## United States Court of Appeals FOR THE EIGHTH CIRCUIT

No. 97-1558	
John Hall and Linda Hall,	*
Appellees,	* * *
v.	* *
James Arthur, M.D., and Allan C. Gocio, M.D.,	* *
Appellants, and	*
Hot Springs Neurosurgery Clinic,	*
P.A., and St. Joseph's Regional Health Center, Inc.,	* *
Defendants.	*
	Appeals from the United State District Court for the Western District of Arkansas.
No. 97-1628	
John Hall and Linda Hall,	* *
Appellees,	*

V.	*
	*
James Arthur, M.D.; Allan C.	*
Gocio, M.D.; and Hot Springs	*
Neurosurgery Clinic, P.A.,	*
	*
Defendants, and	*
	*
St. Joseph's Regional Health	*
Center, Inc.,	*
	*
Appellant.	*

Submitted: January 15, 1998

Filed: April 6, 1998

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Before RICHARD S. ARNOLD, Chief Judge, MORRIS SHEPPARD ARNOLD, Circuit Judge, and SACHS, District Judge.

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## MORRIS SHEPPARD ARNOLD, Circuit Judge.

Dr. James Arthur is a neurosurgeon at St. Joseph's Regional Health Center in Hot Springs, Arkansas. One type of surgery that Dr. Arthur performs is called an anterior cervical diskectomy and fusion surgery ("ACF surgery"). To perform such a procedure, a surgeon removes damaged disk material from a patient's spine and usually replaces it with another object. The goal is for the patient's body to form new bone tissue around the object and the vertebrae between which it has been placed, thus fusing the vertebrae together.

<sup>&</sup>lt;sup>1</sup>The Honorable Howard F. Sachs, United States District Judge for the Western District of Missouri, sitting by designation.

The choice of the replacement object is the focus of this litigation. Early ACF procedures used a piece of the patient's own bone from another part of the patient's body, usually the hip. Later, surgeons started to use bone donated by others to so-called bone banks. The evidence at trial showed that each of these procedures has certain risks associated with it: Using the patient's own bone requires two surgeries rather than one, increasing the risk of infection; using donor bone exposes the patient to the risk that disease will be transmitted from the donor to the patient. Perhaps partly in an effort to reduce these risks, Dr. Arthur began using a third replacement object, a ceramic material called Orthoblock.

The evidence at trial revealed that after Dr. Arthur performed an ACF surgery on John Hall, Mr. Hall continued to have difficulties with his back; approximately four months later, Dr. Edward Saer of Little Rock performed a repeat ACF surgery on Mr. Hall to replace the Orthoblock with bone taken from Mr. Hall's hip. Mr. Hall and his wife, Linda Hall, now residents of New Mexico, brought this diversity action against Dr. Arthur, Dr. Allan C. Gocio (who assisted in Mr. Hall's surgery), St. Joseph's Hospital, where the surgery took place, and Calcitek, the manufacturer of Orthoblock. The Halls laid claims against the defendants for medical negligence, battery, fraud, outrage, products liability, and breach of warranty.

Although the Halls settled with Calcitek, the remaining defendants were involved in a three-week jury trial. The jury found Dr. Arthur, Dr. Gocio, and the hospital liable for negligence and awarded Mr. Hall compensatory damages in the amount of \$9,900. The defendants appeal; we affirm the judgment of the trial court.

I.

Dr. Gocio asserts that the trial court erred in submitting the negligence claim against him because there was insufficient evidence that he violated the relevant standard of care. Arkansas law, applicable here, requires that the violation of the standard of care in a medical malpractice case must be established by expert testimony

when the asserted negligence does not lie within the jury's comprehension as a matter of common knowledge. *See Reagan v. City of Piggott*, 805 S.W.2d 636, 637-38 (Ark. 1991); *see also* Ark. Code Ann. § 16-114-206(a)(2).

There appears to be no dispute that there was evidence produced at trial sufficient to convince a reasonable fact finder that Dr. Arthur, by using Orthoblock for Mr. Hall's ACF surgery, violated the applicable standard of care. Dr. Gocio argues, however, that since he acted only as an assistant in Mr. Hall's surgery, the Halls had to produce expert testimony as to the standard of care applicable to an assistant in order to allow the jury to reach the question of his potential negligence. We disagree.

Dr. Gocio, like Dr. Arthur, is a neurosurgeon. His involvement in Mr. Hall's surgery was as a neurosurgeon, to help Dr. Arthur insert the Orthoblock in question into Mr. Hall's back. If the expert testimony tended to show that Dr. Arthur's placement of Orthoblock in Mr. Hall violated the relevant standard of care for a neurosurgeon performing an ACF surgery, a jury could reasonably conclude that Dr. Gocio, by helping Dr. Arthur to insert the Orthoblock, similarly violated the standard of care for a neurosurgeon performing an ACF surgery. Accordingly, we reject Dr. Gocio's assertion that there was insufficient evidence that he violated the applicable standard of care.

St. Joseph's Regional Health Center urges us to hold that the trial court erred in denying St. Joseph's motion for judgment as a matter of law. The Halls' case against the hospital relied primarily on the actions of Gail Sanders, a nurse at St. Joseph's. Various expert witnesses criticized Ms. Sanders for failing to seek administrative review of her decision to order Orthoblock for Dr. Arthur's use in ACF surgeries. The hospital does not dispute the finding of negligence by the jury; instead, it asserts that the Halls produced insufficient evidence from which a reasonable jury could conclude that Ms. Sanders's negligence proximately caused harm to Mr. Hall. We disagree.

The hospital's argument appears to be that the Halls cannot recover against the hospital unless they produced evidence as to what would have happened had Ms. Sanders not been negligent. We do not believe that specific evidence of what the hospital would have done under different circumstances is necessary here. Certain proof of a counterfactual situation is, of course, extraordinarily difficult to produce. Instead, we believe that the fact finder can make a logical inference, based upon its experience and the evidence that was produced at trial, that Ms. Sanders's negligence was a contributing cause to Mr. Hall's injury.

Quoting W. Keeton, D. Dobbs, R. Keeton, and D. Owen, *Prosser and Keeton on the Law of Torts* § 41, at 270 (W. Keeton ed., 5th ed. 1984), we noted in *Larabee v. MM&L International Corp.*, 896 F.2d 1112, 1116 (8th Cir. 1990), that " '[w]hen a child is drowned in a swimming pool, no one can say with certainty that a lifeguard would have saved the child; but the experience of the community permits the conclusion that the absence of a guard played a significant part in the drowning.' " While we cannot say with certainty that Mr. Hall would not have been injured if Ms. Sanders had not been negligent, we believe that the jury could reasonably have concluded that her negligence played a significant part in allowing Mr. Hall to be injured by the use of Orthoblock for his ACF surgery. All that one has to assume here is that the hospital would have not allowed the surgery to take place, and we do not regard this assumption as requiring a leap of faith.

II.

All of the defendants argue that the trial court erred by refusing to grant a mistrial when the Halls' counsel provided a 1992 Orthoblock package insert to the jury. The 1989 package insert, which was apparently applicable to the Orthoblock that was used on Mr. Hall and that was in evidence at the trial, states that Orthoblock should not be used "in any position where the implants are likely to sustain significant tensile, flexural or other shear forces during function." Whether or not one might view that caveat as contraindicating the use of Orthoblock in the spine, Calcitek made clear its opposition

to the use of Orthoblock in the spine in the 1992 insert, stating there that "Orthoblocks are not designed for use in spinal applications."

By a ruling *in limine*, the trial court excluded the 1992 package insert under Fed. R. Evid. 407 as a subsequent remedial measure. Mr. Hall's surgery took place in December, 1991, the trial court reasoned, so any warning on an Orthoblock package insert after that time would not be relevant in determining whether Dr. Arthur and Dr. Gocio acted properly in selecting Orthoblock for use in Mr. Hall's spine.

There is no doubt that the display of the 1992 insert to the jury was more than a little unfortunate. Yet, as we have recognized before, inadvertent difficulties frequently arise at trial, and cautionary instructions are generally sufficient to alleviate mistakes occurring during trial. *See United States v. Davidson*, 122 F.3d 531, 538 (8th Cir. 1997), *cert. denied*, 118 S. Ct. 639 (1997), 1998 WL 74095 (1998). Furthermore, the trial court is in a better position than we are to evaluate the impact of these kinds of mistakes. The record shows that the trial court considered the impact of the display of the 1992 package insert and concluded that a cautionary instruction would be sufficient to cure any prejudice that the display created. The instruction that the trial court gave clearly directed the jury to disregard the 1992 package insert, and carefully explained that the insert was irrelevant because it was prepared after Mr. Hall's surgery. Under these circumstances, we do not believe that publishing the 1992 package insert prejudiced the defendants.

III.

All of the defendants also appeal from three evidentiary rulings of the trial court. As a preliminary matter, we note that reversal of the trial court's judgment will be warranted only if the trial court committed an error that is not harmless, and an error will be considered harmless unless it affects a substantial right of the objecting party. *Crane v. Crest Tankers, Inc.*, 47 F.3d 292, 296 (8th Cir. 1995); *see also* 28 U.S.C. § 2111. As we have said in the criminal context, we will find that a substantial right

is affected by a trial court's erroneous evidentiary ruling only if we believe it likely that the jury was "substantially swayed" by the result of that error. *United States v. Blake*, 107 F.3d 651, 653 (8th Cir. 1997). We believe that this formulation should guide our analysis in the civil context as well.

The defendants complain that the trial court improperly admitted testimony from patients other than Mr. Hall concerning what Dr. Arthur told them about Orthoblock prior to surgery. We believe, however, that that evidence was properly admitted to undermine Dr. Arthur's deposition testimony that all of his patients knew that Orthoblock was not designed for use in an ACF surgery or approved by the FDA for that purpose, and his testimony that he told all of his patients that Orthoblock could fracture and migrate after it was in place. While the defendants objected to the introduction of the deposition evidence on relevance grounds, we believe that it was properly admitted under Fed. R. Evid. 406 as evidence of the routine practice of an organization. The other patients testified that Dr. Arthur did not inform them of many of the risks associated with Orthoblock or that it was not intended for the purpose of an ACF surgery and did not have FDA approval. Such testimony, we believe, is plainly admissible under Fed. R. Evid. 401 as tending to shed light on the issue of Mr. Hall's informed consent to the procedure that he underwent.

The defendants do, however, in our view, raise a legitimate objection to the trial court's exclusion of testimony by Lawan Bledsoe, who, according to an offer of proof, would have testified that, in the course of her routine work as a nurse practitioner, she would have talked with each of the patients who testified. According to the offer of proof, Ms. Bledsoe would also have testified that she regularly asked patients if they understood the risks, and, if a patient indicated that Dr. Arthur had not explained them, she routinely referred the patient to Dr. Arthur for a relevant discussion. Since this testimony went to the question of Dr. Arthur's routine practices, the very matter that the Halls put in issue, we believe that the trial court erred in excluding Ms. Bledsoe's testimony.

The trial court's grounds for excluding that testimony derive from difficulties encountered earlier. The trial court apparently believed that the testimony of the patients was admissible only for the purpose of impeaching Dr. Arthur, rather than to undermine Dr. Arthur's testimony concerning his routine practices. The trial court then determined that Ms. Bledsoe's testimony was intended to impeach the patients' credibility, and concluded that such an attack on credibility was collateral to the issues at trial. We believe, however, that Fed. R. Evid. 608(a) is not apposite here, because Dr. Arthur's credibility was not in issue.

A determination that barring Ms. Bledsoe's testimony was erroneous does not, of course, necessitate a reversal. As we have already indicated, we will disturb the judgment only if we believe that it is likely that the jury would have been substantially swayed by the wrongly excluded testimony if it had been admitted. On this record, we cannot conclude that it would have been. The testimony was cumulative to Dr. Arthur's, and, because the defendants did not make their offer of proof in the form of questions and answers, we find it difficult to gauge what effect the excluded testimony would have had, especially since Ms. Bledsoe was not cross-examined. We therefore conclude that the defendants have failed to make a case that the exclusion of this evidence was reversible error, even though, as we have said, it was error to exclude it.

The defendants maintain finally that the trial court erred by restricting the expert testimony of Dr. Howard Senter. Dr. Senter was one of the first users of Orthoblock for an ACF surgery, and there was evidence that his article on the subject in the journal *Neurosurgery* was one of the bases on which Dr. Arthur and Dr. Gocio decided to undertake the use of Orthoblock in an ACF surgery. At trial, according to the offer of proof, Dr. Senter would have testified with respect to the long-term results of ACF surgery patients with Orthoblock implants. Dr. Senter would have testified, moreover, that he had films of some of these additional patients showing that cracks or fractures similar to Mr. Hall's would eventually fuse without harm to the patient.

The trial court excluded all evidence that Dr. Senter would have provided that was generated after April, 1992, on the ground that the doctors performing Mr. Hall's original ACF surgery would not have been able to base their judgments on scientific information gathered thereafter. This ruling was correct insofar as the standard of care is concerned: Whether Dr. Arthur violated the standard of care in December, 1991, by performing an ACF surgery on Mr. Hall would be determined properly by examining the information that Dr. Arthur had or should have had available to him at that time.

The trial court's ruling to restrict Dr. Senter's testimony was erroneous, however, insofar as that testimony bears upon the question of causation. The basic elements of a cause of action for negligence are duty, breach, causation, and damages. To be successful, a plaintiff must prove each of these elements. Whether the use of Orthoblock as an implant caused Mr. Hall's subsequent difficulties should be determined by the best information available at the time of trial. Even if Orthoblock was thought to cause problems in 1991, and Dr. Arthur was thus in breach of the standard of care by selecting it, the Halls cannot succeed on their medical negligence cause of action if the present state of scientific knowledge shows that Orthoblock did not cause any of the difficulties that Mr. Hall suffered.

While we conclude, then, that the trial court erred in restricting Dr. Senter's testimony, we must again determine whether the error is a reversible one. The exclusion of cumulative evidence, of course, is merely harmless error. *See Porchia v. Design Equipment Co.*, 113 F.3d 877, 881 (8th Cir. 1997). Although Dr. Senter was prohibited from testifying as to the long-term results of his ACF Orthoblock patients after April, 1992, he did produce evidence regarding the long-term results of patients prior to that time. The relevant offer of proof, moreover, does not indicate how many more patients Dr. Senter would have testified about, nor does the offer of proof indicate how testimony concerning those patients would have been more helpful to the defense than the testimony concerning the patients about whom Dr. Senter was permitted to testify. An offer of proof in a question-and-answer form might have yielded this

information, but in the present record we are unable to divine it. Thus, we cannot say that we believe on this record that it is likely that the jury would have been substantially swayed by the excluded evidence.

IV.

For the foregoing reasons, we affirm the judgment of the trial court.

A true copy.

Attest:

CLERK, U.S. COURT OF APPEALS, EIGHTH CIRCUIT.