

DORR, GRAY & JOHNSTON *v.* HEADSTREAM.

Opinion delivered May 30, 1927.

1. APPEAL AND ERROR—CONCLUSIVENESS OF VERDICT.—Where evidence, though conflicting, is sufficient to support a verdict, the Supreme Court cannot invade the exclusive province of the jury nor determine where the weight of the evidence lies.
2. EVIDENCE—EXPERT TESTIMONY AS TO INJURIES FROM X-RAY.—One may, by study, observation and experience as to the effect of the X-ray upon the human body, become competent to testify as an

expert witness in an action for injuries due to burns from the X-ray, notwithstanding he is not a physician.

3. TRIAL—ADMISSIBILITY OF REBUTTAL TESTIMONY.—In an action for injuries due from X-ray burns, a refusal to allow defendant in rebuttal to show details of the process of administering treatment *held* not error where it is in conflict with the original testimony of the witness and not offered to show actual conditions that existed.
4. EVIDENCE—ADMISSIBILITY OF EXPERT TESTIMONY.—In an action for X-ray burns it was not error to allow expert witnesses to testify that, in their opinion, it constituted negligence for defendant to turn an X-ray of certain voltage on plaintiff for twenty or thirty minutes during the absence of the operator of the machine from the room, since the purpose of expert testimony is to get the conclusion of a witness based on facts assumed to be true.
5. DAMAGES—ADMISSIBILITY OF EVIDENCE.—In an action for X-ray burns, an instruction authorizing damages arising from an ulcer developing ten months after X-ray treatment *held* not error, where there was testimony showing that the burn was the source of the ulcer.

Appeal from Independence Circuit Court; *Dene H. Coleman*, Judge; affirmed.

*John B. McCaleb* and *J. J. McCaleb*, for appellant.

*S. M. Bone, Watkins & Pate* and *Emerson, Donham & Fulk*, for appellee.

HUMPHREYS, J. This suit was brought by appellee against appellants, partners engaged in the practice of medicine and surgery at Batesville, Arkansas, to recover damages in the sum of \$50,000 for negligently, carelessly and unskillfully burning his left arm with an X-ray while treating a small place thereon diagnosed by them as eczema. It was alleged in the complaint that appellants applied the X-ray to the affected part, placing the machine within less than two inches thereof, and negligently, carelessly, and unskillfully permitting the application of the X-rays to continue for thirty minutes, while out of the room, as a result of which his arm was seriously and permanently injured. There were other allegations of negligence in the complaint, of which no mention will be made, as appellee introduced testimony in support only of his allegation of negligence of appellants in applying the treatment.

Appellants filed an answer, denying all of the material allegations of the complaint, and interposing the further defense that the burn received from the X-ray treatment was slight, from which appellee completely recovered under their treatment, and that the burn did not result from negligence or lack of care on their part, but was caused solely from the inherent uncontrollable nature of the rays and the fact that appellee was constitutionally hypersensitive to the X-ray, which condition was not and could not have been known to them.

The trial of the cause resulted in a judgment against appellants for \$5,000 in favor of appellee, from which is this appeal.

The record is so voluminous that it is entirely impractical to incorporate the substance of the testimony of each witness in this opinion. Lay and expert witnesses were introduced by both sides and examined at length. Suffice it to say that the testimony introduced by appellee tended to support the allegations of his complaint with reference to the negligent application of the X-ray to the affected part, which caused great pain and suffering for a long time, necessitating two major operations by a noted physician in Chicago, an outlay of large sums of money, financial losses, deficiency in arm strength and power; whereas the testimony introduced by appellants tended to show skill and proper application of the X-ray treatment to the affected part, resulting in a slight burn, which they could not prevent on account of the uncontrollable character of rays generated by the X-ray machine, and the constitutional hypersensitiveness of appellee to the X-ray.

The jury found against appellants on the disputed questions of fact, and, as there is sufficient testimony to support the verdict, this court cannot invade the exclusive province of the jury and determine where the weight of the evidence lies. We can only review the record where any reversible errors were committed in the trial of the cause.

Appellants' first contention for a reversal of the judgment is that the trial court erred in allowing Dr. L. M. Hill, a chiropractor, to testify as an expert witness in the case. Dr. Hill did not qualify as a physician and surgeon, but testified that he was a graduate of the X-Ray School at Davenport, Iowa, and that he had taken courses in the E. O. Thompson School at Baltimore, Maryland; that he had made between seventeen and twenty thousand exposures with X-ray machines for diagnostic purposes, but not as a therapeutic remedy; also that he was a graduate of Carver School of Chiropractic, of Oklahoma City, Oklahoma. X-ray specialists who apply the X-ray to the human body as a therapeutic remedy, as well as for purposes of diagnosis, are not always graduate physicians. Indeed, according to the record, the operator of the X-ray machine at Mayo's is not a physician. The X-ray is largely a scientific field unto itself, and any one who, by study, observation and experience in that particular branch of science, possesses knowledge and skill therein beyond that of persons of common knowledge, is competent to testify as an expert witness. *Newport Manufacturing Co. v. Alton*, 130 Ark. 542, 198 S. W. 120.

This court is committed to the doctrine that it is not necessary for one to be a physician in order to be an X-ray specialist and entitle him to testify as an expert. *Runyan v. Goodrum*, 147 Ark. 481, 228 S. W. 397, 13 A. L. R. 1403. In speaking of the application of X-ray and the competency of the testimony of one versed and skilled in the use thereof, the Supreme Court of Minnesota said:

"The so-called X-rays, discovered by Roentgen have been recognized and known to scientists, both in and out of the medical profession, for some eight years. During the time the apparatus for the generation of the X-rays, together with the fluoroscope, has been used very generally by electricians, professors of physics, skiagraphers, physicians and others, for experimental and demonstrative purposes. It is a scientific and mechanical appli-

ance, the operation of which is the same in the hands of the college professor, or the physician of the allopathic, homeopathic, or any school of medicine. It may be applied by any person possessing the requisite scientific knowledge of its properties, and there would seem to be no reason why its application to the human body may not be explained by any person who understands it."

From his study and experience Dr. Hill was qualified to testify as to the amount of dosage it would take to burn the human body and whether the dosage was properly or whether negligently administered.

Appellant's next contention for a reversal of the judgment is that the trial court erred in refusing to allow appellant to show by their witness, Dr. Gray, who administered the treatment in question, the details of the process of administering the X-ray treatment. This testimony, to the effect that the X-ray machine could be adjusted to the body and be running without generating X-rays, was offered to rebut the evidence of appellee that Dr. Gray turned the X-ray machine on him for a period of twenty or thirty minutes and left the room during that time. Dr. Gray had testified, in his direct and cross-examination, that he only administered the treatment for five minutes by the watch, and remained in the room during the entire time. The rebuttal testimony was in conflict with Dr. Gray's original evidence, and was not offered to show the actual condition that existed. It was not offered in the nature of an admission that he had left the room and that, during his absence from the room, the tube in which the rays were generated was lighted and the motor running, yet no X-rays were being generated. The rebuttal testimony was not responsive to the issue of negligence joined and not a good faith offer to change the defense. We think the court was correct in excluding it.

Appellant's next contention for a reversal of the judgment is that the trial court erred in allowing appellee's witnesses, Doctors Ruff and Hill, to state that certain alleged facts constituted negligence on the part of

appellants. They were permitted to testify that it would be negligence for an X-ray technician or practitioner to turn an X-ray of 4 milliamperes voltage on a patient for twenty or thirty minutes while absent from the room. The purpose for introducing expert testimony is to get the judgment or conclusion of the witness based upon facts assumed to be true. Expert witnesses could not answer a hypothetical question otherwise than by expressing an opinion or announcing a conclusion. We can see no difference in saying that certain acts or omissions constitute negligence in the treatment of a disease and saying that the acts hypothetically detailed show improper treatment. The court did not err in letting the two expert witnesses testify that, in their opinion, it constituted negligence for appellant to turn an X-ray on appellee of the voltage described for twenty or thirty minutes during the absence of the operator of the machine from the room. This court stated in the case of *Durfee v. Dorr*, 131 Ark. 376, 190 S. W. 376:

“Objection is made by appellant also to the action of the court in permitting practicing physicians, who qualified as experts, to testify as to the character of attention a patient should receive in a hospital. We think this evidence was competent, as it related to a subject upon which the average juror would have no information or experience upon which he would be in position to formulate an intelligent conclusion unless he based his conclusion upon the opinion of one qualified to speak as an expert.”

Appellant's next contention for a reversal of the judgment is that the trial court erred in giving instruction number 2, which is as follows:

“You are further instructed that if you find that plaintiff's arm was burned by defendant's X-ray machine on account of defendant's negligence, as above explained, and that the place so burned became infected without the negligence of the plaintiff, and while he was exercising due care to protect his injury, and that the plaintiff's injury was aggravated and increased by said infection,

defendants would be liable to plaintiff for such aggravated or increased injury.”

One objection made to the instruction is that the undisputed proof showed that the burn completely healed under the treatment of Dr. Gray during the month of August, 1922, and the diseased condition of the arm necessitating the operations developed later from other causes not connected with the burn. It is true that Dr. Gray testified to the facts just detailed, but appellee testified to the contrary, which made the issue of fact a disputed one. Another objection made to the instruction is that it ignored the defense of the appellants that the burn had been entirely cured under Dr. Gray's treatment. It is true that instruction number 2 only covered appellee's theory of the case, but instruction number 6 requested by appellants and given by the court covered their theory of the case with reference to treating and curing the burn. Instruction number 6 is as follows:

“You are instructed that, even though you should find from the evidence, under other instructions herein given, that the X-ray burn received by the plaintiff was caused by or through the negligence of the defendants in their manner of administering same, still, if you find from the evidence that, when such burn was reported by plaintiff to the defendants, they treated him therefor, and effected a cure thereof within a reasonable time, and that, after such cure was so effected, the arm of plaintiff became diseased and developed into a worse condition than it was before such cure, then defendants cannot be held liable for such second or subsequent condition, nor are they required to prove the cause of such second or subsequent diseased condition in order to be exonerated from liability therefor.”

Appellants' next and last contention for a reversal of the judgment is that the trial court erred in giving instruction number 3 upon the measure of damages applicable to the facts in the case, which is as follows:

“If you find for the plaintiff, in determining his damages you should take into consideration the nature

and permanency of his injury, if any; the mental and physical pain and suffering, if any; the money expended in treatment of his injury and hospital expenses, if any; the diminished earning capacity of plaintiff, if any, as you may find from the evidence were occasioned by the negligence of the defendants, and award him such sum as you may find from the evidence will fairly and reasonably compensate him for said injuries so received.”

The objection made to the instruction is that it covered damages arising from the ulcer, which developed ten months after the X-ray treatment. There is testimony in the record tending to show that the burn was the source or origin of the ulcer which resulted in damage to the arm. It was proper for the jury to render a verdict compensating appellee for the injury to the arm if the burn was the proximate cause of the injury. This was a disputed fact for determination by the jury.

No error appearing, the judgment is affirmed.

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