

DELAWARE COUNTY, CROZER- :
KEYSTONE HEALTH SYSTEM, AND :
HEALTH ACCESS NETWORK :

Appeal from the Judgment Entered September 7, 2018
In the Court of Common Pleas of Delaware County Civil Division at
No(s): 13-1549

BEFORE: BOWES, J., OLSON, J., and FORD ELLIOTT, P.J.E.

OPINION BY BOWES, J.:

Filed: July 16, 2020

Appellants Steven M. Troy, D.O., HAN OB-GYN Associates of Delaware County ("HAN"), Delaware County Memorial Hospital (the "Hospital"), and Crozer-Keystone Health System ("Crozer") (collectively, "Defendants") appeal from the September 7, 2018 judgment in favor of Alex and Kira Charlton, individually, and as parents and natural guardians of their minor daughter, G.C. (collectively, "the Charltons"), in this medical malpractice case. After thorough review, we vacate the judgment and remand for a new trial.

The facts pertinent to our review are as follows. On March 2, 2011, Mrs. Charlton underwent routine pre-natal testing at the Hospital. At that time, she was thirty-seven and one-half weeks pregnant with twins. Earlier testing had confirmed that the twins shared a placenta, but each baby had her own sac. The ultrasound that day revealed that "Twin B" was twenty-five percent smaller than "Twin A," which was an indication of discordant growth. Also noted was some tachycardia in Twin B. Dr. Stephanie Pearson, Mrs. Charlton's primary OB-GYN, decided to induce labor.

Induction of labor commenced at approximately 5:00 p.m. that evening and labor progressed throughout the night. Shortly before 5:00 a.m., Mrs.

Charlton was taken to the operating room to deliver the twins. An ultrasound performed at that time depicted both babies in the optimum head-down (vertex) position. However, Dr. Pearson determined that Mrs. Charlton was not fully dilated, and thus, not ready to deliver, and sent her back to the labor room.

At 7:00 a.m., there was a shift change at the Hospital and Dr. Pearson was replaced by Dr. Troy. Labor progressed and Mrs. Charlton was taken to the operating room during the early afternoon of March 3, 2011. At 1:08 p.m., Dr. Troy delivered Twin A, I.C., who presented in a vertex position, without complication. Just minutes later, he reached into the uterus and felt the feet of Twin B, G.C., a presentation known as a footling breech. He ruptured the membranes at 1:16 p.m. Using the Mauriceau maneuver, which “confirms that the baby’s head is in flexed position when it arrives in the vagina, and maintains it there[,]” Dr. Troy proceeded to deliver Twin B. N.T., 1/15/18, at 228. As the second twin’s legs and body rested on Dr. Troy’s forearm, her head and shoulders emerged with the first push at 1:18 p.m. She was placed in the warming bed and examined. It was noted that she had poor tone in her upper extremities, head, and neck.

Nurse Caroline Murdaco was the primary labor and delivery nurse for the twins. She testified that for the delivery of G.C., Dr. Troy had his hand on the top of Ms. Charlton’s abdomen. When he removed it to rupture the membranes, she placed her hand there in order to follow the head of the baby as it descended, which she testified is the proper procedure with a breech

birth. As the second baby's head and shoulders were being delivered, a "snapping" or "popping" sound was heard in the delivery room. Nurse Murdaco looked to see what was going on with the baby, and saw nothing. At the time the pop was heard, Nurse Murdaco confirmed that Dr. Troy was not "doing any sort of maneuvering, pulling, stretching, twisting, rotating, anything at the moment." N.T., 1/16/18, at 163. Nurse Murdaco filled out an incident report describing that "a popping sound was heard by patient and staff" because she had never heard such a sound before and was afraid that perhaps they had injured Mrs. Charlton's hip, knee, or back. *Id.*

G.C. was later moved to the neonatal intensive care unit (NICU) at the Hospital as there was concern for a possible cervical and thoracic spinal cord injury. Several days later she was transferred to Children's Hospital of Philadelphia ("CHOP"), where an MRI was performed on March 8, 2011. The MRI revealed "no definite abnormality of the cervical spine" but the reliability of the reading was qualified by a note that G.C.'s positioning during the test was less than optimal. An MRI performed eight months later, on November 9, 2011, depicted "evolution of a remote subdural hematoma with myelomalacia of [G.C.'s] spinal cord" and "[n]umerous foci . . . in keeping with pseudomeningocele formation related to nerve root avulsion injury." Plaintiffs' Exhibit P16B-MRI Report, 11/9/11, at 22-23. In short, G.C. had a permanent spinal cord injury.

The Charltons commenced this action on February 20, 2013, alleging that Dr. Troy was negligent, and that his negligence caused G.C.'s neurological

injuries. Liability against HAN was premised on vicarious liability for the conduct of Dr. Troy. The Charltons also alleged that Dr. Troy was the ostensible agent of the Hospital and Crozer.¹ Defendants maintained that Dr. Troy complied with the standard of care in every respect, and that G.C.'s injury occurred *in utero* due to intra-uterine growth restriction (IUGR) caused by placental insufficiency.

A jury trial commenced on January 5, 2018. At that time, G.C. was six years old. She attended first grade with her twin sister and was a good student academically. However, she could not walk due to decreased muscle tone and paralysis of the lower extremities. She also exhibited weakness of the muscles in the upper extremities, and her right arm was atrophied.

At trial, liability was hotly contested and numerous medical experts testified for each side. Mr. and Mrs. Charlton described the events surrounding the birth of their twin girls. They also offered the testimony of their expert in maternal-fetal medicine, Dr. Benjamin Hamar. Dr. Hamar opined that the standard of care when delivering a second twin in a footling breech position is to perform an ultrasound to determine if the infant's head is in a flexed position. If the head is deflexed or hyperextended, he opined that a cesarean section ("c-section") should be performed. If the head is

¹ On May 18, 2017, the Charltons filed a complaint joining of CHOP and Children's Hospital of Philadelphia Practice Association, and alleging medical malpractice. The complaint against the CHOP defendants was subsequently dismissed following the grant of summary judgment, which was unopposed by the Charltons.

flexed, a vaginal delivery may be undertaken as long as ultrasound is used throughout to ensure that the infant's head remains in the flexed position. In Dr. Hamar's opinion, Dr. Troy breached that standard of care when he failed to perform the initial ultrasound, and then when he proceeded with the vaginal delivery without the benefit of ultrasound surveillance. It was Dr. Hamar's opinion, to a reasonable degree of medical certainty, that Dr. Troy's deviation from the standard of care caused the injury to G.C. in one of two ways: either he delivered the baby with a malpositioned head, or he exerted too much traction on the head. **See** N.T., 1/10/18, at 293.

In anticipation of Defendants' contention that the injury to G.C. occurred *in utero* due to placental insufficiency and the resulting IUGR, Dr. Hamar noted that G.C.'s weight was not twenty-five percent lower than I.C.'s weight. Additionally, Dr. Hamar maintained that if the placenta was not supplying the necessary nutrients to sustain both twins, one would have seen low amniotic fluid. Furthermore, a Doppler assessment of the umbilical cord would have indicated growth restriction. Dr. Hamar pointed out "[a]ll of those things were normal for [G.C.] and [I.C.] on the ultrasound. **Id.** at 259. In addition, both babies were active throughout labor, which he called "a very reassuring sign." **Id.** at 272.

The Charltons also offered the testimony of Dr. Robert Clancy, a pediatric neurologist, who opined that the location of G.C.'s spinal cord injury was "classic" for trauma due to hyperextension at delivery. **Id.** at 154. He

also characterized the avulsion injury to the nerve roots as stretch injuries, and explained that “traction” is a term used to describe a pulling force, as opposed to pushing. **Id.** at 137.

Pediatric neuroradiologist Paul Caruso, M.D., the Director of Pediatric Neuroimaging at Massachusetts General Hospital, opined on behalf of the Charltons that injury to G.C.’s spine was caused by trauma “at birth or right around birth.” N.T., 1/10/18, at 30. He noted that nerve roots were ripped and torn due to a pulling motion that resulted in detachment. Dr. Caruso dismissed the notion that such injuries were congenital, and testified that he had “never seen nor seen reported the occurrence of these particular findings *in utero*[,]” leading him to conclude that “the findings occurred at birth.” **Id.** at 46.

The Charltons also presented the expert testimony of Dr. Scott Kozin, a pediatric orthopedic surgeon specializing in spinal cord and brachial plexus injuries, and who had treated G.C. since she was two years old. He opined that the tearing of the dura of the spinal cord, as well as the avulsion of the nerve roots, were traumatic injuries, and that the damage is irreparable. **See** N.T., 1/12/18, at 23-24, 28. Placental pathologist, Dr. Theresa Boyd, opined that the twins’ placental compartments were normal and there was no abnormal pathology in the umbilical cords. In addition, the Charltons offered numerous witnesses to testify as to past and future medical expenses for G.C., a lifecare plan, and a day in the life video of G.C.

At the close of the Charltons' case, Dr. Troy, HAN, and Crozer moved for nonsuit on several grounds. First, they alleged that the Charltons failed to establish that the breach of the standard of care articulated by Dr. Hamar, *i.e.*, the failure to use ultrasound to either obtain the information necessary to determine whether a c-section was indicated or to ensure that the baby's head remained flexed during a vaginal delivery, was the cause of the injury to G.C. Second, Defendants argued that there was no testimony that excessive force was used. N.T., 1/15/11, at 177. Defendants Crozer and the Hospital moved for nonsuit on the additional ground that the Charltons had not established vicarious or ostensible agency. The motions for nonsuit were denied.

Defendants offered expert testimony from Dr. Robert Debbs, an expert in maternal-fetal medicine and the use of ultrasound in obstetrics. Dr. Debbs testified that the use of ultrasound to look for a deflexed head is not the standard of care. While he agreed that ultrasound may be helpful when the baby's position is unknown, such was not the case here, as Dr. Troy knew the baby was presenting feet-first. Dr. Debbs maintained further that there is no difference in the risk of serious complications when a c-section is undertaken rather than a vaginal birth in these circumstances. He testified that a vaginal birth is totally acceptable for delivering a footling breech second twin as long as the second twin is not twenty-five percent larger than the first, there is adequate anesthesia, and the first delivery was not difficult. N.T., 1/17/18,

at 73. He concluded further that the fact that G.C.'s birth went so smoothly was an indication that Nurse Murdaco and Dr. Troy kept the head flexed. In his view, the baby was not entrapped, there was no difficulty, and there was no traumatic pulling of the head. He disputed that the snapping sound came from the baby and opined that nothing Dr. Troy did caused the sound. Dr. Debbs concluded that, in his opinion, Dr. Troy did not deviate from the standard of care. ***Id.*** at 117-118.

Defendants also presented the testimony of Michele J. Grimm, Ph.D., an expert in biomedical engineering. She maintained that maternal forces *in utero* are sufficient to stretch nerves and cause root avulsions and that a smaller baby would be more likely to be injured by such forces. She also confirmed that cervicothoracic injuries have been documented in c-section deliveries.

Dr. Jerome Barakos, a pediatric neurologist, testified that G.C.'s spinal injury occurred pre-birth, approximately one to two weeks before the first MRI was performed at CHOP. He arrived at that conclusion based on his review of the March 8, 2011 MRI, which showed cysts and scarring on the spinal cord that he contended would take weeks to form. **See** N.T., 1/18/18, at 57. Dr. David A. Schwartz, a placental pathology expert, opined that the smaller portion of the twins' placenta was supporting G.C., that its volume was very small to be maintaining a fetus, its blood and oxygen supplies were poor, and that G.C. suffered from intra-uterine growth restriction.

At the close of all of the evidence, Defendants moved for a directed verdict, which was denied. On January 23, 2018, the jury returned a verdict in favor of the Charltons and against all of the Defendants.² It found that Dr. Troy's conduct fell below the standard of reasonable medical care, and was the cause of harm to G.C. The jury also found that Dr. Troy was the ostensible agent of the Hospital and Crozer and awarded \$40,258,000 in damages. The verdict was later molded to include delay damages.

Defendants filed motions for post-trial relief, which were denied on August 6, 2018. Judgment was entered on September 7, 2018. Defendants timely appealed and complied with Pa.R.A.P. 1925(b). The trial court penned a 280-page Rule 1925(a) opinion.

Dr. Troy, HAN, and Crozer present four issues for our review:

1. Whether [Dr. Troy, HAN, and Crozer] are entitled to [judgment notwithstanding the verdict] JNOV as a result of [the Charltons'] failure to prove that Defendants breached a medically-accepted objective standard of care under either of [the Charltons'] two **mutually-exclusive** theories: (i) that Defendants should have performed an ultrasound and/or a caesarian section or (ii) Dr. Troy used excessive traction during delivery that caused [G.C.'s] harm?
2. Whether [Dr. Troy, HAN, and Crozer] are entitled to a new trial after the trial court permitted [the Charltons'] counsel to read to the jury, *verbatim*, inadmissible hearsay excerpts from a medical writing (while, thereafter, precluding defense counsel from properly referencing learned treatises during their expert's direct examination) where a single parenthetical statement from the hearsay writing – unsupported by any

² The liability verdict was not unanimous. The jury found in favor of Plaintiffs by a vote of ten to two.

medical studies or scientific evidence – became the centerpiece of [the Charltons'] case and caused Defendants severe and unfair prejudice?

3. Whether the trial court abused its discretion by instructing the jury on concurring causation where **neither** party submitted evidence establishing that two separate causes combined to cause [G.C.'s] harm and, thus, there is no record evidence supporting such a charge?
4. Whether the trial court improperly awarded delay damages on [the Charltons'] future medical expenses in circumstances where the payments are not due, if ever, for decades and, thus, there was no loss of use of the money at issue?

Brief of Dr. Troy, HAN, and Crozer at 5-6 (emphasis in original).

The Hospital raises the following issues:

- I. Whether JNOV or a new trial is required because the jury's finding of medical negligence was not supported by sufficient evidence or was, at a minimum, against the weight of the evidence?
- II. Whether a new trial is required because [the Charltons'] cross-examination of Dr. Troy with the Volpe text, and the reading of that text in closing arguments, were improper and prejudicial?
- III. Whether a new trial is required because the preclusion of Defendants' direct examination of Dr. [Robert] Debbs with learned treatises that he deemed authoritative and relied on was improper and prejudicial?
- IV. Whether a new trial is required because the [j]ury instruction on concurring causation was improper and prejudicial?
- V. Whether JNOV or a new trial is required because the jury's finding that Dr. Troy was [the Hospital's] agent was unsupported by sufficient evidence or was, at a minimum, against the weight of the evidence?
- VI. Whether the trial court erred in awarding delay damages on the jury's award for future medical expenses?

The Hospital's brief at 5 (emphasis and unnecessary capitalization omitted).³

Initially, we will address Defendants' claims that the trial court erred in refusing to grant JNOV. Defendants claim that the Charltons failed to establish the applicable standard of care; the Hospital contends that there was insufficient evidence to support liability under an ostensible agency theory.

Our standard of review of an order denying judgment n.o.v. is whether, reading the record in the light most favorable to the verdict winner and granting the benefit of every favorable inference, there is sufficient competent evidence to support the verdict. Any conflict in the evidence must be resolved in the verdict winners' favor. Judgment n.o.v. may be granted only in clear cases where the facts are such that no two reasonable minds could fail to agree that the verdict was improper.

Tillery v. Children's Hosp. of Phila., 156 A.3d 1233, 1239-40 (Pa.Super. 2017) (citation omitted). We will disturb a trial court's grant or denial of JNOV "only for an abuse of discretion or an error of law." ***Quinby v. Plumsteadville Family Practice, Inc.***, 907 A.2d 1061, 1074 (Pa. 2006).

Defendants complain first that the trial court erred in denying JNOV for two reasons: (1) Dr. Hamar's testimony did not establish an objective standard of care for an obstetrician performing a footling breech delivery of a second twin, and (2) the Charltons did not establish the standard of care for the appropriate use of traction in this type of delivery.

The following principles inform our review. In order to state a *prima facie* case of medical malpractice, "a plaintiff must demonstrate the elements

³ Since certain issues overlap, we address them together.

of negligence: a duty owed by the physician to the patient, a breach of that duty by the physician, that the breach was the proximate cause of the harm suffered, and the damages suffered were a direct result of harm.” **Fessenden v. Robert Packer Hosp.**, 97 A.3d 1225, 1229 (Pa.Super. 2014). Generally, in all but the most obvious cases, a medical expert is required who will testify to a reasonable degree of medical certainty as to the proper standard of care, the defendant’s deviation from that standard of care, and that defendant’s breach of the standard of care caused the plaintiff’s injury. **Catlin v. Hamburg**, 56 A.3d 914, 920 (Pa.Super. 2012).

The Charltons’ maternal-fetal medicine expert Dr. Benjamin Hamar testified that, in the delivery of a second twin in a footling breech presentation, the standard of care is to perform an ultrasound to determine the attitude of the infant’s head. **See** N.T., 1/10/18, at 283. If the head is deflexed or hyperextended, a cesarean section should be performed. **Id.** If the ultrasound reveals the head is flexed, the expert conceded that a vaginal delivery could be undertaken, but that the standard of care required the use of continuous ultrasound to ensure that the head remained in the flexed position throughout delivery. **See id.** at 284 (opining that the standard of care requires the use of ultrasound as otherwise the physician is “flying blind” and cannot know that

that the head is flexed).⁴ The expert explained that continuous ultrasound was necessary because a deflexion injury occurs before the infant descends far enough for the physician to be able to grasp and hold the infant's head in a flexed position, as Dr. Troy did herein.

It was undisputed that Dr. Troy did not perform an initial ultrasound to determine the attitude of G.C.'s head or use ultrasound during the delivery to ensure that her head remained in a flexed position throughout. According to Dr. Hamar, this was a breach of the standard of care. However, as Defendants point out, Dr. Hamar offered two theories as to the cause of G.C.'s injury, only one of which involved the failure to keep her head properly flexed. He testified that, "[t]he type of injury that was found here [-] the only way that this happens is with either excessive traction or appropriate traction on a mal-positioned head." N.T., 1/10/18, at 295. He added, "[s]o either way, it's not an appropriate maneuver. It's not appropriate care. It violates the standard of care."⁵ ***Id.***

⁴ Defendants offered testimony from its expert, Dr. Debbs, that the use of ultrasound to determine the flexion of the second twin's head was not the standard of care. Additionally, he opined that the vaginal delivery procedures used by Dr. Troy complied with the applicable standard of care. Dr. Hamar conceded on cross-examination that a vaginal delivery of a footling breech second twin was permissible, and that the Mauriceau maneuver used by Dr. Troy was generally accepted for the vaginal delivery of a footling breech. **See** N.T., 1/10/18, at 299.

⁵ The Charltons, in reliance upon the testimony of Dr. Hamar, argue that Dr. Troy applied either too much traction to a properly positioned head, or

Defendants allege first that Dr. Hamar did not articulate the standard of care applicable to the use of traction, or define or quantify appropriate traction. **See** Dr. Troy's brief at 24. Furthermore, he did not opine as to how Dr. Troy breached such a standard. Instead, Dr. Hamar merely concluded that if the infant's head was properly flexed, the injury occurred because Dr. Troy used too much traction.⁶

In addition, Defendants contend that since Dr. Hamar posited two distinct types of negligent conduct that could have been responsible for G.C.'s injury, he did not opine to a reasonable degree of medical certainty as to either. In support of that position, Defendants direct our attention to **Griffin v. Univ. of Pittsburgh Med. Ctr.**, 950 A.2d 996 (Pa.Super 2008), where expert testimony that plaintiff's shoulder injury was forty-nine percent likely

appropriate traction to a mal-positioned head. **See** Appellees' brief at 36 ("No other explanation existed for injury other than Dr. Troy's negligent conduct."). If that were true, this could have been a *res ipsa loquitur* case. However, the record shows that Defendants offered substantial evidence that a spinal cord injury such as that suffered by G.C. could be sustained *in utero* in the absence of negligence.

⁶ In response to Defendants' claim that Dr. Hamar did not establish a standard of care for the use of traction, or breach of that standard, the trial court responded: "The appropriate level of traction must be applied to a flexed head in order for the standard to be met and the procedure completed safely for the infant coming through the birth canal. The Defendant doctor's testimony that he was exercising due care by employing the maneuvers approved of by the causation experts at trial, did not establish that he was performing them with the appropriate level of traction." Trial Court Opinion, 12/31/18, at 235. Notably, the trial court did not cite to any testimony offered by the Charltons defining the standard of care with regard to the use of traction.

due to a non-negligently-caused grand mal seizure and fifty-one percent likely due to negligent bed restraints was held to be legally insufficient to meet the requisite “reasonable degree of medical certainty” standard.

We find **Griffin** inapposite as that case involved two distinct theories of causation, one negligent and the other non-negligent. Although the expert in that case rendered his opinion to a “reasonable degree of medical certainty,” it was apparent from the totality of his testimony that the defendant’s negligence was only “more likely than not” or “possibly” the cause of the injury. **Id.** at 1003. We held that such expert testimony failed to meet the requisite standard of reasonable medical certainty.

After a thorough review of the record, we find that the Charltons introduced sufficient expert testimony from Dr. Hamar, rendered to a reasonable degree of medical certainty, that the use of ultrasound was the standard of care to ascertain and ensure that the second twin’s head remained in the flexed position, that Dr. Troy breached that standard, and that due to his failure to use ultrasound, G.C. sustained an injury consistent with deflexion or hyperflexion of the head. While Defendants complain that Dr. Hamar’s opinion was deficient because he did not base his opinion on any generally accepted authorities, he was not required to. Expert testimony alone is evidence sufficient to support the verdict.

However, we find merit in the Defendants’ argument that the Charltons’ back-doored a theory of negligence based on excessive traction for which no

standard of care or breach was established by Dr. Hamar. Although Dr. Hamar alternatively concluded that G.C.'s injury could have occurred because Dr. Troy exerted too much traction on G.C.'s flexed head, he offered no testimony regarding the standard of care for the use of traction, or that Dr. Troy deviated from that standard herein. Hence, nonsuit on the "too much traction" theory should have been granted, and the trial court erred in permitting the "too much traction" theory to be submitted to the jury.⁷

Unfortunately, Defendants did not request a special verdict that would require the jury to specify upon which theory it granted relief. Thus, we cannot discern from the general verdict whether the jury found Dr. Troy liable because he failed to use ultrasound to ascertain that G.C.'s head was in a flexed position, and maintain it in that position, or because he applied too much traction on G.C.'s properly-flexed head. The law is well settled that where a defendant fails to request a special verdict, he "cannot complain on appeal that the jury may have relied on a factual theory unsupported by the evidence when there was sufficient evidence to support another theory properly before the jury." ***Shiflett v. Lehigh Valley Health Network, Inc.***, 217 A.3d 225, 234 (Pa. 2019) (quoting ***Halper v. Jewish Family &***

⁷ Defendants also contend that the causation theories advanced by the Charltons were refuted by the testimony of Dr. Troy and Nurse Murdaco. Brief of Dr. Troy, HAN, and Crozer at 33. Such an argument disregards our standard of review which requires us to view the evidence, and all reasonable inferences drawn therefrom, in the light most favorable to the verdict winner, the Charltons.

Children's Services, 963 A.2d 1282, 1288 (Pa. 2009) (defining the "general verdict rule," which provides that "when a jury returns a general verdict involving two or more issues and its verdict is supported as to at least one issue, the verdict will not be reversed on appeal"). For that reason, JNOV was properly denied on this ground.

We turn now to the Hospital's contention that the trial court erred in denying its motion for JNOV as the evidence was insufficient to sustain a finding that Dr. Troy was its ostensible agent. Ostensible agency is defined in § 1303.516 of the MCARE Act, which provides:

- (a) Vicarious Liability.—A hospital may be held vicariously liable for the acts of another health care provider through the principles of ostensible agency only if the evidence shows that:
 - (1) a reasonably prudent person in the patient's position would be justified in the belief that the care in question was being rendered by the hospital or its agents; or
 - (2) the care in question was advertised or otherwise represented to the patient as care being rendered by the hospital or its agents.
- (b) Staff privileges.—Evidence that a physician holds staff privileges at a hospital shall be insufficient to establish vicarious liability through principles of ostensible agency unless the claimant meets the requirements of subsection (a)(1) or (2).

40 P.S. § 1303.516. In short, whether "a hospital may be held liable for the negligent acts or omissions of independent physicians" depends on "(1) whether the patient looks to the institution, rather than the individual

physician for care, and (2) whether the hospital holds out the physician as his employee.” ***Yacoub v. Lehigh Valley Medical Associates, P.C.***, 805 A.2d 579, 660 (Pa.Super. 2002). The issue is whether a reasonably prudent person in the plaintiff’s position would be justified in believing that her physician is an employee of the hospital or other institution.

The parties stipulated that Dr. Troy was not an employee of the Hospital. However, Mrs. Charlton testified that she believed he was an employee of the Hospital and Crozer. N.T., 1/12/18, at 161. That understanding stemmed from the following facts. Mrs. Charlton had been seeing Dr. Stephanie Pearson for yearly gynecology appointments at her office located at the Hospital since 2008. She continued to see Dr. Pearson at that office during her pregnancy with the twins. ***Id.*** at 163. Photographs were introduced depicting the front entrance of the Hospital, and Mrs. Charlton confirmed that when she went to those appointments, she entered the Hospital parking garage by driving past the sign “DCMH, Delaware County Memorial Hospital, Crozer Keystone, Fox Chase Crozer-Keystone Cancer Partnership.” ***Id.*** at 164-65; Plaintiffs’ Exhibit P-82. A photograph showed the hospital directory in front of the bank of elevators, and designated thereon was Dr. Troy’s suite number. Plaintiffs’ Exhibit P-84. Mrs. Charlton testified that she was told that she could only deliver the twins at the Hospital, and that all perinatal testing would be conducted there as well. ***Id.*** at 166-67. Neither Dr. Pearson nor Dr. Troy ever told her by whom they were employed.

On cross-examination, Mrs. Charlton acknowledged that she had seen Dr. Pearson elsewhere on a few occasions. The defense drew her attention to a notice on the directory that “The doctors and other tenants of this building may not be employed by the hospital.” *Id.* at 255. She was also presented with a “consent to treatment” form that she executed on September 8, 2010, which contained the following statement: “I understand the doctors who care for me may not be employees of the hospital. The doctors may be independent contractors who have staff privileges and have agreed to provide care to hospital patients. . . . If hospitalization is necessary, I understand a doctor will be selected . . . by me or for me.” *Id.* at 257-58. In addition, the financial responsibility section of that consent form provided: “I understand the hospital will bill me for care given by hospital employees and I will receive separate bills from physicians and other[s] who are not employed by the hospital.” *Id.* at 260. When questioned about whether she had received bills in the mail, Mrs. Charlton denied receiving any bills and could not recall receiving any “explanation of benefits” forms. *Id.* at 260-61.

The trial court concluded that the Charltons met their burden of showing Mrs. Charlton’s reasonable belief that Dr. Troy was an employee of the Hospital. Trial Court Opinion, 12/31/18, at 277. Viewing the evidence in the light most favorable to the Charltons as the verdict winner, we find sufficient evidence was presented to permit the jury to conclude that a reasonable person in Mrs. Charlton’s position would justifiably believe that Dr. Troy was

employed by the Hospital. Hence, we find no error in the trial court's denial of the Hospital's request for JNOV on ostensible agency.

Having concluded that JNOV was not warranted, we address Defendants' claims that trial court errors necessitated the grant of a new trial. Our standard of review of the denial of a motion for new trial is well settled:

We will reverse a trial court's decision to deny a motion for a new trial only if the trial court abused its discretion. We must review the court's alleged mistake and determine whether the court erred and, if so, whether the error resulted in prejudice necessitating a new trial. If the alleged mistake concerned an error of law, we will scrutinize for legal error. Once we determine whether an error occurred, we must then determine whether the trial court abused its discretion in ruling on the request for a new trial. An abuse of discretion exists when the trial court has rendered a judgment that is manifestly unreasonable, arbitrary, or capricious, has failed to apply the law, or was motivated by partiality, prejudice, bias, or ill will.

Capoferri v. Children's Hosp., 893 A.2d 133, 136 (Pa.Super. 2006) (*en banc*) (citation and internal quotation marks omitted).

First, Defendants contend that the trial court committed reversible error in permitting the Charltons to use the textbook *Neurology of the Newborn* ("Volpe text") to cross-examine Dr. Troy when they did not establish that the text was authoritative and reliable. That error was compounded when counsel for the Charltons was allowed to read in excerpts from the text, which were clearly hearsay, as substantive evidence. In addition, the trial court abused its discretion in permitting the Charltons to place Dr. Volpe's credentials before the jury and argue the substance of the Volpe text in closing.

The law is well settled that “[o]ur standard of review of an evidentiary ruling made by the trial court is extremely narrow.” **Capoferri, supra** at 143. “The admission or exclusion of evidence is a matter within the sound discretion of the trial court, which may only be reversed upon a showing of a manifest abuse of discretion. To constitute reversible error, an evidentiary ruling must not only be erroneous, but also harmful or prejudicial to the complaining party.” **Potochnick v. Perry**, 861 A.2d 277, 282 (Pa.Super. 2004). For the reasons that follow, we find that the trial court erred, the error was extremely prejudicial, and that a new trial is mandated.

The record reveals that Defendants filed a motion *in limine* prior to trial seeking to preclude reference to the Volpe text, which reported a “snapping” or “popping” sound during delivery as being associated with a tearing of the dura of a newborn. They argued that there was no scientific basis for Volpe’s conclusions stated therein. The trial court denied the motion and ruled that the Charltons could introduce expert testimony at trial on the link between the sound and the injury. **See** N.T., 1/8/18, at 160-61.

The Charltons’ pediatric neurology expert Dr. Robert Clancy was asked on direct examination about the significance of the popping sound. He testified that it was known

for decades and decades that if there is enough extension of the neck[,] that the lining tears and it produces a popping or snapping sound when the head is delivered. So I mean this is in like the classic textbook of child neurology like Dr. Volpe’s you know collection of child neurology wisdom about newborns. So that’s actually the sound of something tearing.

N.T., 1/10/18, at 160-61. Defendants objected to Dr. Clancy's substantive reference to the Volpe text, and there was a sidebar. The Charltons' counsel proffered that Dr. Clancy would testify that the Volpe text is "an authoritative text." *Id.* at 164. The court asked counsel for the Charltons what he intended to ask Dr. Clancy about the contents of the article, and he responded that, "the snap is classic and known." *Id.* at 165. The court stated that it would not allow either party to show textbooks to the witnesses. Although the court did not preclude the Charltons from asking Dr. Clancy whether the Volpe text was authoritative, counsel for the Charltons did not pursue that line of inquiry.

The Volpe text was referenced again during the Charltons' cross-examination of Dr. Troy. Counsel for the Charltons advised Dr. Troy that the medical literature described a snapping or popping sound as being the sound of the dura tearing. N.T., 1/16/18, at 44. Dr. Troy responded, "There's nothing in the **obstetrical** literature for over 100 years that described that." *Id.* (emphasis added). Counsel for the Charltons asked Dr. Troy whether he was present when Dr. Clancy testified, and whether he heard Dr. Clancy tell the jury that "it's been well known for years that[,] when the dura is torn[,] there is classically a snapping sound?" *Id.* at 44-45. Dr. Troy asked whether Dr. Clancy had a reference for that, and was told that Dr. Clancy "talked about Volpe's *Neurology of the Newborn*." Dr. Troy said he did not recall that. *Id.* at 45.

Counsel for the Charltons then asked the defendant obstetrician whether he was familiar with “*Neurology of the Newborn*. It’s a neurology textbook specifically to newborn babies.” **Id.** In response, Dr. Troy asked and received confirmation from the Charltons’ counsel that it was not an obstetrical textbook. Dr. Troy then stated that he “had not heard of that textbook before coming to this trial.” **Id.** The Charltons’ counsel questioned Dr. Troy’s ignorance of the textbook.

Q. You never heard of Volpe's Neurology of the Newborn before this trial?

A. I’m an obstetrician, sir.

Id.

Despite the fact that Dr. Troy was unfamiliar with the Volpe text, and had not been asked whether he believed the text was authoritative or reliable, the Charltons’ counsel proceeded to read a portion of the text to the witness. **See** N.T., 1/16/18, at 46 (“So in Volpe’s *Neurology of the Newborn*, Chapter 22, it talks about the pathogenesis of spinal cord injuries. ‘Least elastic is the neonatal spinal cord which is anchored above by the medulla.’”). Defense counsel promptly objected that this was an inappropriate use of the literature, moved to strike, and requested a sidebar to address the issue “at greater length.” **Id.**

An extensive sidebar discussion followed. Defense counsel reminded the court that counsel for the Charltons had attempted to read in portions of the Volpe text during the direct examination of Dr. Clancy in the Plaintiffs’

case, and that a defense objection had been sustained. Defense counsel argued that this was yet another attempt to read in excerpts from the book during the cross-examination of Dr. Troy “[w]ithout any foundation whatsoever and Dr. Troy has indicated this is not an obstetrical textbook. You can’t just start reading a textbook. It’s hearsay.” **Id.** at 47.

When the trial court suggested that the Charltons would first lay a foundation, defense counsel pointed out that they had already tried unsuccessfully to establish half of the foundation necessary: “It’s either that he admits it’s authoritative or that he’s read it and he’s already said he’s not familiar with it, he hasn’t read it.” **Id.** at 48.

Counsel for the Charltons did not respond to this foundational objection. Instead, he argued that Dr. Troy opened the door to such cross-examination when he testified that he was not familiar with the significance of the snapping or popping sound being reported in any literature. **Id.** at 49. According to the Charltons’ counsel, “[Dr. Troy] gave testimony in direct examination that the tearing of the dura is unrelated to the pop. He went and gave causation testimony.”⁸ **Id.** at 49.

⁸ Dr. Troy testified as on cross-examination during the Plaintiffs’ case. He acknowledged that there was a popping sound, but stated “it did not come from the baby.” N.T., 1/15/18, at 234. He maintained that the pop was not due to anything he did. **Id.** at 241. He was unaware of any obstetrical literature that described a popping sound during delivery.

Defense counsel disputed that characterization of Dr. Troy's testimony, clarifying that Dr. Troy stated only that he was unaware of any literature suggesting a relationship between a pop or snap and the injuries sustained. *Id.* at 50. Defense counsel renewed his argument that the rules of evidence applied and that the Charltons could not use the Volpe text, a neurology textbook, to cross-examine the defendant obstetrician absent a proper foundation.

In considering the arguments, the trial court focused on whether Dr. Troy "opened the door" when he said there was no "literature out there" that could explain the pop. *Id.* When it was brought to the court's attention that Dr. Troy had actually referenced **obstetrical** literature, counsel for the Charltons argued that the distinction did not matter as Dr. Troy created the impression that there was nothing in any literature. He characterized the Volpe text as "neurological literature dealing with obstetrics." *Id.* at 53. The court noted, after reviewing portions of the Volpe text, that the writing "was talking about exactly what happened in this case. At the same vertebral levels that occurred in this baby." *Id.* at 56. Defense counsel reminded the trial court that the similarity between the injury in this case and the scenario described in the Volpe text was of no import when the Charltons were trying to use it to improperly cross-examine Dr. Troy, an obstetrician.

Defense counsel also clarified that the transcript from the previous day revealed that Dr. Troy actually said, "I have never read about any pop

occurring with association with the delivery in the **obstetrical** literature.” *Id.* at 62 (emphasis supplied). Defendants argued that Dr. Troy’s testimony did not open the door to the introduction of neurological literature, nor did it permit the use of the textbook with Dr. Troy without first establishing that it was authoritative. *See id.* at 66 (objecting that permitting the use of the Volpe text without any foundation “throws the rules and case law of this Commonwealth out the window”). The court concluded that Defendants were “making too much of a distinction between obstetrical and neurology literature” as “[t]his ha[d] to do with delivering a baby,” and overruled defense counsel’s objections to the use of the Volpe text.⁹ *Id.* at 65, 67.

Defendants duly preserved their objection to the cross-examination of Dr. Troy with the Volpe text in their post-trial motions, their Rule 1925(b) concise statement of errors complained of on appeal, and in their briefs filed in this Court. In addition, they objected repeatedly when the trial court permitted the Charltons’ counsel to read excerpts verbatim from the text to the witness, thus placing it before the jury for its substantive value.

⁹ The trial court later stated that it found Dr. Troy’s claim that there was nothing in the obstetrical literature regarding the popping or snapping sound mentioned by Dr. Volpe in his neurology textbook “more than a tad disingenuous coming from an obstetrician who has practiced for decades.” Trial Court Opinion, 12/31/18, at 179. Hence, it overruled the defense objection and permitted the admission of the text “for the limited purpose of impeaching the Defendant’s credibility.” *Id.* Notably, Dr. Hamar, Plaintiffs’ maternal-fetal medicine expert, testified that he had never heard before of a popping sound during delivery. N.T., 1/10/18, at 293. He was not asked whether he was familiar with the Volpe text.

Defendants also objected when Plaintiffs' counsel directed Dr. Troy to read aloud Dr. Volpe's credentials from the textbook cover, in effect bolstering the credibility of the inadmissible hearsay evidence. Finally, they objected when Plaintiffs' counsel argued the substance of the excerpts to the jury in closing. At every stage of the proceeding, Defendants objected to the improper use of the Volpe text.

We find that no foundation was laid that would establish the Volpe textbook as a learned treatise for the limited purpose of impeaching Dr. Troy. Our rules of evidence do not recognize a hearsay exception for a learned treatise. **See** Pa.R.E. 803(18).¹⁰ A "learned treatise" is any textbook, published work, or periodical that has been accepted as authoritative or as reliable authority by members of a specific professional community. **See** *Ohlbaum on the Pennsylvania Rules of Evidence* 703.15[3]. Under Pennsylvania law, the contents of a learned treatise offered at trial to establish principles or theories is inadmissible hearsay, an extrajudicial declaration offered to prove the truth of the matter asserted. **See** *Aldridge v. Edmunds*, 750 A.2d 292, 296 (Pa. 2000). Experts may rely on authoritative publications

¹⁰ Pa.R.E. 803 is titled "Exceptions to the Rule Against Hearsay--Regardless of Whether the Declarant is Available as a Witness." Rule 803(18) provides: "Statements in Learned Treatises, Periodicals, or Pamphlets (**Not Adopted**)." (emphasis added). The comments to the rule explain that "Pennsylvania has not adopted F.R.E. 803(18), and does not recognize an exception to the hearsay rule for learned treatises[,]" citing *Majdic v. Cincinnati Machine Co.*, 537 A.2d 334 (Pa.Super. 1988) (*en banc*).

in formulating their opinions, and, to a limited extent, our courts permit experts to briefly reference materials to explain the reasons underlying their opinions. **Id.** at 297. While such materials are not admissible, an expert may be impeached with statements contained in a text or publication deemed authoritative or reliable by him or other experts in the same field. **See *McDaniel v. Merck, Sharp & Dohme***, 533 A.2d 436 (Pa.Super. 1987).

In ***Majdic v. Cincinnati Mach. Co.***, 537 A.2d 334 (Pa.Super. 1988) (*en banc*), our Court summarized the applicable principles with regard to the use of learned treatises:

The law in this Commonwealth is well-settled that an expert witness may be cross-examined on the contents of a publication upon which he or she has relied in forming an opinion, and also with respect to any other publication which the expert acknowledges to be a standard work in the field. In such cases, the publication or literature is not admitted for the truth of the matter asserted, but only to challenge the credibility of the witness'[s] opinion and the weight to be accorded thereto. Learned writings which are offered to prove the truth of the matters therein are hearsay and may not properly be admitted into evidence for consideration by the jury.

Id. at 339. **See also *Evanuik v. University of Pittsburgh Western Psychiatric Institute and Clinic***, 338 A.2d 636 (Pa.Super. 1975) (indicating that, as long as a party produced his own expert to verify that the publication is authoritative in the field, an expert witness may be tested by reference to those publications).

In addition, a fact witness's credibility may be challenged on cross-examination with respect to any publication in the field that he considers

generally reliable. **Crespo v. Hughes**, 167 A.3d 168, 182 (Pa.Super. 2017) (citing **Majdic, supra** at 339). **See also Burton-Lister v. Siegel, Sivitz & Lebed Assocs.**, 798 A.2d 231, 239 (Pa.Super. 2002) (finding it permissible to cross-examine defendant physician with a publication he deemed authoritative).

Although the trial court did not state on the record its rationale for permitting the Charltons to impeach Dr. Troy with the Volpe text, it later opined that such use was proper because Dr. Troy “was introduced, groomed[,] and treated as a causation expert for [Appellants] in order for that perception to arise in the mind of the jury.” Trial Court Opinion, 12/31/18, at 230. The trial court reasoned that, as an expert, Dr. Troy could be questioned about the contents of a textbook that he did not recognize as authoritative. **Id.** at 247.

We find that the record does not support the trial court’s conclusion that Dr. Troy testified as an expert witness. As we explained in **Branham v. Rohm & Haas Co.**, 19 A.3d 1094, 1110 (Pa.Super. 2011), “technical expertise does not *ipso facto* convert a fact witness, who might explain how data was gathered, into an expert witness, who renders an opinion based on the data.” “Fact testimony may include opinion or inferences so long as those opinions or inferences are rationally based on the witness’s perceptions and helpful to a clear understanding of his or her testimony.” **Deeds v. Univ. of Pa. Med. Ctr.**, 110 A.3d 1009, 1017-1018, (Pa.Super. 2015) (citation omitted). Dr.

Troy's statement that he did nothing wrong to cause the injury to G.C. did not make him a causation expert as his testimony was based on his own observations and medical judgment at the time he rendered treatment. **See *Crespo, supra*** at 182 (affirming trial court's finding that treating physician was qualified to comment as a fact witness on causation because his testimony was based on his observations, diagnosis, and medical judgment at the time he rendered treatment). As a fact witness, Dr. Troy could only be cross-examined with a publication that he agreed was authoritative or reliable, and that foundation was not laid herein.

Moreover, the trial court's justification for permitting impeachment of Dr. Troy with the Volpe text is legally incorrect even if Dr. Troy was an expert witness. In order to cross-examine an expert with a treatise, either that expert or another expert in the field must attest to the publication's reliability. Absent such a foundation, a text cannot be used to cross-examine even an expert witness. Thus, whether Dr. Troy is viewed as an expert or a fact witness, the trial court erred in permitting him to be cross-examined with a text that neither he nor any expert witness had established as authoritative and reliable in his field of obstetrics, or neurology for that matter. Dr. Hamar rendered no opinion on the reliability of the Volpe text. Despite the proffer noted above, Dr. Clancy was not asked whether the Volpe text was authoritative. Thus, there was no foundation laid for the use of the Volpe text to cross-examine and/or impeach Dr. Troy, and its use was improper.

Nor did Dr. Troy open the door to impeachment with the Volpe text merely because he stated he had never read in the obstetrical literature about a popping sound associated with delivery. **See** N.T., 1/15/18, at 62 (“I have never read about any pop occurring with association with the delivery in the obstetrical literature.”). “A litigant opens the door to inadmissible evidence by presenting proof that creates a false impression refuted by the otherwise prohibited evidence.” **Commonwealth v. Nypaver**, 69 A.3d 708, 716 (Pa.Super. 2013). The existence of the Volpe text, a neurology textbook that referenced a popping sound, simply did not refute Dr. Troy’s statement that he had not read of such a sound in the **obstetrical** literature.

Defendants also alleged error in the manner in which the trial court allowed counsel for the Charltons to “cross-examine” Dr. Troy by reading excerpts verbatim from the Volpe text, and asking Dr. Troy if he had read them correctly. **See Majdic, supra** at 340 (making no distinction between hearsay read into evidence by counsel and that being read by the witness). The defense repeatedly objected to this practice, but the trial court permitted this clearly prohibited use of a publication as substantive evidence.

It is beyond cavil that the Volpe text was used as substantive evidence, *i.e.*, for the truth of the matter asserted. The reading of excerpts from the text invited the jury to view the ‘snapping’ or ‘popping’ sound heard during G.C.’s delivery both as evidence of Dr. Troy’s negligence and as proof that he caused the injury. **See Burton-Lister, supra** at 239 (finding error where a

publication was used to cross-examine a party physician by reading in portions as this use was “an implicit invitation to the jury to view the substance of the material as true”).

Herein, absent a proper foundation, we find there was no permissible use of the Volpe text. Without Dr. Troy’s acknowledgement that it was authoritative or a standard work in his field, the textbook was inadmissible even for the limited purpose of impeaching him. The Volpe text was *per se* inadmissible as substantive evidence. Thereafter, placing the author’s credentials before the jury impermissibly bolstered the credibility of the inadmissible hearsay evidence. Finally, permitting the Charltons to argue the substance of the inadmissible excerpts in closing argument exacerbated the earlier errors.

As with all evidentiary errors, we must determine whether Defendants were prejudiced by the error, *i.e.*, whether the improper uses of the Volpe text may have affected the verdict. The record reveals the following. The Charltons’ counsel handed Dr. Troy a copy of the Volpe text. N.T., 1/16/18, at 67. Then he directed Dr. Troy’s attention to page 96, and asked that the page be displayed in the courtroom. ***Id.*** Defense counsel objected, but the trial court did not rule on the objection. The Charltons’ counsel proceeded to read from the text:

[Plaintiff’s Counsel]: Here’s the question. Does this book, Doctor, state thus it is easy to understand why excessive longitudinal traction results in marked stretching of the vertebral column and rupture of the dura (the “snap”) often heard at

delivery of the aftercoming head in such cases and the spinal cord. The cord ruptures at the site of particular mobility and anchoring, i.e., the lower cervical to upper thoracic region. Did I read that properly, Doctor?

[Defense Counsel]: Objection.

THE COURT: Overruled.

N.T., 1/16/18, at 68.

Plaintiffs' counsel proceeded to read a series of excerpts from the Volpe text and ask Dr. Troy the same question, *i.e.*, whether he had read the text correctly. Counsel read the statement that most cases of spinal cord injury "are associated with excessive longitudinal or lateral traction of the spine or excessive torsion." N.T., 1/16/18, at 71. He went on to read that, "traction is more important in breech deliveries[,] because although the vertebral column, the ligaments, and the muscles and the spinal cord are somewhat elastic, "the dura is somewhat less elastic." ***Id.*** at 72. He continued, "The least elastic is the neonatal spinal cord" and "thus, it is easy to understand why excessive longitudinal traction results in marked stretching of the vertebral column and rupture of the dura." ***Id.*** The *coup de grace* came when counsel explained that the Volpe text equated excessive traction and stretching and rupture of the dura with "the 'snap' often heard at delivery of the after[-]coming head in such cases." ***Id.*** at 73.

We find that the admission of the hearsay evidence from the Volpe text was extremely prejudicial.¹¹ It suggested that Dr. Troy negligently employed

¹¹ Defendants also argue that the court's restriction of their use of authoritative obstetrical textbooks with Dr. Debbs "stands in sharp contrast" to the "unlimited license" afforded the Charltons with the Volpe text. Brief of Dr. Troy, HAN, and Crozer at 50-51. They contend that this disparate treatment exacerbated the prejudice from the improper use of the Volpe text, and that they should have been permitted to ask Dr. Debbs **how** the authoritative obstetrical texts informed his opinion that ultrasound was not required in the circumstances herein. **See** Hospital's brief at 52; Brief of Dr. Troy, HAN, and Crozer at 51.

We have concluded that the trial court committed reversible error in permitting the Charltons to use the Volpe text to cross-examine Dr. Troy without first establishing that he found the text authoritative, and then in permitting its contents to be read to the jury as substantive evidence. We find unpersuasive Defendants' argument that the trial court's limitation of their use of the obstetrical textbooks with Dr. Debbs somehow exacerbated the prejudicial effect of the Volpe text. Defendants sought to use the textbooks to establish that ultrasound was not the standard of care; the Volpe text linked a snapping sound to the use of excessive traction at delivery.

Moreover, Defendants were permitted to elicit testimony establishing that the authoritative obstetrical textbooks informed Dr. Debbs' opinion that ultrasound was not the standard of care. Dr. Debbs testified without objection: "There is nothing in the literature that [Dr. Troy] did not do for this twin delivery that is recommended on a national level, on a local level, and on an international level for a twin delivery under circumstances of Ms. Charlton's pregnancy. He completely complied with all of the standards of care." N.T., 1/17/18, at 47-48. In addition, Dr. Debbs testified that the ACOG bulletin, conceded by Dr. Hamar to be authoritative, did not mention that ultrasound should be performed in the course of a twin delivery. **Id.** at 97. The Charltons objected when Defendants asked Dr. Debbs if "Williams's textbook, which we have in the courtroom, the book that is most prevalent, does that suggest the use of an ultrasound in a twin delivery?" **Id.** at 93. After a discussion at sidebar, the trial court ruled that Defendants could ask Dr. Debbs if "These textbooks Williams, Creasy and Resnik, and Gabbe, did they help you form the basis of your opinion, Doctor, that an ultrasound is not required in this context?" **Id.** at 101-02. Dr. Debbs responded in the affirmative to the

too much traction and ruptured the dura, as evidenced by the “popping” sound. As the trial court recognized in ruling pretrial on the motion in *limine*, the “snapping” or “popping” sound heard during delivery was “the core, or the crux of the entire case.” N.T., 1/8/18, at 54-55. The excerpts from the Volpe text tended to support the Charltons’ theory that the injury to G.C. was caused by Dr. Troy’s negligence during delivery, rather than *in utero* as the defense maintained. Furthermore, although Dr. Clancy alluded to literature describing a “snapping” sound associated with the tearing of the dura during the delivery of an infant’s head, the excerpts from the Volpe text specifically linked that sound to **excessive traction**. **See** N.T., 1/10/18, at 160-61 (emphasis added). It is unclear from the context whether Volpe was describing traction on an infant’s head, feet, or the spinal cord itself. However, words such as “excessive longitudinal traction” likely would have resonated with the jury, and lent credence to Dr. Hamar’s alternative theory that Dr. Troy used too much traction on the infant’s properly-flexed head, the very theory that we concluded was not legally supported by the Charltons’ expert testimony.

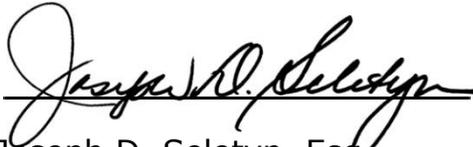
question. Although Dr. Debbs was not permitted to explain further, we do not find that the trial court abused its discretion in this regard. **See Aldridge v. Edmunds**, 750 A.2d 292, 297 (Pa. 2000) (recognizing that since experts may rely on authoritative publications in formulating their opinions, they may briefly reference such materials to explain the reasons underlying their opinions).

In sum, because the error in the admission of this evidence was “of such consequence that, like a dash of ink in a can of milk, it cannot be strained out, the only remedy, so that justice may not ingest a tainted fare, is a new trial.”¹² **Deeds v. Univ. of Pa. Med. Ctr.**, 110 A.3d 1009, 1014 (Pa.Super. 2015) (quoting **Lobalzo v. Varoli**, 185 A.2d 557, 561 (Pa. 1962)).

Accordingly, we vacate the judgment and remand for a new trial.

Judgment vacated. Case remanded for a new trial. Jurisdiction relinquished.

Judgment Entered.

A handwritten signature in black ink, appearing to read "Joseph D. Seletyn", written over a horizontal line.

Joseph D. Seletyn, Esq.
Prothonotary

Date: 7/16/20

¹² In light of our disposition, there is no need to address the remaining issues.