

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND

ELLEN BRODSKY, *et al.*,

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Plaintiffs,

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v.

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Civil Action No. PX 15-3587

KAVO DENTAL TECHNOLOGIES, LLC, *et al.*,

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Defendants.

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**MEMORANDUM OPINION AND ORDER**

Pending in this product liability case is the Motion to Exclude the testimony of Plaintiffs' engineering expert, Michael Leshner, filed by Defendant KaVo Dental Technologies, LLC ("KaVo") (*see* ECF No. 67). Because Leshner's opinion lacks a reliable foundation, the Court GRANTS KaVo's Motion to Exclude Leshner's opinion that defective design and manufacture of the Helios 3000 dental light caused Brodsky's injuries.

**A. Background**

This case is the subject of the Court's prior opinion on the parties' cross motions for summary judgment, ECF No. 59, and the facts will not be repeated here. At trial, Leshner, a mechanical engineer, intends to opine that the Helios 3000 dental light manufactured by KaVo suffers from design and manufacturing defects arising from a loose-fitting connection between the ceiling-mounted movable arm and the lamp. Leshner notes specifically that the KaVo lamp is affixed to a moveable arm via a "threaded connection." The Helios 3000 had a male thread length of approximately half an inch, with six thread pitches; the American Society of Mechanical Engineers ("ASME") standard applicable to the Helios 3000 connection called for a longer male thread length with 18 thread pitches. ECF No. 49-4 at 11. As a result, Leshner

asserts, repeated use of the lamp over time caused the threaded connection to separate which, in combination with Defendant installer Henry Schein, Inc.'s failure to install a roll pin, caused the lamp to fall on Plaintiff Dr. Ellen Brodsky during a dental procedure.

On January 12, 2018, KaVo moved to exclude Leshner's causation opinion, arguing that it lacks any reliable foundation or methodology. The Brodskys countered that Leshner's opinion is squarely supported by his examination of the lamp in combination with his review of ASME industry standards applicable to the Helios 3000 threaded connection. On January 26, 2018, the Court held a *Daubert* hearing during which Leshner testified as to the bases for his opinions. For the following reasons, Leshner's opinion regarding the defective design and manufacture of the Helios 3000 lacks sufficient reliability to be admitted at trial.

## **B. Analysis**

Under Federal Rule of Evidence 702, a witness "qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if"

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

Courts have distilled Rule 702's requirements into two crucial inquiries: whether the proposed expert's testimony is relevant and whether it is reliable. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 141 (1999); *U.S. v. Forest*, 429 F.3d 73, 80 (4th Cir. 2005); *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 260 (4th Cir. 1999). The party offering the expert testimony bears the burden of establishing its admissibility by a preponderance of the evidence. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 199 (4th Cir. 2001). The testimony

must be based on “specialized *knowledge* and not on belief or speculation, and inferences must be derived using scientific or other *valid methods*.” *Ogelsby v. Gen. Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999) (first emphasis in original, second emphasis added). Reliability is “determined by the principles and methodology employed by the expert.” *Holesapple v. Barrett*, 5 F. App’x 177, 179 (4th Cir. 2001) (internal quotation marks and citation omitted). Ultimately, the Court, as gatekeeper, must ensure that “an expert . . . employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kuhmo Tire*, 526 U.S. at 152.

As discussed at the hearing, neither the parties nor this Court seriously question Leshner’s qualifications as a mechanical engineer. However, “[e]ven where an expert is qualified to provide an opinion on a particular subject . . . his testimony is not admissible if its underlying methodology does not satisfy Rule 702.” *McKerrow v. Buyers Prod. Co.*, No. CCB-14-2865, 2016 WL 1110303, at \*3 (D. Md. Mar. 22, 2016) (citing *Kuhmo Tire*, 526 U.S. at 152). “To satisfy Rule 702’s reliability prong, expert testimony must be supported by appropriate validation.” *Id.* (internal citation and quotation marks omitted).

In a products liability case, a plaintiff may not merely “rely[ ] on the opinion of an expert unsupported by any evidence such as test data or relevant literature in the field.” *Nease v. Ford Motor Co.*, 848 F.3d 219, 231 (4th Cir. 2016), *cert. denied*, 137 S. Ct. 2250 (2017) (quoting *Oglesby*, 190 F.3d at 249). Rather, the Court must determine whether an expert’s hypothesis—that a product’s defective design or manufacture caused the plaintiff’s injury—has been tested in some meaningful way. *See id.*

At the hearing, Leshner candidly admitted that he performed no testing to validate or verify his opinion himself, nor did he rely upon any independent testing to confirm that the size

and number of threads in the Helios lamp-to-arm connection contributed to the lamp separation. Notably, Leshner acknowledged that in the industry, “reliability testing”—where normal-use repetitive motions are studied in a controlled environment to ascertain when and how a product would “fail”—is often performed. Leshner admitted that he did not conduct such testing on the Helios 3000 or review any other such testing performed by any other entity, including KaVo. Nor does it appear that during discovery Plaintiffs requested any prior reliability tests for the Helios 3000 from KaVo.

Rather, Leshner’s opinion is based on his inspection of the Helios 3000 that failed in this case and a comparison of the threads in the Helios 3000 lamp-to-arm connection to the relevant ASME standard for screw threads, ASME B1.1-2003, which led him to conclude that KaVo’s deviation from the ASME standard caused the failure. *See* ECF No. 49-3 at 7; ECF No. 68 at 1. But using non-ASME standard threads, by itself, does not render the product defectively designed. This is because the purpose of this ASME thread standard is to promote uniformity, not necessarily safety. As Leshner confirmed, a manufacturer “would want to use [an ASME] standard size” threaded component so that “someone could find a replacement part.” Leshner Dep. 44:6–10.<sup>1</sup> Accordingly, the ASME standard for uniformity in screw threads cannot provide a reliable basis for Leshner to opine that deviating from this standard caused the failure.

In this regard, Leshner’s opinion here suffers from the same deficiencies as in *McKerrow v. Buyers Products Company*. There, Leshner opined that a design defect in a truck hitch caused a trailer to collapse onto McKerrow’s hand, injuring him. Leshner based his opinion in

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<sup>1</sup> The Court also notes, and the parties do not seriously dispute, that ASME did not implement ASME B1.1-2003 for screw threads as a safety standard. *See* About ASME Safety Codes and Standards, <https://www.asme.org/about-asme/standards/safety-codes-for-elevators-and-escalators> (listing the ASME Safety Codes and Standards, not including B1.1-2003) *cf.* *Tate v. Dravo Corp.*, 623 F. Supp. 1090, 1096 (W.D.N.C. 1985) (with respect to welding standards, companies can create their own standards within the deviation generally tolerated in the industry); *Almonte v. Averna Vision & Robotics, Inc.*, 128 F. Supp. 3d 729, 742, 745 (W.D.N.Y. 2015) (discussing an ASME standard denoted as a safety standard).

*McKerrow* on inspecting the allegedly defective hitch and comparing the hitch to a competitor model. *See* 2016 WL 1110303, at \*2, \*4–\*5. Leshner did nothing to “subject [his] hypothesis” regarding the hitch’s defects “to tests designed to verify or falsify” his opinion. *Id.* at \*6 (internal quotation marks and citation omitted).<sup>2</sup> Similarly, here, Leshner’s opinion lacks any reliable methodology which verifies that a defect in the Helios 3000’s threaded connection caused the lamp to fail and injure Dr. Brodsky. Accordingly, while Leshner’s opinion has intuitive appeal and may in the end be correct, it is nonetheless inadmissible without underlying *validation*. *See id.*; *Oglesby*, 190 F.3d at 250. Therefore, it is this 30th day of January, 2018, ORDERED that:

1. The Motion to Exclude filed by Defendant KaVo Dental Technologies, LLC (ECF No. 67) BE, and the same hereby IS, GRANTED;
2. The Clerk is directed to transmit copies of this Memorandum Opinion and Order to counsel for all parties.

1/30/2018  
Date

/S/  
Paula Xinis  
United States District Judge

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<sup>2</sup> *See also Wood v. Toyota Motor Corp.*, 134 Md. App. 512, 521–25 (Md. Ct. Special App. 2000) (affirming exclusion of Leshner’s opinion regarding defective airbag absent independent testing or reliance on test data to support his opinion that defective airbag caused injury to plaintiff in car crash).