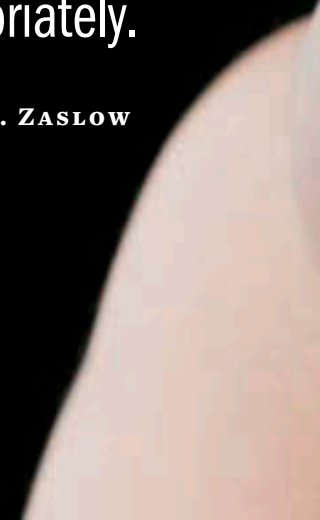
Deconstructing

A permanent brachial plexus injury is devastating to a child. It affects not only what the child can—and can't—do, but also his or her self-image. This injury rarely occurs in the absence of shoulder dystocia and excessive traction by the delivering physician, and the delivery team must be prepared to respond appropriately.

By || **Daryl L. Zaslow**



the BRACHIAL PLEXUS INJURY case

JAMIE GRILL/GLOW IMAGES

In my office, I have a card from the parents of a five-year-old girl who sustained a brachial plexus injury at birth, thanking me for representing their daughter at trial, which they say helped give her a chance at a normal life. That card stands as a constant reminder of how significant permanent brachial plexus injuries are to the children who sustain them and how much responsibility we have when we represent these victims of medical negligence.

These cases—also called shoulder dystocia or Erb's palsy cases—are among the most common categories of obstetrical malpractice claims, and they often involve significant damages.[1] Like almost every subcategory of medical malpractice, these cases present a unique set of issues.

Finding out whether a child's injury is permanent and significant is important not only in assessing whether you should pursue a case but also in determining whether the delivery was **COMPLICATED BY SHOULDER DYSTOCIA.**

The brachial plexus supplies nerves to the shoulder, arm, and hand. When these nerves are stretched or torn, the injury causes weakness or total paralysis of the muscles connected to those nerve roots.

Erb's palsy is the most common form of pediatric brachial plexus palsy. It involves the proximal upper extremity and is caused by a lesion or injury where the fifth and sixth cervical roots unite to form the upper trunk of the brachial plexus. This injury results in diminished use of the entire upper extremity, and the muscle imbalance frequently causes the shoulder to be in an adducted, internally rotated position with the elbow in extension, forearm in pronation, and the wrist and fingers flexed because of weakness in the wrist and finger extensors.

Shoulder dystocia is an obstetrical complication that happens toward the end of the delivery process. It usually involves the baby's anterior shoulder becoming stuck behind the maternal symphysis pubis, or pubic bone.

The definition of shoulder dystocia is controversial. Among the medical literature seemingly published to defend meritorious claims against obstetricians is the American College of Obstetricians and Gynecologists (ACOG) Practice Bulletin No. 40. It defines shoulder dystocia as "a delivery that requires additional obstetric maneuvers following failure of gentle downward traction on the fetal head to effect delivery of the shoulders."[2] Defendant obstetricians and their experts embrace this definition even though the practice bulletin also notes that "because the delivering attendant must determine whether ancillary maneuvers are actually necessary, the diagnosis of shoulder dystocia has a subjective component."[3]

Considering that ACOG promulgates a definition of shoulder dystocia that is subjective, it is no surprise that the complication is underreported. But the degree to which obstetricians fail to record it in medical records is astonishing. One study of nearly 39,000 births in Sweden between 1999 and 2001 reported that shoulder dystocia was recorded in less than 40 percent of deliveries that were complicated by some degree of shoulder impaction.[4]

Whether the lack of recording shoulder dystocia is the result of a genuine failure to appreciate the complication when it occurs or attempts to avoid litigation, the delivery notes will not necessarily show whether a delivery was complicated by shoulder dystocia.

A lack of recorded shoulder dystocia is not fatal to our success in these cases. It should not deter us from taking cases where there is a permanent brachial plexus injury, because the definition of shoulder dystocia is subjective,[5] obstetricians routinely fail to record shoulder dystocia in delivery notes,[6] and permanent brachial plexus injuries are almost always associated with shoulder dystocia.[7]

Plaintiff experts must subscribe to the definition of shoulder dystocia that is most consistent with the anatomic complication. The term "dystocia" means an abnormal, slow, or difficult childbirth, and the most accurate definition of shoulder dystocia is any circumstance in which a baby's shoulders have difficulty fitting through the mother's pelvis.[8]

This definition is invaluable in cases where obstetricians fail to record shoulder dystocia in the delivery notes, yet other medical care providers who were present during the delivery record phrases such as "tight fit at baby's shoulders," "difficult delivery," or "delay in delivering the body of the baby" elsewhere in the patient's chart.

The success of a brachial plexus injury case hinges on your ability to help jurors understand the concepts involved. Defendants often argue that permanent brachial plexus injuries can occur without shoulder dystocia or excessive traction by the delivering attendant. Because obstetricians often fail to memorialize shoulder dystocia in the medical

chart, studies relying on delivery notes to determine whether brachial plexus injuries can occur in the absence of shoulder dystocia are fundamentally flawed. Even physician Robert Gherman, one of the leading authors of medical literature that defense experts rely on, conceded, "We acknowledge that almost all the information concerning the relationship between delivery, shoulder dystocia, and brachial plexus injury has been collected retrospectively and therefore has inherent ascertainment bias. Some of the 'no shoulder' brachial plexus injuries may have actually represented non-recognition or incomplete documentation of antecedent shoulder dystocia."[9]

The Significance of Permanence

Finding out whether a child's injury is permanent and significant is important not only in assessing whether you should pursue a case but also in determining whether the delivery was complicated by shoulder dystocia. Infants who do not recover biceps function by three months of life generally still have evidence of an Erb's palsy injury after two years. Also, a neurological assessment of a child's injury at six months is recognized as a strong prognostic sign.[10]

One study analyzed more than 23,000 deliveries at Johns Hopkins Hospital over 11 years in an effort to determine "whether [brachial plexus palsy] that occurs without [shoulder dystocia] represents a traction injury during unrecognized [shoulder dystocia] or a natural phenomenon with a different mechanism of injury."[11]

The first of the study's two paramount findings was that permanent brachial plexus injuries were almost always associated with shoulder dystocia. "Among permanent [brachial plexus palsies], the rate of shoulder dystocia . . . exceeded 90 percent, confirming the near universal association found in most articles addressing the topic."[12] The rare occurrence of a permanent brachial plexus injury without recorded shoulder dystocia resulted in a mild injury, whereas nerve root avulsions (when the nerve fibers are pulled out of the spinal cord) and significant impairments occurred almost exclusively with shoulder dystocia.[13]

This study also concluded that non-shoulder-dystocia brachial plexus injuries are real, but they are clinically transient, rare, and probably caused differently than shoulder dystocia brachial plexus injuries. The authors found: "Contributors to the mechanism of this temporary injury include asynclitism [the position of a baby in the uterus

AAJ Fights Harmful Med-mal 'Reform' Proposals

BY SUE STEINMAN

Several proposals to restrict patients' rights have emerged in the new Congress and from the White House in recent months. AAJ opposes these and any measures that would limit the rights and remedies available to people injured as a result of negligent medical care.

H.R. 5. This comprehensive tort "reform" bill is a priority for House Republicans, who used this bill number because it's the same one they used the last time they were in the majority, in 2005. H.R. 5 was the first bill the Judiciary Committee considered in January.

Like most restrictive tort "reform" measures, it caps noneconomic damages at $250,000. It also seriously restricts punitive damages, eliminates joint liability, and limits attorney fees. It shortens the time period for filing cases and makes it harder for injured patients to be fully compensated for devastating injuries. The bill applies not only to medical malpractice but also to pharmaceutical, nursing home, and insurance bad-faith cases.

Its restrictions apply regardless of the theory of liability. So it would limit even the rights of patients and nursing home residents who are physically or sexually abused by a health care provider or nursing home employee.

In February, the House Judiciary Committee voted the bill out of committee. AAJ Public Affairs expects it to be reviewed briefly by the House Energy and Commerce Committee and then to go to the floor for full consideration by all members of the House.

Medical malpractice pilot projects. President Barack Obama's 2012 budget includes $250 million for medical malpractice pilot projects to be administered by the Department of Justice. AAJ opposes these projects, which would provide incentive grants to states to implement tort "reforms," such as instituting health courts and eliminating the collateral source rule, a provision that was removed from H.R. 5 during the House Judiciary Committee's consideration of the bill.

Last year, AAJ supported the administration's $25 million "medical liability and patient safety" pilot projects, administered by the Department of Health and Human Services, because the grants were given to hospital systems and other entities that focused on reducing medical errors. The results of these projects should be reviewed before determining whether additional pilot projects are necessary.

AAJ is fighting back against med-mal "reform" proposals with a comprehensive advocacy and media plan, and you can help. To receive the most recent news about H.R. 5, join our "protect patients" list server. E-mail Sam Kruzel at sam.kruzel@justice.org to join.

Your clients also can make a difference in this debate. Send your medical malpractice, medical products, nursing home, and insurance bad-faith cases to Kruzel. He can provide you with a form to fill out about your client's case.

To send a message to your member of Congress urging a "no" vote on H.R. 5, go to www.peopleoverprofits.org. To contribute to the AAJ advocacy and media campaign to defeat this legislation, go to www.justice.org/ProtectPatients/Contribute.

Sue Steinman is AAJ's director of policy.

such that the head is tilted to the side, causing the fetal head to be out of line with the birth canal], posterior shoulder involvement, and decreased muscle tone from fetal acidosis."[14] This conclusion explains why there have been legitimate reports of brachial plexus injuries following births that were not complicated by shoulder dystocia and where traction was not applied.

The Defendant's Deposition

The defendant's deposition is the juncture in discovery when you can seize control over the issue of liability. Unless your jurisdiction prohibits the video recording of depositions, all defendant depositions should be recorded. On several occasions, I have given defendants models of a pelvis and baby and asked them to demonstrate the baby's position at the time shoulder dystocia was encountered. When they attempted to do so, they confused right and left occiput anterior presentations. Showing this gaffe to jurors on video is more powerful than reading it to them from a transcript.

Defense attorneys who specialize in obstetrical malpractice tend to be among the most skilled and redoubtable attorneys of the defense bar, so you should expect defendants to be well prepared for their depositions. Typically, defendants explain with ease the technical aspects of the maneuvers they employed to dislodge the impacted shoulder during the delivery. But often, they can't articulate with any precision the other acceptable maneuvers that could have been—but were not—used to free the infant. This shows that they may not be familiar with all the issues surrounding shoulder dystocia.

Try to obtain the following concessions when deposing defendants.

- In a delivery that is complicated by shoulder dystocia, traction applied to the baby's head by the obstetrician can cause a permanent brachial plexus injury.
- In a delivery complicated by shoulder dystocia, *gentle* traction on the baby's head by the obstetrician will *not* cause a permanent brachial plexus injury.[15]
- Except when obstetricians deliberately use excessive traction to avoid an imminent asphyxic injury, excessive traction constitutes a deviation from accepted standards of care.
- There was no reason for the defendant to intentionally apply excessive traction in the delivery at issue because there was no imminent risk of an asphyxic injury. (If the deliberate use of excessive traction is not recorded in the chart, defendants will have to concede this or admit they wrote an incomplete delivery note. Also, a legitimate imminent risk of asphyxia should be supported by low Apgar scores and/or some level of acidosis.)

If you secure these concessions, and the injury was caused by traction, the traction must have been excessive.

Defendants who do not remember the deliveries at issue frequently attempt to bolster what they recorded in the medical record by testifying based on their "custom and practice." However, most jurisdictions prohibit character evidence to prove that the person conformed with that custom on a particular occasion, and for such testimony to constitute admissible habit evidence, the evidence must refer to a repeated behavioral response to a specific factual stimulus.[16]

Accordingly, it is important to ask the defendants in deposition to explain in detail all their experience handling deliveries complicated by shoulder dystocia. Similarly, make sure they explain the sequence and detail of all the maneuvers they used in connection with each of these prior deliveries. Defendants who do not have the requisite experience handling deliveries complicated by shoulder dystocia or used different maneuvers to handle prior deliveries complicated by shoulder dystocia should be barred from testifying what their custom and practice was because they fail to meet the onerous evidentiary rules regarding habit evidence.

Often, defendants can't articulate with any precision the acceptable maneuvers that could have been—but were not—used to **FREE THE INFANT.**

Medical Literature

If the defense conceded that excessive traction on a baby's head, without a legitimate concern of an imminent asphyxic injury, constitutes a deviation from the accepted standard of care, the case boils down to the jury's decision regarding causation. You must persuade the jury that your client's injury was caused by excessive traction.

To achieve this, you may have to arm your experts with the medical literature they need to support their opinions. Of course, the use of medical literature varies from jurisdiction to jurisdiction and

too frequently from judge to judge.

The relevant medical literature generally falls under two categories. The first is the defense literature written over the last 15 years by obstetricians and usually published by ACOG. It contends that the natural forces of labor and birth can cause these injuries.[17] Generally, this literature is undermined by the fact that the studies supporting it are typically based on reviewing delivery notes that do not memorialize shoulder dystocia,[18] and the studies do not distinguish between transient and permanent brachial plexus injuries. These are fatal flaws. Jurors may understand the problem as "garbage in, garbage out."[19]

The second category of medical literature is written by physicians who diagnose brachial plexus injuries and treat children who have them: pediatricians, pediatric neurologists, and pediatric orthopedists. Jurors understand that unlike obstetricians—whose literature is motivated by a desire to insulate themselves from meritorious claims—pediatricians, pediatric neurologists, and pediatric orthopedists are not the putative defendants in these cases, so their conclusions regarding causation are more objective and reliable.

While the defense literature seeks to ascribe these injuries to the natural forces of labor and delivery, the seminal pediatric neurology treatise notes that they are caused by excessive traction:

> Brachial plexus injury is thought to result from stretching of the brachial plexus, with its roots anchored to the cervical cord, by extreme lateral traction. The traction is exerted via the shoulder, in the process of delivering the head with breech deliveries, and by the head, in the process of delivering the shoulder in cephalic deliveries. . . . The relatively rare occurrence of intrauterine injury to the brachial plexus has been secondary to abnormalities of fetal position or of uterine structure.[20]

The damages in these cases extend far beyond the physical limitations that result from permanent brachial plexus injuries. Through empathy, assiduous preparation, anecdotes, and argument, the plaintiff lawyer must ensure that jurors understand the impact of an injury on the child's self-image and confidence. Children with these injuries have a physical deformity that affects everything in their lives, from the clothes they choose to wear to the activities they choose to participate in.

These children, who are routinely chosen last by their peers when sports teams are picked in gym class and on the playground, and who are self-conscious because their arms "look funny," are relying on us to secure them justice. A thorough understanding of the issues involved in these cases will help achieve that goal. T

Daryl L. Zaslow is a partner in Eichen, Crutchlow, Zaslow, and McElroy in Edison, Red Bank, and Toms River, New Jersey.

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Notes

1. Gary N. McAbee & Carman Ciervo, *Medical and Legal Issues Related to Brachial Plexus Injuries in Neonates*, 106 J. Am. Osteopathic Assn. 209 (2006) (citing Physicians Insurers Assn. Am., *Data Sharing Project 1985–2001* (Physicians Insurers Assn. Am., 2002); *see also* Dawn Collins, *Why Do Patients Sue Their Obstetrician/Gynecologists?*, 18 Contemporary Obstetrics & Gynecology 345 (2000).
2. Robert J. Sokol et al., *ACOG Practice Bull. No. 40: Shoulder Dystocia*, 100 Obstetrics & Gynecology 1045, 1045 (2002).
3. *Id.*
4. Margareta Mollberg et al., *Obstetric Brachial Plexus Palsy: A Prospective Study on Risk Factors Related to Manual Assistance during the Second Stage of Labor*, 86 Acta Obstetricia et Gynecologica 198, 202 (2007).
5. *See* Sokol et al., *supra* n. 2.
6. *See e.g.* Mollberg et al., *supra* n. 4, at 202–03.
7. *See e.g.* Edith D. Gurewitsch et al., *Risk Factors for Brachial Plexus Injury with and without Shoulder Dystocia*, 194 Am. J. Obstetrics & Gynecology 486, 489 (2006).
8. *Williams Obstetrics* ch. 20, at 464 (F. Gary Cunningham et al. eds., 23d ed., McGraw-Hill 2010).
9. Robert B. Gherman et al., *Brachial Plexus Palsy: An In Utero Injury?*, 180 Am. J. Obstetrics & Gynecology 1303, 1306 (1999).
10. *See* Joseph J. Volpe, *Neurology of the Newborn* 959, 974–75 (5th ed., Saunders 2008).
11. Gurewitsch et al., *supra* n. 7, at 487.
12. *Id.* at 489.
13. *Id.* at 490.
14. *Id.* at 491.
15. If you have difficulty obtaining this concession, remind the defendant that ACOG's definition of shoulder dystocia recognizes the application of gentle traction, and obstetricians are trained that it is acceptable to apply gentle traction during deliveries complicated by shoulder dystocia. It would be an indictment of the entire obstetrical community to admit that obstetricians are trained to perform maneuvers that could result in permanent injuries. So obstetricians usually admit that because they learned the use of gentle traction, and ACOG endorsed that practice, it will not cause a permanent brachial plexus injury.
16. *See* Fed. R. Evid. 404, 406.
17. *See e.g.* Bernard Gonik et al., *Mathematic Modeling of Forces Associated with Shoulder Dystocia: A Comparison of Endogenous and Exogenous Sources*, 182 Am. J. Obstetrics & Gynecology 689, 689–91 (2000); Herbert F. Sandmire & Robert K. DeMott, *Erb's Palsy: Concepts of Causation*, 95 Obstetrics & Gynecology 941, 941–42 (2000).
18. *See e.g.* Gurewitsch et al., *supra* n. 7, at 490; Mollberg et al., *supra* n. 4, at 202–03.
19. *See* Susan Shott, *Protect Your Case from Invalid Statistics*, Trial 46 (Sept. 2009), www.justice.org/cps/rde/xchg/justice/hs.xsl/10298.htm.
20. Volpe, *supra* n. 10, at 972.