

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF KENTUCKY  
NORTHERN DIVISION  
AT COVINGTON

CIVIL ACTION NO. 08-95 (WOB)

CHELSEA ZINK

PLAINTIFF

VS.

MEMORANDUM OPINION AND ORDER

SMI LIQUIDATING, INC., ET  
AL.

DEFENDANT

This matter is before the court on defendants' motion to exclude the testimony of plaintiff's expert on specific causation (Doc. #114) and plaintiff's motion for a hearing on that issue (Doc. #131); defendants' motion to exclude the testimony of plaintiff's expert on general causation (Doc. #116); and plaintiff's motion for the court to consider the motion for summary judgment by Dr. Holladay and Commonwealth Orthopaedic Centers (Doc. #119) and that motion for summary judgment (Doc. #121).

The court has reviewed these motions and finds that oral argument is unnecessary. It therefore issues this brief memorandum opinion and order disposing of these motions in advance of the final pretrial conference set for Friday, May 14, 2010.

### ***Brief Factual Background***

On August 16, 2007, plaintiff Chelsea Zink ("Zink"), then 18 years old, underwent arthroscopic surgery on her right shoulder. The surgery was performed by Dr. Bruce Holladay, an orthopaedic surgeon at Commonwealth Orthopaedic Centers ("COC") in Northern Kentucky.

For 48 hours after her surgery, Zink received local anesthetic delivered into her shoulder joint through a catheter attached to a pain pump. The pain pump was manufactured by defendant Sorenson Medical Products.

On her fourth post-operative visit on January 15, 2008, Zink complained to Dr. Holladay of shoulder pain. Dr. Holladay obtained x-rays of Zink's shoulder, which he said showed "no evidence of narrowing of chondrolysis in the joint."

On May 8, 2008, after Zink continued to complain of pain, Dr. Holladay performed a second arthroscopic surgery on Zink's shoulder. During this surgery, Dr. Holladay noted cartilage damage in plaintiff's shoulder joint.

On September 10, 2008, Dr. Holladay again obtained x-rays of Zink's shoulder, which showed no sign of chondrolysis. On January 16, 2009, however, Dr. Holladay obtained a third set of x-rays which showed "marked narrowing" in Zink's shoulder joint.

Thereafter, plaintiff switched her treatment to Dr. Samer Hasan at Cincinnati Sports Medicine and Orthopaedic Center. On

May 14, 2009, Dr. Hasan examined plaintiff and took x-rays, which indicated a 75% joint space narrowing. Dr. Hasan performed a partial shoulder replacement on October 15, 2009, during which he visually noted significant cartilage loss.

Zink filed this suit on May 28, 2008, alleging claims for strict product liability, negligence and breach of warranty against the manufacturer of the pain pump in question and related entities. SMI Liquidating, Inc. thereafter filed a third-party complaint against Dr. Holladay and COC (Doc. #23), alleging that Holladay's use of the pain pump to deliver anesthesia to the intra-articular space of Zink's shoulder was done in a negligent and off label manner. SMI Liquidating seeks contribution and indemnity from Dr. Holladay and COC.

### ***Analysis***

#### **A. Motion for Summary Judgment - Dr. Holladay and COC**

All parties agree that to prove a claim of medical negligence in Kentucky, the claimant must establish the existence of a duty, breach, causation, and damages. Defendants' cross claim against Holladay fails because they cannot establish these elements as a matter of law.

Defendants' expert witness, Dr. Petty, testified without contradiction that it was not a deviation from the standard of care in 2007 for Holladay to place the pain pump catheter in plaintiff's shoulder as he did. The only alleged deviation that

Dr. Petty identified was Holladay's failure to research the medical literature regarding this type of use of the pain pump before performing the procedure.

However, Dr. Petty further testified that, had Holladay done some research and then proceeded on the same course, it would not have constituted a deviation from the standard of care. Indeed, Dr. Petty testified that Holladay performed this procedure on plaintiff "during the dawning of the awareness of this potential risk and not after it was well described and accepted in the community." Thus, even if this testimony could establish some duty and breach thereof, the element of causation is lacking as a matter of law.

For these reasons, Dr. Holladay and COC are entitled to summary judgment on defendants' third-party claims against them.

**B. Motion to Exclude Expert Testimony on General Causation**

Defendants' motion to exclude Dr. Jason Dragoo's testimony will be denied because their attacks on his opinion go towards the weight to be afforded that opinion rather than its admissibility.

First, defendants concede that Dr. Dragoo, an orthopaedic surgeon at Stanford University, is qualified and competent. Defendants' main argument is that Dragoo's opinion is unreliable because it is based on a laboratory study he conducted in 2008 in which human cartilage was infused with local anesthetic and which

demonstrated only that damage to the cartilage cells resulted, not that actual chondrolysis developed. However, as plaintiff points out, such a result could not be definitively demonstrated via human studies because such experimentation in the shoulder joints of living persons would be unethical. Moreover, plaintiff notes - and defendants do not disagree - that defendants' own expert, Dr. Petty, testified that damage to the chondrocytes is the mechanism for chondrolysis.

Moreover, while defendants argue that the proposition that the pain pump usage at issue here causes chondrolysis is not "well-accepted" in the scientific community, that argument is belied by the testimony of their own expert, Dr. Petty. When asked whether Dr. Holladay's intra-joint placement of the catheter was a breach of the standard of care in 2007, Dr. Petty testified "No," noting:

I think that Dr. Holladay did these things only during the dawning of awareness of this potential risk and **not after it was well described and accepted in the community.**

(Doc. #121-1 at 11) (emphasis added).

Defendants further argue that Dr. Dragoo's opinion is unreliable because he concedes that not every patient who used a pain pump in this manner developed chondrolysis. However, this goes to the weight of the testimony to be accorded to Dr. Dragoo's testimony, particularly given the other bases for his opinion. Defendants cite no authority to support the proposition

that a product is not unreasonably dangerous just because it does not harm every person who uses it.

Finally, while defendants argue that Dr. Dragoo's own study has not been peer-reviewed, they concede that this is but one factor in the Rule 702 reliability analysis. Dr. Dragoo did publish the study from his 2008 laboratory study, and the other medical articles on which he relies are peer-reviewed. Moreover, while not binding on this court, the recent opinion by Judge Spiegel in a similar pain pump case in which Dr. Dragoo's testimony was challenged concludes: "The Court is satisfied that the body of publications regarding the relation between chondrolysis and anesthetics provides a basis for the general causation testimony offered in this case." *Schott v. I-Flow Corp.*, - F. Supp.2d -, No. 1:08-CV-00323, 2010 WL 1008478, at \*6 (S.D. Ohio Mar. 16, 2010). The court finds that opinion persuasive and adopts its reasoning herein.

In sum, Dr. Dragoo is highly qualified and his expert opinion regarding general causation between intra-articular pain pump use and chondrolysis is sufficiently reliable to pass muster under Rule 702.

**C. Motion to Exclude Expert Testimony on Specific Causation**

Plaintiff proffers the testimony of Dr. Samer Hasan as to the specific causation of plaintiff's chondrolysis. Defendants' opposition to Dr. Hasan's testimony centers on his use of

"differential diagnosis" as the basis for his conclusion that plaintiff's chondrolysis was caused by the intra-articular use of the pain pump.

The Sixth Circuit has explained that differential diagnosis is the "method by which a physician determines what disease process causes a patient's symptoms. The physician considers all relevant potential causes of the symptoms and then eliminates alternative causes based on a physical examination, clinical tests, and a thorough case history." *Best v. Lowe's Home Centers, Inc.*, 563 F.3d 171, 178 (6th Cir. 2009) (internal quotations and citation omitted). Differential diagnosis is considered to be "a standard scientific technique of identifying the cause of a medical problem by eliminating the likely causes until the most probable one is isolated." *Id.*

The Sixth Circuit employs the following test for admission of expert opinions based on differential diagnosis:

A medical-causation opinion in the form of a doctor's differential diagnosis is reliable and admissible where the doctor (1) objectively ascertains, to the extent possible, the nature of the patient's injury . . . , (2) "rules in" one or more causes of the injury using a valid methodology, and (3) engages in "standard diagnostic techniques by which doctors normally rule out alternative causes" to reach a conclusion as to which cause is most likely.

*Id.* at 179 (citations omitted).

In *Best*, the Sixth Circuit also stated that "doctors need not rule out every conceivable cause in order for their differential-diagnosis-based opinions to be admissible." *Id.* at

181. If evidence of other possible causes exists, then the opposing party "is free to attack [the expert's] opinion on that basis at trial." *Id.* The court further stressed that "[a]dmissibility under Rule 702 does not require perfect methodology." *Id.* The expert must only employ in the courtroom "the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Id.* (citation omitted). "Any weakness in his methodology will affect the weight that his opinion is given at trial, but not its threshold admissibility." *Id.* at 182 (citation omitted).

A review of Dr. Hasan's deposition shows that his proposed testimony as to specific causation satisfies the criteria for admissibility under Rule 702 and *Best*. Dr. Hasan objectively ascertained, by way of the open surgery he performed on plaintiff, that plaintiff has chondrolysis in her shoulder. He further testified that he reviewed her full medical history as it related to her shoulder, including reviewing Dr. Holladay's treatment notes. He also testified that he was careful to start from all potential causes of chondrolysis and then "gradually whittle away and arrive at the most logical explanation." (Hasan Depo. 183)

Defendants attack Dr. Hasan's opinion because the x-rays did not show evidence of chondrolysis until more than a year after the surgery in question, and the medical literature indicates



that the onset of chondrolysis is "rapid." However, Dr. Hasan explained in his deposition that Dr. Holladay's notes from the second surgery he performed on plaintiff - less than a year after the first surgery - indicate that she had cartilage damage at that time and "it seemed to be relatively widespread." (Hasan Depo. 201) Thus, his opinion that the chondrolysis was caused by the use of the pain pump is, contrary to defendants' argument, consistent with the medical literature which states that the onset of chondrolysis is "rapid."

Defendants also criticize Dr. Hasan's opinion to the extent that he did not conclude that the second, thermal surgery was the cause of plaintiff's cartilage damage. Defendants mischaracterize Dr. Hasan's testimony. He actually testified that he did consider the thermal surgery as a possible cause but believed, based on the cartilage damage that Dr. Holladay observed in plaintiff's shoulder during the second surgery, that chondrolysis had already set in and thus was likely triggered by the use of the pain pump following the first surgery. (Hasan Depo. 209) Dr. Hasan candidly testified that he believed the thermal surgery could have exacerbated the cartilage damage, but he does not believe it was the original cause. (Hasan Depo. 209-10)

Finally, Dr. Hasan testified that he ruled out arthritis as a likely cause based on plaintiff's young age, and he ruled out

interference from the internal staples because their placement was such that they would not have interfered with the area of cartilage which was damaged.

Defendants' also criticize Dr. Hasan's opinion on the grounds that no diagnostic tests were ever done to eliminate possible infection as a cause of plaintiff's chondrolysis. But Dr. Hasan testified that plaintiff's treatment notes reflected that at no time did plaintiff exhibit any symptoms of infection and, further, that any such infection would have been apparent during the second surgery. He also testified that, had he had any concern about a history of infection, he would not have performed the reconstructive surgery that he did perform on plaintiff in 2009.

Thus, as the court concluded in *Best* about the expert there, the testimony of Dr. Hasan satisfies the criteria for admissibility of differential diagnosis-based opinions. That test does not require the expert to eliminate "every conceivable" possible cause, and defendants' criticisms of Dr. Hasan's methodology go to the question of what weight his opinion should be given at trial.

Therefore, having reviewed this matter, and the court being otherwise sufficiently advised,

**IT IS ORDERED** that:

(1) Defendants' motion to exclude the testimony of plaintiff's expert on specific causation (Doc. #114) and plaintiff's motion for a hearing on that issue (Doc. #131) be, and are hereby, **DENIED**;

(2) Defendants' motion to exclude the testimony of plaintiff's expert on general causation (Doc. #116) be, and is hereby, **DENIED**;

(3) Plaintiff's motion for the court to consider the motion for summary judgment by Dr. Holladay and Commonwealth Orthopaedic Centers (Doc. #119) and that motion for summary judgment (Doc. #121) be, and are hereby, **GRANTED**.

This 7<sup>th</sup> day of May, 2010.



**Signed By:**

**William O. Bertelsman** *WOB*

**United States District Judge**