FIRST DIVISION
June 26, 2006

No. 1-04-2478

BELINDA BOWMAN, Indiv. and as Independent Adm'r of the Estate of Solomon Bowman, a Minor, Deceased,	)	Appeal from the Circuit Court of Cook County
Plaintiff-Appellant,	)	
v.	)	No. 00 L 7346
THE UNIVERSITY OF CHICAGO HOSPITALS, KWANG-SUN LEE, and MICHAEL SCHREIBER,	)	Honorable Thomas L. Hogan,
Defendants-Appellees.	)	Judge Presiding.

PRESIDING JUSTICE CAHILL delivered the opinion of the court:

Plaintiff Belinda Bowman brought a medical negligence action against defendants University of Chicago Hospitals, Dr. Kwang-Sun Lee and Dr. Michael Schreiber after her newborn son Solomon died in defendant hospital's neonatal intensive care unit. Plaintiff dismissed defendant Schreiber before trial. A jury found in favor of defendants and against plaintiff. Plaintiff appeals, claiming: (1) the jury's verdict was against the manifest weight of the evidence; (2) the trial court erred in denying her motion for a directed verdict; and (3) the trial court allowed improper cross-examination of plaintiff's expert witnesses. We affirm.

The evidence at trial showed the following facts. Solomon was delivered prematurely in an emergency Caesarian section at defendant hospital on August 6, 1999. (All dates that follow

are in the year 1999 unless otherwise noted.) Solomon was placed on a ventilator with an endotracheal tube and started on antibiotics because of the risk of infection. On August 9, cultures taken from him were negative for an infection and antibiotics were discontinued. Solomon's physicians became concerned about a possible infection again on August 13, but a culture from Solomon's endotracheal tube was negative. From then until August 21, Solomon appeared to be progressing well. Then Solomon's blood counts began to change, including a "shift to the left," a particular type of change in the blood count. Solomon looked clinically ill late on August 25 or early on August 26. His physicians conducted additional tests and gave him antibiotics, but he developed an infection and septic shock. Solomon died on August 28.

Plaintiff presented the testimony of defendant Lee, who testified as an adverse witness under section 2-1101 of the Code of Civil Procedure (735 ILCS 5/2-1102 (West 2000)). Lee said Solomon was born prematurely and died from pneumonia and sepsis. Lee agreed that a pseudomonas organism colonized at the site of the baby's trachea, then went to the lungs and bloodstream. Lee testified that if doctors suspect sepsis based on a baby's clinical signs, they perform blood tests and administer antibiotics. Lee testified that if a baby has a colonization of pseudomonas organisms, the condition is not treated unless the baby shows signs of infection, pneumonia or sepsis. He said pseudomonas is rare. He testified that he met the standard of care in this case. Lee admitted that a chest X Ray on August 26 showed "a density which is compatible with pneumonia." Lee said he thought pseudomonas was "quite possible" when the baby became seriously ill. He testified that an infectious disease doctor ordered a pseudomonas-specific antibiotic for Solomon on August 27.

Dr. Blaise Congeni, a pediatric infectious disease specialist, testified as plaintiff's expert.

Congeni said his opinions were based on Solomon's hospital chart. He said Lee deviated from the standard of care in treating Solomon. He opined that if a tracheal and aspirate culture had been taken on August 22, the presence of pseudomonas would have been known by August 23, and that the standard of care specified that antibiotics should have been given at that time. Congeni testified that there was no culture until August 26 and no therapy until August 27. He opined that had Solomon been given pseudomonas therapy by August 24, he would have survived. He agreed that Solomon "was doing pretty well symptomologically up until *** the late evening of the 25th." He said the medical term "shift to the left" means that a blood count has shifted toward more immature cells. He said infection soon comes to mind when a “shift to the left” is seen. He gave his opinion to a reasonable degree of medical certainty that Lee deviated from the standard of care. He testified that the deviation was a failure to respond to the "shift to the left," to do a culture on August 22 and to provide pseudomonas therapy on August 23. This, he testified, caused or contributed to Solomon’s death.

Congeni admitted on cross-examination that a "shift to the left" can have causes other than infection. He testified that 99% or more of his practice deals with children older and bigger than Solomon. He said a bad result from a doctor's judgment call is not the same as medical negligence. Defense counsel asked Congeni if textbooks would contain useful information. Plaintiff's counsel objected on the basis that defense counsel intended to introduce literature that the witness had not designated as authoritative, but only as helpful and reliable. Congeni testified in response to the objection that he considered the pediatric textbook by Drs. Jack S. Remington and Jerome O. Klein to be a standard, well-respected text. A table from the Remington and Klein text was admitted into evidence. The table showed the outcomes of

neonatal bacterial systemic infection at Parkland Memorial Hospital from 1969 to 1989. The table showed a 76% mortality rate in babies with pseudomonas. Congeni agreed with statements from the text that bacterial infection may "masquerade" as other noninfectious conditions and that signs and symptoms of an infection may be vague and misleading. On redirect, Congeni testified that the standard of care required a sputum and blood culture on August 22.

Plaintiff called Dr. Marcus Hermansen, a pediatrician and neonatologist. Hermansen testified that Lee deviated from the standard of care in his treatment of Solomon and that those deviations were the direct cause of the baby's death. He said Lee deviated from the standard of care by not obtaining cultures on August 21 when infection should have been ruled out as part of a differential diagnosis. Hermansen said that, based on the information about the baby on August 21, he would have been "highly suspicious for an infection." He opined that had antibiotics against pseudomonas been started on August 21, 22 or 23, the baby would have recovered and survived. Hermansen said he receives 15% to 20% of his income from medical/legal work and he reviews more cases for plaintiffs than for defendants.

Hermansen said on cross-examination that Solomon's risk factors at birth gave him a 75% to 80% chance of survival. He testified that there is a statistically significant association between intrauterine growth restriction, which Solomon had suffered, and neonatal death. During questioning on blood counts, Hermansen testified that "two very good authors to look at" on the subject were doctors other than Remington and Klein. Plaintiff objected to questions about the works of those other authors which the court overruled. Hermansen called the textbook "Infectious Diseases of the Newborn" by Remington and Klein a "very good book." He agreed that virtually everyone in his field is aware of it, it is a "standard book" and "a good

source." When defense counsel asked whether the text suggested a point at which certain blood counts required action, plaintiff's counsel objected and the trial court sustained the objection.

Plaintiff called Dr. David Jung, a senior resident at defendant hospital in 1999. Jung testified he remembered plaintiff and Solomon. He said that a pseudomonas infection is one of the major hospital-acquired infections and infants on respirators are targets for the infection. He said an infection was not ruled out in Solomon's case from August 21 to 26. Jung testified there was no reason to order blood cultures or antibiotics on August 23 because there were no signs of infection and the baby was doing very well. He said there were no signs or symptoms of infection on August 24 or 25. He testified that the endotracheal tube culture showed pseudomonas and another bug. He said his notes showed that the blood culture taken on August 26 was not known to be positive for pseudomonas until August 28. He said Solomon's course showed a sudden change.

Jung testified on cross-examination that the medical records showed that, by 9:56 p.m. on August 26, someone in neonatology had determined that Solomon had pseudomonas sepsis. He said broad-based antibiotics were prescribed before he was 100% positive that the baby had pseudomonas.

Plaintiff called Dr. Wit-Hung Nghiem, a neonatologist, who was a first-year intern at defendant hospital in August 1999. She said she had no independent recollection of the case and her testimony was based on review of the records. She said a baby suffering from an infection could be asymptomatic. Nghiem said a baby in a neonatal intensive care unit on a ventilator with an endotracheal tube was at high risk for a pseudomonas infection. But there was nothing in the lab values or the status of the baby on August 24 that was consistent with a pseudomonas

infection of the lungs. She said the ventilator setting on August 25 showed that the baby was doing well from a respiratory point of view. Nghiem said there was nothing before August 26 in Solomon's clinical presentation that made her suspect an infection.

Plaintiff and her mother, Patricia Bowman, also testified.

Defendants called Dr. Michael Scott Caplan, a neonatologist. He testified that in children born with weights of less than 1,500 grams, the incidence of infection is "pretty high," that 1% to 2% of those infections are caused by pseudomonas and the mortality rate is between 50% and 75% "despite appropriate care." He said there had not been appreciable improvement in treating pseudomonas between the 1980s and the 1990s and 2000s because the babies "present very abruptly with an overwhelming presentation of shock and bleeding and respiratory failure and kidney failure." Caplan said Lee complied with the standard of care. He opined that the standard of care did not require a blood or sputum culture before August 26. He said that the earliest a culture would have been positive for pseudomonas would have been 2 p.m. on August 25. Caplan testified that Solomon suffered from intrauterine growth restriction before he was born, and he was small, even for his gestational age. He opined that Solomon was clinically stable until the early morning hours of August 26. He said even if an aspirate culture on August 22 had been positive for pseudomonas, the standard of care would not have required that it be treated because of the danger of using broad-spectrum antibiotics on mere colonizations of organisms. He said that a "shift to the left" in a blood count does not mean a baby has an infection. Caplan opined that once pseudomonas was in Solomon's lungs, his chances of survival were less than 50%.

Caplan testified on cross-examination to his opinion that cultures were not necessary on

August 21 or 22 because Solomon was not displaying outward manifestations of illness and he looked stable. Caplan said until August 25, there was an 80% to 90% chance Solomon would survive to go home. Caplan said he did not know what caused the "left shift" in Solomon's blood count on August 21, 22, 23 and 25, but an infection could have been one of the prime causes and should have been ruled out as part of a differential diagnosis. He admitted that the incidence of pseudomonas in late onset respiratory pneumonia in a baby on a ventilator in a neonatal intensive care unit is more than 2% and possibly as high as 11%.

On redirect examination, Caplan testified that there would have been no way in clinical practice to confirm that bacteria in the lung were causing pneumonia and that antibiotics were needed. He said the only way to determine if bacteria are in the lung is to do a lung biopsy, which is not possible in a premature baby.

Dr. Stanford Taylor Shulman, an expert in pediatric infectious disease, was called by the defense. He said he earned 15% or 20% of his income from testifying as a medical expert and he worked two-thirds of the time for defendants. He opined that Solomon developed a pseudomonas infection very late on August 25 or very early on August 26. He found Solomon to be stable and improving up until the early morning hours of August 26 when he deteriorated dramatically. Shulman said there was no indication for ordering cultures in a child who was doing well. He said, "without clinical signs of infection, it really would be the wrong thing to do to treat a patient who's clinically well but appears to be colonized with a germ like pseudomonas." He opined that it is virtually inconceivable that blood cultures earlier than late on August 25 would have been positive for pseudomonas. Shulman said it would have been virtually impossible for a blood culture ordered on August 23 to have come back positive for

pseudomonas. He opined that giving Solomon antipseudomonal antibiotics before August 26 "would absolutely not have been required to meet the standard of care. In fact, it would have been contraindicated." Shulman said if Solomon had been given pseudomonas antibiotics on August 23 or 24, it would not have affected the outcome of the case.

Shulman opined that once Solomon developed pseudomonas infection his chances of survival were 20% to 25%. Shulman said an abnormal white blood cell count is not a good indicator of infection in a newborn because it can be caused by other stressors. He said he did not believe the standard of care required that infection be included in the differential diagnosis in Solomon's care from August 21 through 25. He opined that within a reasonable degree of medical certainty Lee complied with the standard of care in treating and caring for Solomon.

Shulman admitted on cross-examination that he is not a neonatologist. He agreed that on August 21 and 22 there was a “left shift” in Solomon’s blood count and a “left shift” "strongly suggests the presence of infection."

Terri Collins Novak, a registered nurse who cared for Solomon on August 21 and 22, testified that Solomon's vital signs were stable and within the normal range. Novak said she did not see anything during her shift that caused her concern that the baby had an infection. She said she has treated babies with pseudomonas in the past and she did not see signs of pseudomonas in Solomon. Novak admitted on cross-examination that she had cared for fewer than five very sick babies with pseudomonas. She agreed that some of the signs she saw in Solomon can be signs of infection.

Mary Beth Hellinga, a registered nurse who cared for Solomon from 7 p.m. on August 23 to 7 a.m. on August 24, testified that his condition was stable and he showed no signs of

infection. On cross-examination she admitted she had no independent knowledge of plaintiff or Solomon and relied on charts for her testimony.

Lee Ann Bruce, a registered nurse who cared for Solomon from 7 p.m. on August 24 to 7 a.m. on August 25, testified that when she began her shift, Solomon's clinical status was within normal limits and stable except for a bradycardia and desaturation that morning. No further bradycardias or desaturations were documented after that. During her shift, his vital signs were within normal limits. She testified that plaintiff had concerns about the baby's episodes of apnea and bradycardia. Bruce admitted on cross-examination that she had no independent recollection of caring for Solomon.

Tina Boersma, a registered nurse who cared for Solomon on August 19, 20, 21, 23 and 25, said Solomon had stable vital signs with frequent episodes of bradycardia with desaturations. She said it was not unusual for babies of his size to have bradycardias. Solomon's vital signs were stable during her shift from 7 a.m. to 7 p.m. on August 25, with no apneas or bradycardias and no signs of infection. His mother was present and helped bathe him. Boersma admitted on cross-examination that bradycardias and desaturations can be signs of infection. She testified that in her deposition she had said there was a change in the baby's condition on August 21 and he received a blood transfusion for anemia. She said she had never known anemia to be a sign of infection. She knew that a “shift to the left” in blood tests can indicate an infection. She said a specimen from an endotracheal tube can be cultured if so ordered. She said that on August 21, the doctor was notified that Solomon was having apneas, bradycardia and his capillary blood gas was drawn. Boersma testified on redirect examination that there were no changes in Solomon’s condition on August 21 that suggested an infection.

Rosetta Hopkins, a neonatal staff nurse who cared for Solomon, testified that the baby was premature but stable throughout the time she cared for him and she did not see signs of an infection. She did not care for him after August 21.

The defense called Lee, who testified that Solomon died of pseudomonas pneumonia and sepsis. Lee estimated that in 30 years of practice he had seen only about 10 pseudomonas cases. He said the pseudomonas bacteria are ubiquitious, estimating that 5% to 10% of all people carry the germ in their mouth or on their skin. He said healthy people can live with pseudomonas, but immunologically incompetent or impaired people such as premature babies tend to have serious infections with pseudomonas. Lee said a colonization means that bacteria are living in, not invading, an area of the body and some studies show that more than half of intubated infants will have a colonization of one or more bacteria after several days. He said that if a baby is given antibiotics it sometimes will make the organism more virulent because more virulent strains of the organism survive antibiotic treatment. Lee opined that Solomon's death could not have been prevented by treating a colonization of pseudomonas, if a colonization existed.

Dr. Frank Thorp testified that he was a physician with the hospital's pediatric nutrition support services when Solomon was hospitalized. He described Solomon as a "high-risk" infant. He said, "we thought on our service [Solomon] had done spectacularly well for one to two weeks of intravenous feeding and then [he] very rapidly developed sepsis and could not respond to treatment and we were very surprised and startled by that." Thorp testified that Solomon's condition was stable until late afternoon on August 26 when he began to show signs of distress. Thorp admitted on cross-examination that the diagnosis of infection is not his area of expertise.

At the close of evidence, plaintiff moved for a directed verdict which the trial court

denied. The jury returned a verdict for defendants and against plaintiff.

Plaintiff's first claim on appeal is that she is entitled to a new trial because the jury's verdict was against the manifest weight of the evidence.

To prove medical negligence, the plaintiff must show that the defendant owed a duty of care to the plaintiff, the defendant breached that duty and the breach was the proximate cause of the plaintiff's injury. Knauerhaze v. Nelson, 361 Ill. App. 3d 538, 548, 836 N.E.2d 640 (2005). Medical expert testimony is necessary to prove the elements of medical negligence. Knauerhaze, 361 Ill. App. 3d at 549. "[T]o sustain the burden of proof, a plaintiff's expert must demonstrate within a reasonable degree of medical certainty that the defendant's breach in the standard of care is more probably than not the cause of the injury." Knauerhaze, 361 Ill. App. 3d at 549. It is the jury's role to assess the weight and sufficiency of the evidence, including the credibility of the experts' testimony, and to resolve the factual question of proximate cause. Knauerhaze, 361 Ill. App. 3d at 550.

In reviewing a claim that a jury's verdict was against the manifest weight of the evidence, a court will find error "where the opposite conclusion is clearly evident or where the findings of the jury are unreasonable, arbitrary, and not based upon any of the evidence." Snelson v. Kamm, 204 Ill. 2d 1, 35, 787 N.E.2d 796 (2003). A reviewing court may not simply reweigh the evidence and substitute its judgment for that of the jury. Snelson, 204 Ill. 2d at 35.

Here, the jury heard evidence in plaintiff s favor, including the following statements. Congeni said Lee deviated from the standard of care by not taking tracheal and aspirate cultures or responding to the shift to the left in Solomon s blood count. Hermansen said Lee deviated from the standard of care by failing to obtain cultures earlier when antibiotics would have saved the baby. Jung said infants on respirators are prone

to infections. Shulman said the shift to the left strongly suggested infection. Novak said some signs she saw in Solomon could have been signs of infection. Boersma said that bradycardias and desaturations can be signs of infection and Solomon s doctor was notified of these signs. Boersma also knew that a shift to the left could be a sign of infection. Also potentially favorable to plaintiff was the fact that Some, but not all, of the defense witnesses who cared for Solomon said they had no independent recollection of Solomon and relied on charts for their testimony.

The jury heard evidence in defendants' favor, including the following statements. Lee said he met the standard of care. Lee said Solomon's death could not have been prevented by treating a colonization of pseudomonas if one existed. Congeni said bacterial infection may masquerade and its symptoms are vague and misleading. Caplan said Lee met the standard of care. Caplan said Lee was not required to order a culture before August 26 and if he had, it probably would have been negative. Caplan said a "shift to the left" does not mean an infection is present. Jung said that when Solomon's condition changed suddenly his doctors did, in fact, start a broad-based antibiotic before they were 100% positive of the presence of pseudomonas. Ngheim said nothing before August 26 made her suspect an infection. Shulman said Lee complied with standards and antipseudomonal antibiotics would have been contraindicated before August 26. Novak said Solomon was stable, his vital signs were within normal range and she saw no signs of pseudomonas. Hellinga said Solomon's condition was stable with no signs of infection. Bruce said the baby's vital signs were normal except for incidents of apnea and bradycardia.

We find this evidence to be balanced but sufficiently favorable to defendants to allow the jury to arrive at its verdict. It would not have been unreasonable or arbitrary for the jury to

conclude that plaintiff's experts did not demonstrate within a reasonable degree of medical certainty that defendants breached the standard of care and that the breach was more likely than not the cause of Solomon's death. The jurors had the benefit of observing the demeanor of the witnesses. Because neither side submitted a special interrogatory to determine the jury's conclusions on specific issues, it cannot be known for certain how it reached its verdict. But the testimony of plaintiff's experts could have led the jury to conclude that plaintiff had not met her burden of proof. For example, the jury could have been swayed by Congeni's statement that a bad result from a doctor's judgment call is not the same as negligence. Or by Hermansen's statement that Solomon's condition at birth alone was enough to diminish his chances of survival by 20% to 25%. Congeni's credibility could have been affected by his admission that only about 1% of his practice was devoted to babies as young and small as Solomon. Hermansen's credibility could have been diminished by his admission that he testified mainly for plaintiffs. These possible interpretations of the evidence, combined with the testimony of defense experts that defendants did not breach the standard of care, support the conclusion that the jury's verdict was not against the manifest weight of the evidence.

Plaintiff next claims that the trial court erred in denying her motion for a directed verdict. We apply the *de novo* standard of review to the trial court s denial of a motion for a directed verdict. **Buckholtz v. MacNeal Hospital, 337 Ill. App. 3d 163, 167, 785 N.E.2d 162 2003 .**

V *erdicts ought to be directed only in those cases in which all of the evidence, when viewed in its aspect most favorable to the opponent, so overwhelmingly favors movant that no contrary verdict based on that evidence could ever stand.* **Buckholtz, 337 Ill. App. 3d at 167,** *quoting* **Pedrick v. Peoria**

Eastern R.R. Co., 37 Ill. 2d 494, 510, 229 N.E.2d 504, 513-14 (1967).

Here, having viewed all the evidence in a light most favorable to defendant, we cannot say that the evidence so overwhelmingly favored the plaintiff that no contrary verdict could stand. Both sides presented extensive evidence by experts and occurrence witnesses to support their theories. The evidence appears to us to be sufficiently closely balanced that neither side was dominant. The role of the jury was to weigh the evidence and assess the credibility of witnesses. Nothing in the record suggests that a verdict in favor of defendants was fatally flawed.

Finally, we address plaintiff's claim that she is entitled to a new trial because the trial court erred in allowing defendants to cross-examine plaintiff's experts, Congeni and Hermansen, with medical literature that was irrelevant and lacked an adequate foundation for introduction into evidence. In particular, plaintiff disputes the admission of the Parkland hospital study conducted between 1969 and 1989 and reported in the Remington and Klein text.

Decisions of the trial court on the admission of evidence will not be disturbed absent an abuse of discretion. Foley v. Fletcher, 361 Ill. App. 3d 39, 46, 836 N.E.2d 667 (2005). A court abuses its discretion when no reasonable person would agree with the trial court's decision. Skubak v. Lutheran General Health Care Systems, 339 Ill. App. 3d 30, 36, 790 N.E.2d 67 (2003). In general, cross-examination of an expert witness with material from "a recognized text or treatise is proper where either the court has taken judicial notice of the author's competence [citation] or, absent concession by the witness, the cross-examiner proves the text or treatise is authoritative [citations]." People v. Johnson, 206 Ill. App. 3d 875, 879, 564 N.E.2d 1310 (1990). An author's competence can be established by a witness with expertise in the subject matter. Darling v. Charleston Community Memorial Hospital, 33 Ill. 2d 326, 336, 211

N.E.2d 253 (1965).

Here, Congeni testified that the Remington and Klein text was "standard" and "well-respected." Hermansen called the Remington and Klein text "a very good book," a "standard book" and "a good source." The topic of the text and the study—infectious diseases in newborns—was relevant as evidence in a trial arising from the death of a newborn baby from an infection. The record shows that the competence of the authors and the authority of the texts in question were established through the testimony of expert witnesses. We do not find the fact that neither expert used the term "authoritative" to be controlling. The terms they did use were sufficient to prove the authority of the text at issue and justify defense counsel's use of the works on cross-examination of plaintiff's witnesses.

Plaintiff argues that Brown v. Arco Petroleum Products Co., 195 Ill. App. 3d 563, 570, 552 N.E.2d 1003 (1989), requires a finding that defendant's use of the Remington and Klein material to cross-examine plaintiff's witnesses was improper because the authors' competency was not established by judicial notice or the questioning of the experts or other witnesses. In Brown, the appellate court reversed a jury verdict and remanded the cause for a new trial due to the cumulative effects of several errors, including the improper cross-examination of medical expert witnesses with *unidentified* material. Brown, 195 Ill. App. 3d at 570-71. There, the material was never identified and so its authority could not have been established. Witnesses were not questioned about the author's competency, judicial notice was not taken of the author's competency and no witness was called to establish the authority of the material. Brown, 195 Ill. App. 3d at 570.

Here, the Remington and Klein text was clearly identified. The expert witnesses

described the authors and their work as "well-respected," "very good authors to look at," "standard," "a very good book" and "a good source." Darling requires that an author's competence be established by judicial notice *or* by expert witness testimony. Darling, 33 Ill. 2d 336. The expert witnesses here established the authors' competence to our satisfaction.

The judgment of the circuit court is affirmed.

Affirmed.

GORDON and BURKE, JJ., concur.