IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLORADO Judge Robert E. Blackburn

Civil Case No. 09-cv-02121-REB-BNB

KAREN S. ZANDER,

Plaintiff,

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CRAIG HOSPITAL, and RICK BAYLES, Ph.D, CNIM,

Defendants.

ORDER DENYING MOTION TO STRIKE TESTIMONY BY JOHN [sic] MUKAND, M.D.

Blackburn, J.

The matter before me is defendants' **Motion To Strike Testimony by John [sic] Mukand, M.D.** [#88], filed June 16, 2010. I deny the motion.

I. JURISDICTION

I have jurisdiction over this case under 28 U.S.C. § 1332 (diversity of citizenship).

II. STANDARD OF REVIEW

Defendants seek to strike or limit the testimony of plaintiffs' expert witness. Rule 702 of the Federal Rules of Evidence, which governs the admissibility of expert witness testimony, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and

methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

FED.R.EVID. 702. As interpreted by the Supreme Court, Rule 702 requires that an expert's testimony be both reliable, in that the witness is qualified to testify regarding the subject, and relevant, in that it will assist the trier in determining a fact in issue.

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 589-92, 113 S.Ct. 2786, 2795-96, 125 L.Ed.2d 469 (1993); Truck Insurance Exchange v. MagneTek, Inc., 360 F.3d 1206, 1210 (10th Cir. 2004). The Supreme Court has described the court's role in weighing expert opinions against these standards as that of a "gatekeeper." See Kumho Tire Company, Ltd. v. Carmichael, 526 U.S. 137, 147, 119 S.Ct. 1167, 1174, 142 L.Ed.2d 248 (1999).

In this instance, where defendants challenge the expert's qualifications to opine as to a particular subject, the district court must determine that the putative expert has sufficient "knowledge, skill, experience, training, or education" to offer an opinion that will be helpful to the jury. *See Watson v. United States*, 485 F.3d 1100, 1106 (10th Cir. 2007). I have discretion in determining whether a witness is so qualified. *See Milne v. USA Cycling Inc.*, 575 F.3d 1120, 1133 (10th Cir. 2009).

III. ANALYSIS

On September 7, 2007, plaintiff underwent spinal surgery at Craig Hospital to remedy a tethered spinal cord. Defendant Rick Bayles was responsible for performing and interpreting somatosensory-evoked potential (SSEP) studies during the surgery.¹

¹ The SSEP test "show[s] the electrical signals of sensation going from the body to the brain. The signals show whether the nerves that connect to the spinal cord are able to send and receive sensory information like pain, temperature, and touch." *All About Diagnostic Testing: SSEP* (available at

Plaintiff alleges that Bayles deviated from the applicable standard of care in connection with his role in her surgery, which ultimately caused her permanent neurologic injuries, including complete paraplegia of the lower extremities, and associated economic and noneconomic damages. Craig Hospital is sought to be held liable for Bayles's alleged negligence on the basis of *repondeat superior*.

Defendants challenge the qualifications of plaintiff's putative expert, Dr. Jon Mukand, to testify as to the standard of care applicable to intraoperative neurosurgical monitoring or the cause of plaintiff's paralysis. Based on the present record, I cannot say that Dr. Mukand is not adequately qualified to opine on these matters. I therefore deny the motion.

Dr. Mukand is a rehabilitative physician, in which capacity he develops treatment and rehabilitation programs for patients with spinal cord injuries. Although he is neither a neurosurgeon nor certified to perform neurosurgical intraoperative monitoring, he received formal training and direct experience during his internship in the mid-1980s in performing and interpreting intraoperative monitoring with SSEPs in scoliosis surgeries. (Plf. Resp. App., Exh. 2 ¶ 3 at 1 [#92-1], filed July 2, 2010.) His past medical training "includes extensive experience with nerve conduction studies and electromyography," which are similar to SSEP tests. (*Id.*, Exh. 2 ¶ 5 at 2.)² As an intern, Dr. Mukand had

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http://www.allaboutbackpain.com/html/spine_diagnostics/spine_diagnostics_ssep.html) (last accessed August 17, 2010). The tests are used both "for clinical diagnosis in patients with neurologic disease" as well as "for intraoperative monitoring during surgeries that place parts of the somatosensory pathways at risk." Legatt, Alan D., Somatosensory Evoked Potentials, General Principles (available at http://emedicine.medscape.com/article/1139906-overview) (last accessed August 17, 2010.)

² Dr. Mukand attests that the various types of neuromonitoring rely on the same fundamental concepts and that the principles associated with neuromonitoring as essentially the same regardless of the type of surgery performed. (Plf. Resp. App., Exh. 2 \P 2 & 3 at 1; *id.*, Exh. 2 \P 6 at 2.) Defendants

what he describes as "hands-on experience with spinal surgeries . . . as the physician involved with monitoring patients' responses to nerve stimulation and communicating responses to the surgeon." (*Id.*, Exh. 2 ¶ 7 at 2.) He also established an electrophysiology lab during his residency and has published articles on electrophysiological techniques, including his work in developing, managing, and coordinating a clinical trial for the first human BrainGate implant in 2004-2005. (*Id.*, Exh. 2 ¶ ¶ 4 & 5 at 1-2.)³

Admittedly, Dr. Mukand's relevant hands-on experience is not of recent vintage, but defendants present no actual authority, aside from their own *ipse dixit*, for their assertion that an expert's relevant experience need be of any particular vintage to be admissible.⁴ Nor have defendants demonstrated that there are any differences, let alone significant or relevant differences, between neurosurgical intraoperative monitoring and intraoperative monitoring in orthopedic or any other type of surgery. Indeed, Dr. Mukand's affidavit suggests that the opposite is true. (*Id.*, Exh. 2 ¶ ¶ 2 & 3 at 1; *Id.*, Exh. 2 ¶ 6 at 2.) Instead, such infirmities go to the weight, not the admissibility, of Dr. Mukand's opinions. Accordingly, based on the evidence before me, it appears that Dr. Mukand is qualified to opine on the standard of care applicable to intraoperative

present nothing to refute these assertions.

This trial involved the implantation of an microelectrode in the brain of a fully paralyzed patient, which by recording and interpreting the patient's brain waves, allowed him to control a computer cursor and thereby read email, play video games, and perform other computer-based tasks simply by thinking about performing those tasks. (**See** Plf. Resp. App., Exh. 1 at 6 & Exh. $2 \, \P \, 4$ at 1-2.)

⁴ Indeed, Dr. Mukand submits that he has kept abreast of the literature in electrophysiological monitoring over the years, and has noted no more than minor advances in the relevant technology since the time of his original training. (Plf. Resp. App., Exh. 2 ¶ 6 at 2.)

neurosurgical monitoring. Relatedly, I reject defendants' assertion that this same testimony offends Rule 703.

The issue whether Dr. Mukand is qualified to offer an expert opinion on the cause of plaintiff's injuries is slightly more difficult on the record before me. Neither party has alluded to, much less submitted a copy of, Dr. Mukand's expert report in this matter.

Nor is it clear from the evidence presented in connection with this motion that he intends to opine as to the specific cause of plaintiff's injuries at all. Instead, the deposition excerpts appended to the motion and response demonstrate only that Dr. Mukand has testified as to the various possible causes of a spinal cord injury that might cause paralysis, and even then only in the context of how intraoperative monitoring might be used to detect such potential causes. (See id., Exh. 1 at 32-35.)

In this regard, therefore, I rely on the principle that, generally, "rejection of expert testimony is the exception rather than the rule." **FED.R.EVID.** 702, 2000 Adv. Comm. Notes. "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." **Daubert**, 113 S.Ct. at 2798. I therefore find and conclude based on the evidence before me that Dr. Mukand is qualified to offer the limited causation opinions shown by the evidence before me in connection with this motion. I reserve for future development of the record at trial whether a more fact-specific causation opinion may be admissible *vel non*.

THEREFORE IT IS ORDERED that defendants' Motion To Strike Testimony by John [sic] Mukand, M.D. [#88], filed June 16, 2010, is DENIED.

Dated August 19, 2010, at Denver, Colorado.

BY THE COURT:

Robert E. Blackbum

United States District Judge