. 2007). On appellate review, we will not disturb a trial court's decision regarding the admission or exclusion of expert testimony absent an abuse of discretion. *Scott*, 275 S.W.3d at 404; *see*

Stevens, 78 S.W.3d at 832. A trial court abuses its discretion when it applies incorrect legal standards, reaches an illogical conclusion, bases its decision on a clearly erroneous assessment of the evidence, or employs reasoning that causes an injustice to the complaining party. *State v. Ruiz*, 204 S.W.3d 772, 778 (Tenn. 2006) (citing *Howell v. State*, 185 S.W.3d 319, 337 (Tenn. 2006)). At trial, the burden rests on the party proffering the expert witness to establish that the evidence “rests upon ‘good grounds.’” *Scott*, 275 S.W.3d at 404.

Appellant concedes that Dr. Chancellor was professionally qualified to render an opinion regarding cause of death. However, he challenges the remaining three *Scott* factors with regard to her testimony. In examining the other factors, trial “courts ‘must analyze the science and not merely the qualifications [of the expert].’” *Scott*, 275 S.W.3d at 402 (quoting *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d 257, 265 (Tenn. 1997)).

“To ensure that there is not a significant analytical gap between the expert’s opinion and the data upon which the opinion is based,” the trial court must “consider whether the ‘basis for the witness’s opinion, i.e., testing, research, studies, or experience-based observations, adequately supports that expert’s conclusions.’” *Id.* (quoting *Stevens*, 78 S.W.3d at 834-35). In doing so, “the courts should consider how and why the expert was able to extrapolate from certain data to the conclusions that he or she has reached.” *Id.* (citing *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 144-46 (1997)). Expert testimony may properly be excluded if “‘there is simply too great an analytical gap between the data and the opinion proffered.’” *Id.* at 403 (quoting *Stevens*, 78 S.W.3d at 834).

Dr. Chancellor testified that she is a medical doctor and that she is board-certified in anatomic pathology, clinical pathology, forensic pathology, and neuropathology. At a January 2011 pre-trial hearing, she testified that she had personally performed over 2400 autopsies and had assisted in hundreds more. In the same hearing, Dr. Chancellor testified that she had received specialized training in petechial hemorrhaging and that certain patterns of petechia formation were well-recognized by colleagues in her field. Dr. Chancellor clearly relied on her training and experience in forming her opinions. Based on this evidence, the trial court properly found sufficient basis for her expert opinions.

Notwithstanding, appellant claims that because Dr. Chancellor was impeached at trial with a medical journal article that questioned the causal connection between asphyxia and petechiae, she was incompetent to render a scientific opinion. Appellant did not present the article in question at the pre-trial hearing or utilize the article during that hearing to cast doubt on whether the basis for her opinions supported her conclusions. Instead, he waited until his cross-examination of Dr. Chancellor, after she had offered her expert opinions regarding cause and manner of death to the jury, to question her about the contents of the article. At that point, the article could only be used for impeachment rather than

disqualification. During questioning about the article, Dr. Chancellor testified before the jury,

I am certainly aware that petechial hemorrhages can be called a nonspecific finding, that they are found in certain deaths that are not related to asphyxia. I have seen petechial hemorrhages in eyes of people who have suffered heart disease as a cause of death, who have suffered other types of natural death and developed petechiae. I have seen them numerous times in people who have been strangled, in other types of injurious situations. Yes, petechial hemorrhages are not always found in cases of suffocation. I am aware of that. In this case, they were found and their pattern, namely that the sparing around the nose and face is suggestive that there was pressure applied in that area where the petechiae were formed. Therefore, I believe that this death is the result of suffocation.

The medical journal was not substantive evidence and was inadmissible at trial. *See* Tenn. R. Evid. 618 (“[Statements . . . in . . . periodicals . . . may be used to impeach the expert witness’s credibility but may not be received as substantive evidence.”). Dr. Chancellor was questioned about the contents of the article and agreed with some of the statements contained therein; however, given the circumstances of this case, she disagreed that the “theory” advanced by the article was germane to her expert opinions in this case.

Based upon the evidence taken at the pre-trial hearing and Dr. Chancellor’s education and experience, the trial court properly allowed Dr. Chancellor to testify as an expert witness. We conclude that there is no “analytical gap” between the foundation for her opinions and her conclusions.

We next consider the remaining *Scott* factors. With regard to these factors, our supreme court stated:

Additionally, the courts should consider the methodological and foundational reliability of the expert’s testimony. The methodological inquiry focuses upon the reliability of the methodology employed by the expert. The foundational inquiry has two steps. The first step is to assess the expert’s field or discipline itself by focusing on the reliability of the studies, articles, and data that compose the field and that provide the underlying foundation for the expert’s testimony. The second step is to analyze the reliability of the underlying facts or data upon which the expert’s opinion is predicated. *See* Tenn. R. Evid. 703.

....

To assess methodological and foundational reliability, this Court . . . identified the following non-exhaustive list of factors for trial courts to consider: (1) whether scientific evidence has been tested and the methodology with which it has been tested; (2) whether the evidence has been subjected to peer review or publication; (3) whether a potential rate of error is known; (4) whether the evidence is generally accepted in the scientific community; and (5) whether the expert’s research in the field has been conducted independent of litigation.

Scott, 275 S.W.3d at 403-04.

Dr. Chancellor testified that she relied upon her specialized training in petechial formation, which was part of her training in forensic pathology, in forming her conclusions. The defense expert acknowledged that he had also relied on the formation of petechiae in establishing asphyxia as a cause of death. *See e.g., State v. Geraldrick Jones*, No. W2002-00747-CCA-R3-CD, 2003 WL 22446138, at *5 (Tenn. Crim. App. Oct. 17, 2003) (summarizing Dr. Smith’s expert testimony that petechial hemorrhages indicate asphyxial-type death). The medical journal article, while not substantive evidence, admittedly challenged the prevailing view that “petechaie and asphyxia are causally linked.”¹ Nothing in this methodology suggests that her opinion should not have been heard by the jury.

Finally, in considering the foundational reliability of Dr. Chancellor’s opinions, courts must consider “(1) [the] reliability of the field itself and (2) the trustworthiness of the facts or data utilized by the expert.” *Scott*, 275 S.W.3d at 407. Appellant concedes the reliability of the field of forensic science but challenges the trustworthiness of the facts or data relied upon by Dr. Chancellor in forming her opinions.

It is undisputed that the victim had petechial hemorrhages. This “fact” or “data” is not open to interpretation. Appellant debates Dr. Chancellor’s explanation for the petechial hemorrhages as resulting from asphyxia or suffocation. Dr. Chancellor’s opinions were based on her training and experience. As noted, Dr. Smith, likewise, agreed that he had often relied on the presence of petechiae in naming asphyxia as the cause of death. Appellant had ample opportunity to cross-examine Dr. Chancellor on the continued viability of the theory causally connecting petechial hemorrhaging with asphyxial-type deaths.

¹ The medical journal article was not made an exhibit at trial and was not included in the record. Although appellant attached it to his brief, ““appendices to briefs do not constitute evidence to be considered in the review of a case.”” *State v. Devon Wiggins*, No. W2007-01734-CCA-R3-CD, 2009 WL 1362323, at *9 (Tenn. Crim. App. May 15, 2009) (quoting *Best v. State*, 708 S.W.2d 421, 423 (Tenn. Crim. App. 1985)). Therefore, our review of the article is limited to those excerpts that were embodied in trial testimony.

For these reasons, the trial court did not abuse its discretion in accepting Dr. Chancellor as an expert witness in forensic pathology and neuropathology. Appellant is not entitled to relief on this claim.

C. Whether the Trial Court Properly Limited Appellant's Cross-Examination of the Medical Examiner

Appellant contends that the trial court erred by limiting his cross-examination of the medical examiner. Counsel attempted to impeach Dr. Chancellor with evidence that she had previously been denied the opportunity to testify as an expert witness because her opinions were speculative and constituted "guessing."

"The propriety, scope, manner and control of cross-examination of witnesses lies within the discretion of the trial court." *State v. Reid*, 213 S.W.3d 792, 839 (Tenn. 2006) (citing *State v. Dishman*, 915 S.W.2d 458, 463 (Tenn. Crim. App. 1995)). We review the trial court's decisions concerning the parameters of cross-examination under the abuse of discretion standard. *Keough v. State*, 356 S.W.3d 366, 369-70 (Tenn. 2011).

In a previous, unrelated case, Dr. Chancellor opined in a jury-out hearing that the manner of the victim's death was homicide. She admitted that there was no physical evidence to support the theory but that given the extensive dismemberment of the victim's body, "in [her] opinion, when a body is found in this condition, the manner of death is homicide." Dr. Chancellor admitted that her opinion was based solely on the victim's dismemberment and that there was no actual proof establishing cause or manner of death. According to appellant, the trial court in the unrelated case apparently did not permit Dr. Chancellor to testify as to manner of death in that case.

When appellant asked to cross-examine Dr. Chancellor with regard to the unrelated case, the trial court in the instant case ruled that it was irrelevant. The former case did not involve petechial formation or asphyxiation. The line of questioning did not bear on Dr. Chancellor's credibility or professional qualifications. Appellant's proposed impeachment of Dr. Chancellor carried the possibility of confusing or misleading the jury. The trial court did not improperly limit appellant's cross-examination of the medical examiner. *See State v. Ronald Gene Pullon*, No. E2012-00385-CCA-R3-CD, 2013 WL 57075, at *4 (Tenn. Crim. App. Jan. 4, 2013) ("affirm[ing] that a trial court does not violate constitutional norms by limiting the scope of cross-examination when the potential of such evidence to mislead or confuse the jury greatly exceeds its probative value").

CONCLUSION

Based on our review of the record, the parties' briefs, arguments of counsel, and relevant case law, we discern no error and affirm the judgments of the trial court.

ROGER A. PAGE, JUDGE