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NOT FOR PUBLICATION

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ARIZONA

RICHARD SACCUCI, Plaintiff, vs. UNITED STATES OF AMERICA, Defendant.	No. CV-07-1277-PHX-GMS **FINDINGS OF FACT AND CONCLUSIONS OF LAW AND JUDGMENT**

On May 12-15, 2009, this matter was tried to the Court without a jury. (Dkt. ## 80-81, 84-85.) This Order constitutes the Court's findings of fact and conclusions of law under Federal Rule of Civil Procedure 52(a).[1]

I. BACKGROUND

On May 20, 2004, Plaintiff presented to the Carl T. Hayden VA Medical Center in Phoenix, Arizona ("VAMC") with complaints consistent with a transient ischemic attack ("TIA"). Prior to the incident on May 20, Plaintiff suffered from the pre-existing conditions of Type II diabetes, hypertension, hyperlipidemia, gout, and vertigo. Plaintiff was admitted and treated by internal medicine physician and hospitalist Dr. Michael M. Garrett. Laboratory testing and a chest x-ray were ordered and performed. The testing revealed a

[1]During trial, at the conclusion of Plaintiff's case, Defendant moved for partial judgment pursuant to Federal Rule of Civil Procedure 52(c) arguing that Plaintiff failed to offer any evidence supporting damages in the form of economic loss. The Court granted Defendant's Motion. Judgment is therefore granted in favor of Defendant on all claims to the extent that Plaintiff seeks economic loss damages.

normal creatinine level (1.2 mg/dl), and BUN (18 mg/dl) while the chest x-ray revealed a 7.5 x 8 mm pulmonary nodule in Plaintiff's left lung. A repeat chest x-ray with nipple markers was ordered to rule out the possibility of the nodule being the result of a nipple shadow. The repeat x-ray confirmed the existence of the pulmonary nodule. Dr. Mark Jackson, the VAMC radiologist, recommended further studies, specifically a CT scan if no prior films were available.

On June 11, 2004, Plaintiff underwent a chest CT scan with contrast dye. Repeat laboratory testing of Plaintiff's creatinine level were not conducted either in the days before or after the CT scan. The results were unremarkable except for calcified granuloma corresponding to the previously seen nodule. Several months later, on August 17, 2004, Plaintiff, complaining of vertigo, was seen by his assigned physician, Dr. Phillip Poirier. Dr. Poirier ordered routine laboratory testing which, on September 23, 2004, revealed high creatinine (1.7 mg/dl) and BUN (32 mg/dl) levels. According to these results, Plaintiff experienced a .5 mg/dl rise in his creatinine levels between May 20, 2004, and September 23, 2004.

In this case, Plaintiff asserts that he suffered serious damage to his kidneys as a result of medical malpractice in his treatment at the VAMC. Plaintiff claims that medical malpractice was committed by the employees of the VAMC: (1) when repeat creatinine laboratory testing was not conducted in the days leading up to and following his CT scan; and (2) when the VAMC failed to adequately inform him of the risk of kidney damage from contrast agent used in conjunction with his CT scan.[2]

II. FINDINGS OF FACT

1. Plaintiff had elevated creatinine levels at least as early as 1987.

2. Plaintiff also had elevated creatinine levels when his blood was tested in 1992 and 1997.

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[2]To the extent that Plaintiff asserted alternate malpractice claims in his Complaint (*see* Dkt. # 1 ¶ VI), Plaintiff expressly waived those claims at trial.

3. In 1998, Plaintiff's creatinine level was elevated and his estimated glomerular filtration rate (EGFR) – a more sensitive measure of kidney function than the creatinine level – was fifty-seven. An EGFR at this level meets the diagnostic criteria for stage III kidney disease.

4. Although most peoples' creatinine levels remain quite stable, Plaintiff's creatinine levels are subject to variation. Plaintiff's creatinine levels were subject to such variation both before and after June 2004. It is not uncommon for those with chronic kidney disease to have variant creatinine readings.

5. Although the majority of Plaintiff's creatinine levels taken before June 2004 indicate that he suffered from chronic kidney disease, some, including those taken in 1989 and May 2004, are within the upper range of normal kidney function.

6. In 2001, Plaintiff's blood chemistry panel indicated that his creatinine level was .9 mg/dl. No blood chemistry panels were taken for Plaintiff between 2001 and 2004.

7. As experts for both sides have testified, Plaintiff's creatinine level of 1.2 mg/dl, which resulted from his May 20, 2004, blood tests, was likely lower than his typical creatinine level during this general time.

8. Plaintiff suffered from poorly-controlled hypertension and hyperlipidimia from at least 1987 forward. Plaintiff developed adult onset diabetes in 2001. Persons over 40 begin to lose renal function every year. All of these conditions caused gradual kidney damage to Plaintiff.

9. Plaintiff had chronic kidney disease prior to 2004, and Plaintiff's creatinine levels varied prior to 2004.

10. Plaintiff first treated with the VAMC when, in May of 2004, he presented at Defendant's emergency treatment center with complaints that were eventually diagnosed as a TIA.

11. As a result of this initial visit, Dr. Garrett switched Plaintiff's blood pressure medication to Lisinopril. Lisinopril is generally a preferable blood pressure medication for diabetics because of its kidney-protective effects. Lisinopril, however, can have negative effects on the kidney function of some patients.

12. Examination of a diagnostic chest x-ray taken of Plaintiff after his discharge revealed the presence of a nodule in his chest, which ultimately resulted in a request by Dr. Garrett for Plaintiff to receive a CT scan of the chest with contrast to rule out the possible malignancy of the nodule.

13. On June 5, 2004, Plaintiff received a VAMC intake physical from Nurse Practicioner Jones, during which Plaintiff signed a consent to a CT scan with contrast of the chest.

14. During the intake physical, Nurse Jones noted that the dose of Lisinopril ordered by Dr. Garrett was not adequately reducing Plaintiff's blood pressure. She thus increased the dose of Lisinopril. Nurse Jones ordered a creatinine blood test to be performed one week from the date of the June 5 physical. When she did so, Nurse Jones knew that Lisinopril could have adverse effects on the kidney functions of some patients.

15. According to the procedure Nurse Jones normally followed, she informed Plaintiff that she had ordered an additional creatinine test for him to be taken within a week's time from the VAMC lab. Plaintiff never obtained this additional creatinine test.

16. During this same session, Nurse Jones reviewed with Plaintiff the VAMC's written consent form for a CT scan with contrast. Among other things, the form specified that a CT scan of the thorax with contrast was performed by injecting "a special iodine containing solution (contrast agent) into a vein through a needle puncture" and taking "computerized x-ray sections" of the chest. The consent form specified that the risks "include reactions to contrast agent which range from minor reactions requiring no treatment to very serious

complications, such as cardiac arrest and death. Conscious sedation may be required, risks include minor complications to cardiac arrest and death."

17. Plaintiff signed the written consent form. Plaintiff was then scheduled for a CT scan with contrast, and a radiologist was subsequently assigned by the VAMC.

18. Under the circumstances of this case the VAMC met the standard of care for informed consent when it obtained the written consent of Plaintiff to the CT scan with contrast procedure on the form that it did.

19. Plaintiff received a CT with contrast on June 11, 2004.

20. On September 23, 2004, as a result of his first appointment with his PCP assigned by the VAMC – Dr. Poirier – Plaintiff had a blood chemistry panel taken. That test indicated that Plaintiff had a creatinine level of 1.7 mg/dl.

21. The only blood work history available to Dr. Poirier was the previous bloodwork done at the VAMC after May 2004. In light of Plaintiff's elevated level of creatinine from the test taken the previous May, Dr. Poirier removed Plaintiff from Lisinopril because of its possible tendency to elevate creatinine levels.

22. After several subsequent creatinine levels indicated that removing Plaintiff from Lisinopril did not affect his creatinine levels, Dr. Poirier returned Plaintiff to Lisinopril, due to its likely kidney-protective affects. Dr. Poirier further referred Plaintiff to a nephrologist.

23. Plaintiff did not suffer increased creatinine levels from the administration of Lisinopril.

24. Plaintiff has subsequently had frequent creatinine levels taken since early 2005. The creatinine levels are not stable, but vary between a low of 1.48 mg/dl and a high, reached on two occasions, of 2.0 mg/dl.

25. During the course of the more frequent creatinine tests taken subsequent to 2005, Plaintiffs creatinine levels have varied as much as .5 mg/dl and have

varied as much as .4 mg/dl during a three month period between May 16, 2006, and August 28, 2006.

26. All of these creatinine levels and their resulting EGFRs indicate that Plaintiff has chronic stage III liver disease. Creatinine measurements at the level being experienced by Plaintiff are basically asymptomatic and can be treated by Plaintiff and his physicians without noticeable effect on his life routines or medical treatment options.

27. A diagnosis of contrast-induced nephropathy requires a minimum of a specific increase in the creatinine level either by .5 mg/dl or by 25% within a short period (48 to 72 hours) after the patient receives the contrast dye.

28. Contrast-induced nephropathy is statistically rare.

29. Only a very small percentage of patients (the testimony suggested from between one to three percent) have any reaction at all to the administration of contrast dye. Among the small number of patients who experience contrast-induced nephropathy, all but approximately one percent of that number return to baseline creatinine levels shortly after the acute episode.

30. Plaintiff's expert opined that Plaintiff was one of those statistically very rare patients who both had a reaction to contrast dye and who did not return to pre-administration creatinine levels following exposure. Nevertheless, Plaintiff's expert acknowledged that, due to the failure to have a creatinine chemistry panel performed more closely after the administration of the contrast dye, there is insufficient information to determine whether the diagnostic criteria for contrast-induced nephropathy are satisfied.

31. Plaintiff's expert thus determined that the difference between the May 2004 and the September 2004 creatinine blood chemistry panels should be used to fulfill the requirements of the diagnosis of contrast-induced nephropathy. In his view, the hospital should be held responsible for a failure to obtain a blood chemistry panel shortly after the CT scan, and thus it is fair to attribute the

difference between the May and the September creatinine panels to the contrast dye since the hospital could not prove that the administration of the dye did not cause the increase.

32. There are several reasons why the Court rejects this version of causation. First, the court finds that there is a more likely explanation of the rise in Plaintiff's creatinine levels. Even Plaintiff's expert opined that Plaintiff's typical creatinine level was probably higher than 1.2 mg/dl around the time that he received the CT with contrast. Further, all of the experts who testified, even Plaintiff's expert, acknowledged that hypertension, hyperlipidimia, diabetes, and age could and would progressively reduce renal function over time. Diabetes might be a cause of an increase over time of creatinine levels, even absent protein in the urine.

33. The natural progression along with age is the most likely explanation for Plaintiff's higher, but still asymptomatic and inconsistent, levels of creatinine.

34. Further, although Plaintiff's expert testified that the variation between the May and September 2004 creatinine levels should be attributed to the administration of contrast dye, the Court rejects both reasons on which he based that conclusion.

35. First, Plaintiff's creatinine levels were subject to considerable variation both before and after the June 11, 2004, administration of contrast. Although Plaintiff did not have frequent or even consistent blood panel results prior to the administration of the contrast dye, the panels that were taken indicated considerable fluctuation in Plaintiff's creatinine levels. Those levels went from a high of 1.4 mg/dl measured in 1987 and 1998 to a low of .9 mg/dl in 2001, with 1.3 mg/dl measurements in 1992 and 1997 and 1.2 mg/dl measurements in 1989 and 2004. Thus there were significant variations in Plaintiff's creatinine levels even before the administration of contrast dye. After the administration of contrast dye, Plaintiff's creatinine levels also

fluctuated. But in light of Plaintiff's pattern of fluctuating levels of creatinine, it does not follow that an upward fluctuation between May 2004 and September 2004 is the result of the administration of contrast dye.

36. After early 2005, Plaintiff's creatinine levels were taken much more frequently. They continued to vary both upward and downward in a short series of months. The creatinine levels vary between a low of 1.48 mg/dl and a high reached on two occasions of 2.0 mg/dl. During the course of these more frequent creatinine tests, Plaintiffs creatinine levels have varied as much as .5 mg/dl and have varied as much as .4 during a three month period between May 16, 2006, and August 28, 2006. No contrast dye has been administered to the Plaintiff during this period, yet the levels of his creatinine have been subject to considerable fluctuations. The Court thus rejects the argument that the fluctuations are attributable to the contrast-dye.

37. Further, Dr. Mende testified that in light of the recent improvement in Plaintiff's kidney function he could not testify with the requisite degree of probability as to any continuing damage that Plaintiff might suffer. Dr. Mende tesitified that such improvement in someone who has suffered long-term kidney disease is extremely atypical. The Court concludes that the improvement is more likely explicable as part of a pattern of Plaintiff's fluctuating creatinine levels rather than as an extremely atypical "recovery" from damage inflicted by contrast dye.

38. Finally, Dr. Mende's proposal to attribute the rise between the May and September 2004 creatinine levels to the contrast dye because the hospital had not procured a blood chemistry panel closer to the time of the CT scan fails to take into account that a blood chemistry panel was ordered by Nurse Jones for approximately June 12 – one day after Plaintiff had taken the CT scan with contrast. Plaintiff never had this blood panel taken. Not only does Dr. Mende's proposal reverse the burden of proving causation, which is on

Plaintiff, it fails to take into account that a blood chemistry panel to reflect Plaintiff's creatinine level was ordered by the VAMC. Plaintiff simply failed to take the blood test. The Court thus declines to make the inference that Dr. Mende suggests as being inappropriate.

39. Hypertension, hyperlipidimia, diabetes, and age cause the loss of renal function over time, even in those cases where the loss of renal function is not signified by excessive protein in the urine. This is the result of gradual damage to the vascular system, which in turn damages kidney function.

40. Plaintiff had higher than normal creatinine levels at least as early as 1987. He has had hypertension and hyperlipidimia that were in poor control between 1987 and 2004, and he developed diabetes no later than 2001. The cause of Plaintiff's chronic kidney disease is vascular and results from Plaintiff's pre-existing kidney problems as exacerbated over time by his continuing hypertension, hyperlipidimia, age, and diabetes.

41. Any finding of fact deemed a conclusion of law is so adopted.

III. CONCLUSIONS OF LAW

1. Plaintiff brings this action pursuant to the Federal Tort Claims Act ("FTCA"), 28 U.S.C. § 2671 *et seq.*

2. This Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1346(b). Venue is proper in this District pursuant to 28 U.S.C. § 1402(b).

3. In actions brought under the FTCA, the liability of the United States is determined in accordance with the substantive law of the place where the act or omission occurred. *Taylor v. United States*, 821 F.2d 1428, 1430 (9th Cir. 1987); *see also* 28 U.S.C. §§ 1346(b)(1), 2674.

4. The alleged malpractice in this case occurred at the VAMC in Phoenix, Arizona; therefore Arizona substantive law controls.

5. To recover in tort in Arizona, a plaintiff must prove: "(1) a duty, or obligation, recognized by law, requiring the defendant to conform to a certain standard of

conduct, for the protection of others against unreasonable risks[;] (2) a failure on [the] defendant's part to conform to the required standard[;] (3) a reasonably close causal connection between the conduct and the resulting injury[; and] (4) actual loss or damage[s]." *Ontiveros v. Borak*, 136 Ariz. 500, 504, 667 P.2d 200, 204 (1983) (quotation omitted).

A. Medical Malpractice Standards

6. Liability for medical malpractice actions is determined pursuant to Arizona Revised Statutes section 12-561 *et seq.*

7. Arizona Revised Statutes section 12-561(2) defines medical malpractice as follows:

> "Medical malpractice action" or "cause of actions for medical malpractice" means an action for injury or death against a licensed health care provider based upon such provider's alleged negligence, misconduct, errors or omissions, or breach of contract in the rendering of health care, medical services, nursing services or other health-related services or for the rendering of such health care, medical services, nursing services or other health-related services, without express or implied consent.

8. The elements of proof necessary to support a medical malpractice action are found in Arizona Revised Statutes section 12-563:

> The following shall be necessary elements of proof that injury resulted from the failure of a health care provider to follow the accepted standard of care:
>
> 1. The health care provider failed to exercise that degree of care, skill and learning expected of a reasonable, prudent health care provider in the profession or class to which he belongs within the state acting in the same or similar circumstances; and
>
> 2. Such failure was a proximate cause of the injury.

9. Arizona Revised Statutes section 12-563 governs Plaintiff's burden of proof in medical malpractice cases. In order to establish a standard of care and a deviation from that standard, Plaintiff must present evidence that the health care provider failed to exercise the degree of care, skill, and learning expected from a reasonable, prudent health care provider in the profession to which he

or she belongs under the same or similar set of circumstances in the state of Arizona. *Bell v. Maricopa Med. Ctr.*, 157 Ariz. 192, 194-95, 755 P.2d 1180, 1182-83 (Ct. App. 1988); *see also* Ariz. Rev. Stat. § 12-563.

10. A plaintiff in a medical malpractice lawsuit must use medical expert testimony to prove (1) whether a health care provider breached a duty by falling below the acceptable standard of care and (2) a connection between the breach and the ultimate injury, except where negligence is readily apparent to a layman. *Barrett v. Harris*, 207 Ariz. 374, 378, 380, 86 P.3d 954, 958, 960 (Ct. App. 2004); *Peacock v. Samaritan Health Serv.*, 159 Ariz. 123, 126, 765 P.2d 525, 528 (Ct. App. 1`988).

11. "[C]ausation must be shown to be Probable and not merely Possible, and general expert medical testimony that a subsequent illness or disease 'could' or 'may' have been the cause of the injury is insufficient." *Kreisman v. Thomas*, 12 Ariz. 215, 218, 469 P.2d 107, 110 (Ct. App. 1970).

12. "A plaintiff proves proximate cause by demonstrating a natural and continuous sequence of events stemming from the defendant's act or omission, unbroken by any efficient intervening cause, that produces an injury, in whole or in part, and without which the injury would not have occurred." *Barrett*, 207 Ariz. at 378, 86 P.3d at 958 (citations omitted). The "[d]efendant's act need not have been a 'large' or 'abundant' cause of the final result; there is liability if the result would not have occurred but for defendant's conduct, even if that conduct contributed 'only a little' to plaintiff's injuries." *Ontiveros*, 136 Ariz. at 505, 667 P.2d at 205.

13. Plaintiff has failed to demonstrate that his kidney disease was caused in whole or in part by an administration of the contrast dye. Given the existence of Plaintiff's kidney disease prior to the administration of the contrast dye, Plaintiff's risk factors that contribute to the progressive development of kidney disease (which manifested themselves at least as early as 1987), the

fluctuations in Plaintiff's creatinine levels both before and after June 2004, the very small likelihood that Plaintiff would demonstrate a reaction to contrast dye or fail to return to baseline creatinine levels from it, and that it is extremely atypical for a person with long-term kidney damage to show the improvement in kidney function that Plaintiff has recently shown, Plaintiff has not carried his burden of proof that administration of the contrast dye on June 11, 2004, was a cause of his kidney disease.

B. Informed Consent Standards

14. "The duty of a physician in a malpractice case is the duty to disclose the risks as measured by the usual practices of the medical profession." *McGrady v. Wright*, 151 Ariz. 534, 537, 729 P.2d 338, 341 (Ct. App. 1986) (citation omitted). Arizona courts have "[left] the precise parameters of the required disclosure for any particular informed consent case to be established by expert testimony in accordance with the applicable standard of care." *Duncan v. Scottsdale Med. Imaging Ltd.*, 205 Ariz. 306, 309-10, 70 P.3d 435, 438-39 (2003) (citation omitted). "Whether or not a surgeon is under a duty to warn a patient of the possibility of a specific adverse result of a proposed treatment depends upon the circumstances of the particular case and upon the general practice followed by the medical profession in the locality; and the custom of the medical profession to warn must be established by expert medical testimony." *Riedisser v. Nelson*, 111 Ariz. 542, 544-45, 534 P.2d 1052, 1054-55 (1975). To prove an informed consent case, a plaintiff must prove that the medical "provider [did] not adequately disclose the risks and alternative treatments prior to performing the procedure." *Gorney v. Meaney*, 214 Ariz. 226, 231, 150 P.3d 799, 804 (Ct. App. 2007) (citing *Duncan*, 205 Ariz. at 309-10, 70 P.3d at 438-39).

15. Under the circumstances of this case, Defendant provided adequate information to Plaintiff, who provided a valid informed consent to the CT scan with contrast.

16. Any conclusion of law deemed a finding of fact is so adopted.

17. The Court enters judgment for Defendant United States. Plaintiff takes nothing from his claims.

DATED this 2nd day of June, 2009.

G. Murray Snow
United States District Judge