In the United States Court of Federal Claims

OFFICE OF SPECIAL MASTERS

No. 11-631V

(Not to be Published)

* *		
	*	Filed: July 31, 2015
ROY GREENE,	*	
	*	
Petitioner,	*	Finding of Fact; Tetanus-Diphtheria
	*	("Td") Vaccination; Brachial Neuritis;
v.	*	Timing of Onset of Symptoms;
	*	Contemporaneous Medical Records
SECRETARY OF HEALTH AND	*	Versus Testimony; Dismissal of
HUMAN SERVICES,	*	Table Claim
	*	
Respondent.	*	
	*	
* *		

F. John Caldwell, Jr., Maglio Christopher & Toale, PC, Washington, D.C., for Petitioner.

Ann Martin, U.S. Dep't of Justice, Washington, D.C., for Respondent.

RULING REGARDING FINDINGS OF FACT[1]

On September 29, 2011, Roy Greene filed a petition for compensation in the National Vaccine Injury Compensation Program (the "Vaccine Program"),[2] alleging that he developed brachial plexopathy as a result of his July 22, 2009, receipt of the tetanus-diphtheria ("Td") vaccine. Pet. (ECF No. 1). Mr. Greene has alleged both a Table Injury and a "Non-Table" claim *(id.* at 2), but success on the Table claim will require Petitioner to establish onset of his symptoms within two to twenty-eight days of vaccination (42 C.F.R. § 100.3(a)(I)(B)).

[1] Because this ruling contains a reasoned explanation for my actions in this case, I will post it on the United States Court of Federal Claims website, in accordance with the E-Government Act of 2002, Pub. L. No. 107-347, § 205, 116 Stat. 2899, 2913 (Dec. 17, 2002) (current version at 44 U.S.C. § 3501 (2014)). As provided by 42 U.S.C. § 300aa-12(d)(4)(B), however, the parties may object to the published ruling's inclusion of certain kinds of confidential information. Specifically, under Vaccine Rule 18(b), each party has fourteen days within which to request redaction "of any information furnished by that party: (1) that is a trade secret or commercial or financial in substance and is privileged or confidential; or (2) that includes medical files or similar files, the disclosure of which would constitute a clearly unwarranted invasion of privacy." Vaccine Rule 18(b). Otherwise, the whole ruling will be available to the public. *Id*.

[2] The Vaccine Program comprises Part 2 of the National Childhood Vaccine Injury Act of 1986, Pub. L. No. 99-660, 100 Stat. 3758, codified as amended, 42 U.S.C. §§ 300aa-10 through 34 (2012) [hereinafter "Vaccine Act" or "the Act"]. Individual section references hereafter will be to § 300aa of the Act.

At the parties' request, a fact hearing was held in the matter on March 26, 2015. My fact ruling, based on the record as a whole, is set forth herein, and I conclude that Mr. Greene's symptoms began no earlier than September 1, 2009. As a result, Petitioner's Table Injury claim shall be dismissed.

I. Factual Background

A. *Documentary Treatment History*

On July 22, 2009, Mr. Greene (who worked in the construction industry) presented to the emergency room at Clear Lake Regional Medical Center in Webster, Texas with a puncture wound in his right hand caused by a drill accident at a construction site. Pet'r's Ex. 10 at 10-15, 19-27. Petitioner received the Td vaccination in his right arm as a result of this injury. *Id.* Petitioner was discharged from the hospital that same day with a prescription for a narcotic medication for pain management. *Id.* at 15.

Petitioner saw no other healthcare providers in connection with his injury until September 7, 2009 (Labor Day of that year). He presented to Houston Northwest Medical Center in Houston, Texas on that date reporting that he had been experiencing sharp pain in his right upper arm for the past four days, as well as chest pain earlier that day. Pet'r's Ex. 12 at 15, 19-20. At the time of the visit, Petitioner indicated that he had pain on the right side of his body that was radiating from his neck down his arm which was not alleviated by changing his position or any other self-treatment. *Id.* at 15. Petitioner underwent a physical, neurological, and psychological examination. *Id.* at 18-20. Results of a chest and shoulder x-ray conducted during this visit were largely unremarkable, however, and Mr. Greene was diagnosed as suffering from a muscle spasm. *Id.* at 21-22. He was discharged from the hospital that same day with medication for his pain (Darvocet and Skelaxin[3]), and a referral for an outpatient doctor's visit regarding his symptoms. *Id.* at 16-18.

Petitioner visited his chiropractor, Todd Hatch, DC, the next day (September 8, 2009) regarding his symptoms and was referred for magnetic resonance imaging ("MRI") of his cervical spine. Pet'r's Ex. 3 at 100. The MRI was performed on September 9, 2009, by Jeffery L. Watts, MD, a board certified radiologist, at Woodlands Open MRI and Imaging Center in The Woodlands, Texas. *Id.* at 34-35. At the time of the MRI, the treatment record reflects that Petitioner reported

[3] Darvocet is the trademark for a combination preparation of propoxyphene napsylate (an opioid analgesic) and acetaminophen (which has analgesic and antipyretic effects similar to aspirin's). *Dorland's Illustrated Medical Dictionary* (32d ed. 2012) at 12, 472, and 1527 [hereinafter *Dorland's*]. Skelaxin is the trademark for a preparation of metaxalone, "a centrally acting skeletal muscle relaxant used in the treatment of painful musculoskeletal conditions. *Id.* at 1145, 1723.

to Dr. Watts that he had been experiencing "[s]evere pain, burning, and numbness in the right arm," but he did not specify when these symptoms began. *Id.* at 36.

Later that month, on September 24, 2009, Petitioner was seen by neurologist Benny Wang, MD, at Sadler Clinic in The Woodlands, Texas regarding his symptoms. Pet'r's Ex. 6 at 2. During that visit, Petitioner reported that in "early 9/09 he started with last two fingers of his hand numb and burning up to elbow and some soreness of the armpit area and the chest." *Id*. Petitioner reported that his skin was very sensitive, he was experiencing pain that was at least moderate in severity, and he was experiencing "some stiffness at times," although his strength was "ok when there is no pain." *Id.* According to Dr. Wang's assessment, Mr. Greene was suffering from right ulnar neuritis.[4] *Id.* at 3. Dr. Wang recommended treatment with Medrol[5] and a Lyrica[6] titrate, and proposed that Petitioner undergo electromyography ("EMG")[7] testing if the prescribed medications were unhelpful. *Id.* at 3.

Mr. Greene subsequently had an initial appointment with Muni A. Shah, MD, at Woodlands Sports Medicine Centre in The Woodlands, Texas on September 30, 2009. Pet'r's Ex. 1 at 6-7. In the "Accident/Injury Information" form that Petitioner filled out for that visit, Mr. Greene states that his symptoms began on "Labor Day" (September 7, 2009). *Id.* at 23. Dr. Shah recorded the known facts relating to Mr. Greene's injury in his notes from the visit, stating that Mr. Greene had "sustained a penetrating trauma to his right hand on July 27, 2009," after which he "experienced immediate digital pain and swelling" for which he was evaluated at the emergency room that same day. *Id*. at 6-7. At the emergency room, Petitioner was administered a Td vaccination and "told to follow up with an orthopedic surgeon, but 'decided not to go' because he felt 'pretty good.'" *Id*. Since his hand accident, however, Petitioner "has had persistent 'burning, tingling, and shooting' discomfort," in his right hand and certain fingers, which is "exacerbated by 'applying pressure' to the hand." *Id*. Although it was noted that Dr. Wang had previously diagnosed Petitioner with a "nerve injury," Dr. Shah explained to Petitioner that "[i]in order to better quantitate this injury, [] an EMG would be prudent," and he therefore arranged a right upper extremity nerve test for Petitioner *Id.* at 7. Upon completion of such testing, Petitioner was to return so that they could "review the results together and decide on further treatment." *Id.*

---

[4] Neuritis is defined as "inflammation of a nerve, with pain and tenderness, anesthesia and paresthesia, paralysis, wasting, and disappearance of reflexes." *Dorland's* at 1263.

[5] Medrol is the trademark for preparations of methylprednisolone, which is used as an anti-inflammatory and immunosuppressant. *Dorland's* at 1120, 1154.

[6] Lyrica is the trademark for a preparation of pregabalin, which is indicated for used in the treatment of neuropathic pain in diabetic neuropathy and post-herpetic neuralgia. *Dorland's* at 1088, 1509.

[7] EMG is "an electrodiagnostic technique for recording the extracellular activity (action potentials and evoked potentials) of skeletal muscles at rest, during voluntary contractions, and during electrical stimulations." *Dorland's* at 602.

On October 5, 2009, Petitioner presented to Allen Chu, MD, PhD**,** an EMG and neuromuscular disease specialist in Houston, Texas, complaining of pain and numbness in his right upper extremity. Pet'r's Ex. 3 at 15. Dr. Chu's notes from this visit indicate that "[t]he numbness [which Petitioner described as 'burning; hot; loss of feeling'] sometimes radiates, from the armpit down to the hand." *Id*. Upon physical examination, Dr. Chu found some abnormalities, including issues with muscle strength (in the right ulnar), deep tendon reflexes, and decreased pinprick sensation (in some of the dermatomes of the upper extremities). *Id.* at 16. Dr. Chu listed cervical radiculopathy, brachial plexopathy,[8] carpal tunnel syndrome, and focal neuropathy as components of the overall differential diagnosis. *Id*.

In order to pinpoint the cause of Mr. Greene's pain and numbness, as well as to evaluate the nature and extent of the denervation, Dr. Chu performed an EMG of Petitioner's upper extremities (as originally recommended by Dr. Shah). Pet'r's Ex. 3 at 16. The EMG revealed a "pattern of neurophysiologic abnormalities [] consistent with a moderate right brachial plexopathy involving the lower plexus, primarily the lower trunk;" "[m]ild ulnar neuropathy across the elbow (cubital tunnel) on the right;" and "[m]ild to moderate median neuropathy at the wrist (carpal tunnel syndrome) on the right*." Id.* at 18-21. Based on these results, Dr. Chu identified Parsonage-Turner syndrome[9] as the source of Mr. Greene's symptoms in his right arm and right shoulder. However, although he speculated that Petitioner's shoulder symptoms could be related to his "work-related injury," he felt that Mr. Greene's hand numbness was less related, given the following supporting evidence: "1) the involvement of Abd. Dig. Mini (ADM) cannot be caused by puncture injury in the palm; 2) the mild extent of ulnar neuropathy at the elbow cannot explain the significant denervation changes distally; 3) the denervation changes involve[] median and radial innervated C8-T1 myotomes; 4) clinically, patient has sensory loss in the C8-T1 dermatomes which are beyond the scope of ulnar innervated areas." *Id.*

Records generated during Mr. Greene's visit to Dr. Chu are a primary source of factual conflict in this matter. In a "Questionnaire for Arm Numbness" filled out by Petitioner during this appointment but prior to his actual visit with Dr. Chu, Mr. Greene wrote down that the numbness (which he reported to be constant and radiating from his armpit down to his right hand) had begun thirty days before (presumably meaning the first week of September). Pet'r's Ex. 4 at 87-89. When

---

[8] Brachial plexopathy is defined as a neuropathy (nerve disorder) of the brachial plexus. *Dorland's* at 1462. "The brachial plexus is the network of nerves 'situated partly in the neck and partly in the axilla' and 'originating from the ventral branches of the last four cervical spinal nerves and most of the ventral branch of the first thoracic spinal nerves.'" *Velchek v. Sec'y of Health & Human Servs*., No. 02-1479V, 2005 WL 2847451, at *3 (Fed. Cl. Spec. Mstr. Oct. 28, 2005) (quoting *Dorland's Illustrated Medical Dictionary* (30th ed. 2003) at 1453).

[9] Parsonage-Turner syndrome (also known as neuralgic amyotrophy) is characterized by "pain across the shoulder and upper arm, with atrophy and paralysis of the muscles of the shoulder girdle." Dorland's at 70, 1391. In Vaccine Program cases, brachial neuritis is an alternative medical term often used interchangeably with Parsonage-Turner syndrome, as well as brachial plexopathy, to describe the same set of symptoms. *Devonshire v. Sec'y of Health & Human Servs*., No. 99-31V, 2006 WL 2970418, at *1 (Fed. Cl. Spec. Mstr. Sept. 28, 2006).

asked elsewhere on the questionnaire to identify by checking one of two boxes when the numbness started ("immediately" or "gradually"), Petitioner hand-wrote on the form (and also appears to have checked), an additional box indicating that its development was "delayed." *Id.* at 87. On that same questionnaire, Petitioner wrote the following more specific description of the nature and start of his symptoms:

> Rt [right] hand was drilled by coworker – 7-22. No symptoms at time – no work missed – Labor Day weekend hard work triggered neuro explosion assumed from Neck – MRI done + traction therapy on personal insurance and cost. Visit neurologist Wang said it was triggered from hand injury.

Id. at 89.

In a "Clinical Information Form" from Dr. Chu's office, presumably filled out on that same day, Mr. Greene similarly reported that his symptoms had started on Labor Day weekend. Pet'r's Ex. 4 at 90. However, typewritten notes from this same visit (which are signed by Dr. Chu) indicate that the onset of "[t]he numbness started about *after* work-related injury on [July 22, 2009]." Pet'r's Ex. 3 at 15 (emphasis added). These notes further indicate that the precipitating factor was an accident, and that the numbness "started gradually" after that July accident (rather than "delayed" as Mr. Greene appears to have written on the aforementioned questionnaire). *Id.*

On October 14, 2009, Petitioner returned to Dr. Shah for a follow-up evaluation of his right hand. Pet'r's Ex. 1 at 4-5. At this time, Mr. Greene stated that his right hand was "improving" and a physical examination performed during this visit led Dr. Shah to concur that Petitioner was "recovering from what appears to be a brachial plexopathy" and "may now engage in activities without restriction." *Id*.

Thereafter, on December 8, 2009, Petitioner had a new patient evaluation with Jeffrey E. Buddoff, MD, an orthopedic surgeon in Houston, Texas. Pet'r's Ex. 2 at 4. At that time, Mr. Greene reported that he had "[n]o previous history of right hand problems until 4-1/2 months ago [mid-July of that year] when he got drilled through the hand." *Id*. Petitioner indicated that "[h]e did fairly well after that," experiencing "[n]o infection or problem," but "[t]hen 2 months ago [October], he had a hard day of work, and that night he could not sleep" because "[h]e had [severe] pain shooting down from his axilla down to the hand." *Id*. Petitioner went on to indicate that he was subsequently "diagnosed with Parsonage-Turner syndrome," which "seems to be improving, except the numbness to the ulnar 1-1/2 digits persists." *Id*. Dr. Budoff noted that "[n]erve study shows a plexus injury, especially at the lower trunk, with mild carpal and cubital tunnel syndrome and denervation of multiple muscles consistent with Parsonage-Turner syndrome." *Id.* at 5-6.

Petitioner returned to see Dr. Budoff on February 9, 2010, for a workers' compensation follow-up examination. Pet'r's Ex. 2 at 2. At that time, Petitioner's hand wound was doing well, and his Parsonage-Turner syndrome appeared to be improving. *Id*. However, Dr. Budoff noted that he was "a little concerned the cubital tunnel/ulnar innervated area [was] worsening" and discussed the possibility of observing the change versus undergoing surgery with Petitioner. *Id.* at 3. Petitioner indicated that he would prefer observation, so Dr. Budoff recommended that Petitioner return in one month for a follow-up assessment.[10] *Id.*

B. *Factual Matters*

The following are facts as set forth by witness testimony or in documents that were created directly or provided by Petitioner or his wife.

1. Petitioner's VAERS Report and Supplemental Documentation Related to that Report

On March 6, 2010, Petitioner filled out a VAERS report identifying (for the first time in the chronology established by any records filed in this action)[11] that onset of his purportedly vaccine-related symptoms began August 8, 2009, at 10:00 PM. [12] Pet'r's Ex. 4 at 33, 51; Tr. at 72. At the same time, Petitioner detailed his understanding regarding the onset of his alleged vaccine-related injury in a report titled, "Tetanus Vaccine Injury Timeline and Condition" [hereinafter "Timeline"]. Pet'r's Ex. 4 at 27-28.

In the VAERS report, Mr. Greene recounted the construction work site injury to his hand that led to his receipt of a Td vaccine on July 22, 2009. Pet'r's Ex. 4 at 27, 51. Although at first the puncture wound appeared to have healed normally, seventeen days later (or on August 8th) his "shoulder blade area began to hurt." *Id.* at 27. At first, Petitioner discounted these symptoms since he "live[d] with soreness all the time and ha[d] creams and a tens [transcutaneous electrical nerve stimulation ("TENS")] unit[13] to help with evening pains," and thus rather than seeking medical

[10] A follow-up appointment was scheduled for March 9, 2010 (Pet'r's Ex. 2 at 7). Records from that visit were not filed, however (and I did not request that such records be filed as they were not germane to my decision in this case). There are also no subsequent records describing Petitioner's condition after this point, although at hearing Mr. Greene testified that he continues to experience symptoms related to his alleged injury.

[11] The VAERS report was included among the materials in Dr. Chu's possession (Pet'r's Ex. 4 at 33), but Dr. Chu testified that he did not have any hand in the creation of this document, had never seen it prior to the hearing, and believed that it was likely provided to his office by Mr. Greene's attorney after its creation. Tr. at 30.

[12] Mr. Greene specifically testified at hearing that in his recollection, the "Tetanus Vaccine Timeline and Condition" (which is dated March 6, 2010) was likely submitted through the VAERS reporting system at the same time as the VAERS report. Tr. at 74.

[13] TENS units "are predominately used for nerve related pain conditions," and "work[] by sending stimulating pulses across the surface of the skin and along the nerve strands." *The Original TENSUnit*, http://www.tensunits.com/ (last accessed July 10, 2015); *see also* Tr. at 83-84 (Petitioner's description of the device).

attention at this time he "just asked [his] wife to rub the stuff on the shoulder blade and kept on living and working." *Id*.

The report goes on to say that by August 15, 2009 (twenty-four days post-vaccination), Mr. Greene's "shoulder still was tender [and] the next symptom to appear was soreness in the back side of right arm in upper area," and he was also "waking up several times a night with one or both hands tingling." Pet'r's Ex. 4 at 27. Thereafter, on September 1, 2009, Mr. Greene's right arm was cramping down from the forearm to his hand. *Id*. Petitioner continued to believe that such symptoms were not related to his hand injury or post-hand injury vaccination, however, and believed self-treatment would be sufficient. *Id*.

The Timeline identifies September 7, 2009, as the date Mr. Greene opted to seek emergency medical attention given the severity of pain. Pet'r's Ex. 4 at 27. Two weeks later, because the pain was making it impossible for him to sleep, he went to Dr. Wang to obtain some kind of prescription pharmaceutical relief. *Id.* at 28. It was at that point, Petitioner asserted, that he was first led to believe (after speaking with Dr. Wang) that the hand numbness that he was experiencing was likely related to his July hand injury. [14] *Id.* During his subsequent visit to Dr. Chu, however, Petitioner learned that his condition "was severe and widespread affecting fiber nerves of just [his] right arm and hand," and also that "it was auto immune and based in the brachial area and not the hand" (*id*.), although as the Timeline reflects, Dr. Chu himself did not indicate – at that time or any other – that it was his professional conclusion that the Td vaccine had any relationship to Mr. Greene's symptoms. *Id.* at 28.

2. Witness Testimony

During the fact hearing on March 26, 2015, Petitioner and his wife testified, as well as one of his treating physicians, Dr. Chu. In addition, pre-hearing affidavits were submitted from both of the Greenes (*see* Pet'r's Exs. 15 and 16). Although I do not credit the truth of every statement made by each witness (primarily due to inconsistencies, or the existence of contradictory but more persuasive documentary evidence), the witnesses sincerely attempted to recall the relevant facts to which they were asked to testify.

[14] The medical record, while inconsistent on this point, also suggests that Mr. Greene did not learn of a possible relationship between the Td vaccine and his symptoms until later in the fall of 2009. *See, e.g.*, Pet'r's Ex. 3 at 55-56 (handwritten note on a treatment form from a visit to a chiropractor on October 23, 2009, where Petitioner indicated, "I think too many tetanus shots hurt people 2, 3 yrs"); Pet'r's Ex. 1 at 48-49, 53 (note from Petitioner's chiropractor dated November 10, 2009, indicated that Petitioner was continuing to see a specialist regarding tetanus toxicity). Mr. Greene himself testified that he was not sure when exactly he became aware of the possibility of making a VAERS report, but indicated that he had located the form to do so through personal research on the internet some time after he saw Dr. Chu. Tr. at 72-73. Petitioner acknowledged that he had consulted with an attorney regarding bringing a Vaccine Program claim before signing the form on March 6, 2010. *Id.* at 73.

a. *Roy Greene* – Mr. Greene's pre-hearing affidavit, notarized on November 6, 2014, is generally consistent with the assertions in his VAERS report and supporting Timeline. Thus, he avers that within a week of the July 22nd vaccination, he "began to have a gradual onset of numbness in [his] right hand,"[15] which "seemed to radiate from [his] armpit down to [his] hand." Aff. of Roy Greene (Pet'r's Ex. 15) [hereinafter "Greene Aff."] ¶¶ 1-3. Accordingly, Petitioner asserts that onset of his symptoms began sometime between late July and early August of 2009. *Id*. ¶ 6. He also confirms his allegation that he misinterpreted the early symptoms as caused directly by the puncture wound he had suffered, and that he did not begin to suspect that any of his subsequent symptoms were related to the Td vaccine until he saw Dr. Chu, well after his Labor Day emergency room visit. *Id.* ¶¶ 3, 5.

Mr. Greene's testimony provided additional details surrounding the accident that ultimately led to his receipt of the Td vaccination. After providing some background into his employment history in the construction industry, [16] he described the incident in which a co-worker accidently drilled through his right hand, leading to his receipt of the vaccination at issue in this case. Tr. at 43-44. Petitioner indicated that based on his years of working in the construction industry he was used to working in pain, and there were some kinds of pain that he would simply ignore because he assumed that they were work related. *Id.* at 82-83. Petitioner indicated that if he was experiencing pain, he would normally take a hot bath or use his TENS unit. *Id.* at 83-84. Accordingly, Petitioner asserted he did not readily seek medical treatment even though he had been experiencing pain and discomfort in the weeks immediately following vaccination. *Id.* at 57-58, 82-84.

Petitioner in particular attempted to bulwark the Timeline's specification of August 8, 2009, as the onset of his vaccine-related symptoms. He testified that to the best of his recollection, this was the first day his shoulder blade area began to hurt "based on the work that we had in progress and how it correlated to my pain levels and the wife's having to attend to me and help me with the shoulder region," although he acknowledged that the actual onset could have been within a few days of that date. Tr. at 75-76. He also tried to explain why he did not link his August symptoms to the Td vaccine. Thus, Petitioner testified that when he first began experiencing pain he thought it might be emanating from his chest, leading him at that time to be concerned that the pain might be a symptom of lung cancer. *Id.* at 46. However, he now believes that this pain was actually his brachial plexus first getting sore. *Id.* Mr. Greene described this pain as a gradual, progressive type of pain – indicating that it did not at first affect his movement, but over time it

[15] At hearing, however, Petitioner indicated that this was a misuse of the term "numbness" (as described in greater detail below).

[16] Petitioner indicated that he first started working in construction when he was in high school (around 1974), and that he had been working in the commercial construction industry since receiving a degree from Texas A & M in 2001. Tr. at 82. Petitioner indicated that although he was a superintendent and, as such, he does not get paid to do physical labor, he does physical labor at a construction site when needed. *Id*. at 82-83.

radiated and increased in intensity. *Id.* He continued to attempt to self-treat his pain until, by September 7, 2009, the chest pain and hand numbness he was experiencing led him to believe that he might be having a heart attack. *Id.* at 47.

As noted above, the first medical records setting forth the injuries complained of in this action are from Petitioner's 2009 Labor Day emergency room visit, and contain statements identifying that time period as the onset of Mr. Greene's symptoms. Accordingly, Mr. Greene attempted at hearing to explain why those records do not reflect the correct onset date. *See generally* Tr. at 45-49, 51-89. Petitioner admitted that the medical records from his emergency room visit pinpointed his symptoms as having begun no earlier than four or so days prior (Pet'r's Ex. 12 at 12-20), but attributed the inconsistency to miscommunication, adding that he felt confident that he had told his treaters that the symptoms and pain that he was experiencing had begun at an earlier point in time. Tr. at 61-64. Petitioner otherwise stated that some of the emergency room-related contemporaneous records (*see, e.g.*, Pet'r's Ex. 3 at 34) accurately captured his symptoms at that time. Tr. at 65-66.[17]

Petitioner also attributed inconsistencies about the onset date in the treatment record as arising from the ambiguous nature of the term "numbness." Tr. at 45-48, 51-54, 56-57. As context for his understanding of this term, Mr. Greene indicated that he had previously broken his back, and as a result of that injury he had become generally familiar with "neurological verbiage." *Id.* at 45. Based on this experience, Petitioner understood the word "numbness" to refer to something very specific – meaning that one could "stick a pin in and it not hurt," not merely a tingling sensation – and something that could become permanent if not addressed. *Id.* at 45-48. Accordingly, although the severity of his Labor Day symptoms impelled him to seek immediate treatment, he did not inform his treaters about his earlier, less severe symptoms that had begun in the first half of August (even though he now associates them with his later symptoms). *Id.* at 45-46, 51.

Despite the fact that Mr. Greene was told during his Labor Day emergency room visit that he was suffering from a pulled muscle or muscle spasm, he pursued treatment on his own due to his concerns about the numbness he had experienced, but continued not to inform treaters about his August symptoms for the reasons discussed above. Tr. at 48. Thus, in his initial visit with Dr. Shah,[18] Petitioner filled out the date of the injury as being July 22, 2009, but reported his symptoms

[17] Petitioner also attempted to explain a discrepancy regarding chest pain complaints as set forth on his Timeline and relevant medical records. Although the Timeline reported that Mr. Greene had experienced chest pain as early as August 18, 2009 (Pet'r's Ex. 4 at 27), in his oral testimony he distinguished these symptoms from the chest pain that led him to visit the emergency room over Labor Day 2009, because the prior chest pain was not accompanied with numbness. Tr. at 77-78.

[18] This record is presumed to be from September 30, 2009, even though it is not dated (*see* Pet'r's Ex. 1 at 6). Tr. at 69.

as beginning on Labor Day (Pet'r's Ex. 1 at 23), discounting the earlier pain he had been experiencing (Tr. at 68-69, 70-71). Similarly, when Petitioner visited Dr. Wang on September 24th, he still did not connect his symptoms with the Td vaccine or hand injury that led him to receive the vaccination. *Id*. at 48-49.[19]

By the time Mr. Greene filled out the questionnaire during his initial visit to Dr. Chu, he continued to rely on his mistaken belief that his August symptoms were not preliminary to the numbness that he later experienced in September, as contemporaneously reported to treaters. Tr. at 47-48, 51. Accordingly, in writing down on Dr. Chu's intake/questionnaire form that his right hand numbness was "delayed," he was trying to convey the fact that the sensations he had experienced between August and September 2009 had evolved from soreness to burning and then finally numbness. *Id.* at 48. He also reiterated that even as late as October 2009, he still did not understand that there could be any relationship between his hand injury (and/or the vaccination that he received as a result of it) and his subsequent symptoms. *Id*. at 67-68.

Overall, Petitioner's testimony at hearing emphasized his belief that the factual allegations in his affidavit and Timeline most accurately recounted the progression of his symptoms (and should therefore be relied upon, rather than the contemporaneous medical records, when there was a discrepancy). Tr. at 46, 54-55.[20] He noted that the Timeline had been prepared before his affidavit, and less than a year after his accident, and also stressed that his recollection of other events that were taking place during that time (including work occurrences in his construction career) had aided his memory in identifying this earlier onset. *Id.* at 54-55. Petitioner also stated that the Timeline's reliability was supported by the fact that it had initially been created in connection with his effort to make a successful Texas workers' compensation claim; in the process of so doing he had been reminded of when certain events had transpired. *Id.* at 54-56, 74, 79, 102. He was thus able to recall his physical status on certain dates by connecting it to employment-related "landmark" events. *Id.* at 76.

b. *Cheryl Greene* – Mrs. Greene, Petitioner's wife, provided an affidavit regarding the onset of Petitioner's alleged injury and testified at the hearing. The affidavit, dated March 2, 2015, states that a few weeks after Petitioner's July 22, 2009, receipt of the Td vaccine, Mrs. Greene observed that her "husband was having pain and numbness in his right arm and hand." Aff. of Cheryl Greene (Pet'r's Ex. 16) (ECF No. 49) [hereinafter "Mrs. Greene Aff."] ¶¶ 1-2.

[19] Petitioner corroborated this assertion by pointing out that he paid for this doctor's visit through his personal insurance, rather than his workers' compensation insurance, as he would have done if he had viewed the medical treatment to be connected with a work-related injury. Tr. at 48-49.

[20] Petitioner explained some of the inconsistencies between the affidavit that he submitted prior to trial and other evidence in this case (specifically the filed Timeline and his testimony at trial) as the product of having passed drafts of the affidavit back and forth with his lawyer, which he believed may have resulted in certain terms (in particular, "numbness") not being carefully chosen. Tr. at 54.

During this time the pain left him unable to sleep, and she "would hear him up at night sitting in a chair in the living room." *Id*. at ¶ 2. She initially attributed these symptoms "to the drill puncture injury that led to the vaccine and expected it would fade." *Id*. However, rather than fade away, the symptoms increased in severity until Mr. Greene finally sought treatment over Labor Day of 2009. *Id.* ¶ 3. Only later, in the course of seeing doctors regarding the symptoms, did the Greenes begin to identify the true nature of the injury. *Id.*

At hearing, Mrs. Greene testified regarding her recollection of Petitioner's symptoms before, and then leading to, his emergency room visit in September 2009. Prior to the emergency room visit she had heard her husband up at night on several occasions moaning as a result of the pain that he was experiencing. Tr. at 92-94.[21] Mrs. Greene testified that she specifically remembered four or five nights when her husband was up as it was very unusual for him to be up at night, and he had awakened her with his moans. *Id.* at 97-98. Mrs. Greene clarified the statement in her affidavit that his pain and symptoms began "a few weeks" after his accident (Mrs. Greene Aff. ¶ 2), indicating that this nighttime suffering likely occurred two or three weeks after the initial injury and associated vaccination. Tr. at 94-95.

In an effort to substantiate her recollections of the August onset of Mr. Greene's symptoms, Mrs. Greene testified that she attempted to help him self-treat his symptoms through the application of homeopathic remedies, including therapeutic oils that she purchased online or at a health food store. Tr. at 95, 101. Mrs. Greene specifically recalled massaging such oils on Petitioner's arm in an attempt to help make him feel better. *Id.* at 93, 95. She also recalled (but was unable to corroborate) conversations with Petitioner's mother or members of the Greenes's church[22] about his condition. *Id.* at 100. But because the Greenes were accustomed to not sharing openly with others the status of Petitioner's physical health, due to concerns that the disclosure of such information might result in his loss of a construction-related job, she indicated that it was not likely that she or her husband would have discussed his condition with third parties. *Id.*

Mrs. Greene further testified that when her husband finally visited the emergency room in September of 2009 to address the pain that he was experiencing, she accompanied him but she did not specifically recall any conversations that he had with healthcare providers. Tr. at 95-96. She did, however, indicate that had she heard her husband tell a doctor or nurse during this visit that

[21] Mrs. Greene specifically testified that she believed that Mr. Greene also was experiencing pain during the day but was forcing himself to go to work in spite of it. Tr. at 98. She added that Petitioner's occupation required him frequently to work through, or in spite of, physical pain *(id.* at 101).

[22] Mrs. Greene specifically recalled that her husband's pre-emergency room visit pain was so great that the Greenes had gone to their church and requested that church members pray over Petitioner. Tr. at 96. No statements or testimony from any such individuals has been provided in this case, however. Mrs. Greene also testified that she had emailed Petitioner's mother, informing her about the pain that he was experiencing and requesting that she pray for him as well. *Id*. However, that email was not provided because Petitioner no longer had access to it, as his mother's computer had crashed. *Id.* at 100.

his pain had begun only four days prior, she would have thought the statement was incorrect. *Id*. at 96.

c. Testimony of Dr. Chu – In order to address some of the inconsistencies arising from certain medical records, at my direction Petitioner summoned Dr. Chu by subpoena to testify in this case as a fact witness, and he did so. *See* Order for Issuance of a Trial Subpoena, dated Jan. 29, 2015 (ECF No. 45). After basic inquiries into his medical background,[23] Dr. Chu was questioned about Mr. Greene's October 2009 office visit. *See generally* Tr. at 6-42. He testified that although he remembered Mr. Greene personally, he did not remember the specifics regarding any of his visits and so had to refresh his memory through a pre-hearing review of Petitioner's medical chart. *Id*. at 32-34.

Based on that review, Dr. Chu testified that Petitioner had informed him that early September of 2009 was the time Mr. Greene's symptoms began. Tr. at 24. The arm numbness questionnaire that Mr. Greene filled out during his initial visit, for example, indicated that Petitioner's symptoms had started only thirty days prior to the October 5th visit. *Id.* The questionnaire also included a section intended to provide patients with an opportunity to provide any additional explanation related to their condition, which Mr. Greene completed and which again identified Labor Day weekend as the start of his symptoms. Pet'r's Ex. 4 at 89; Tr. at 25-27. In addition, when Mr. Greene filled out the new patient form (Pet'r's Ex. 4 at 90) he again identified the same period as the onset of his symptoms. Tr. at 26-27.

With respect to the section of the patient questionnaire where Mr. Greene wrote in by hand a third box in order to describe the development of his numbness as "delayed" (Pet'r's Ex. 4 at 87), Dr. Chu testified that he interpreted that to mean that Petitioner's numbness did not occur immediately after his hand injury, but instead had happened at a later, albeit unspecified, point in time. Tr. at 25. He contrasted this with the "gradually" box, stating that he considered that kind of symptom development to mean that the numbness began after the event but had increased in intensity and severity over time. *Id.*

Dr. Chu acknowledged that the typewritten notes recording Petitioner's visit and reported symptom history could be understood as consistent with Petitioner's testimony that his symptoms had begun well before his Labor Day emergency room visit. Tr. at 29, 32-35. In an attempt to explore this discrepancy, the parties asked Dr. Chu a number of questions about his patient information-compiling practices during the time Mr. Greene was his patient. *Id*. at 8, 19-23, 33-

[23] After graduating from medical school in Taiwan in 1987, Dr. Chu did his residency at Duke University and then went on to complete a fellowship at Harvard University before moving to Houston, Texas to practice medicine. Tr. at 7. Dr. Chu has been working as a neurologist in Houston, Texas since 2000. *Id.* Dr. Chu testified that his primary expertise involves performing EMG testing, and as part of his private practice he sees approximately 1,500 to 2,000 patients per year for such testing. *Id*. at 17. In preparation for his testimony at hearing, Dr. Chu spoke with his attorney and reviewed Mr. Greene's chart, including clinical notes and an EMG report. *Id*. at 8.

39. Dr. Chu explained this process, stating that patients generally first filled out information a standard questionnaire and form before examination, although Dr. Chu would also ask additional questions during the examination, amending the questionnaire accordingly if necessary. *Id.* at 19-23, 34. However, Dr. Chu testified that he did not have any additional handwritten notes regarding Mr. Greene's medical history (and that he did not in this case believe that he had amended the questionnaire or form that Petitioner filled out). *Id.* at 22-23.

Dr. Chu next explained how, in his medical practice, the typewritten history section of the "office visit" document would have been created. Although in some instances he would dictate the contents of that document,[24] in Mr. Greene's case he thought it most likely that this section (Pet'r's Ex. 4 at 87) was transcribed by his administrative assistant from the standard documents that a patient completes during an initial office visit. Tr. at 22-23, 37. It was thus Dr. Chu's belief that whoever had transcribed the information from the handwritten documents into the electronic medical records had inaccurately transcribed some of the information. *Id.* at 39.

Dr. Chu testified to his personal view that the records containing Petitioner's handwritten statements were the most accurate representation of Mr. Greene's medical history (as he reported it during his initial visit). Tr. at 22-23, 27, 29, 35-36. As a result, Dr. Chu gave more credence to Mr. Greene's handwritten assertions about onset occurring around Labor Day than to the later-created typewritten history that could be read to place onset as closer to the date of the hand injury itself (and associated vaccination). *Id.* at 32. Indeed, Petitioner's handwritten insert that his numbness was "delayed," (when given the opportunity to check "gradually") made that more likely to be true, in Dr. Chu's estimation, than the typewritten note stating that the numbness began gradually. *Id.* at 24-25, 28, and 35.[25]

3. Post-Hearing Documentary Materials

After the hearing, I directed the Petitioner to file certain documents that the witnesses had referenced and that might assist the fact-finding process. Non-PDF Order Regarding Hr'g, dated Mar. 26, 2015. The requested records were filed on April 9, 2015. Pet'r's Exs. 17-19 (ECF No. 50). After these documents were filed, Petitioner also filed affidavits (from himself and his wife)

[24] Dr. Chu would only personally dictate the notes when there was additional information not included in the standard documents that he wrote down when meeting with the patient. Tr. at 38. In this case, however, Dr. Chu testified to his belief that there was no such dictation after Mr. Greene's initial visit; the first four lines of the typewritten note were "standard template" in his office for an EMG visit, so those records would have been transcribed in a summarized fashion from the documents that Petitioner filled out during his visit. *Id.* at 27, 36-37.

[25] Dr. Chu also testified, however, that for him, determining the onset of a patient's injury was not of primary importance to his treatment of a patient, such as Petitioner, even though his preference would be to treat an injury as soon as possible. Tr. at 40. Moreover, he could not opine as to the onset of Petitioner's symptoms based on the degree of severity of those symptoms when he examined and tested Mr. Greene. *Id.* at 41-42.

attesting to the fact that the submitted documents were what they purport to be, and specifying the dates upon which the documents were created, as well as the method of creation. Pet'r's Exs. 20-21 (ECF No. 51).

Descriptions of these items appear below. Although I have considered all of them in my factual determination, I do not give them equal weight, for the reasons discussed herein.

a. Petitioner's Calendar – Petitioner filed a calendar (Pet'r's Ex. 17), which, as noted above, was created in connection with his efforts to substantiate his Texas workers' compensation claim (Pet'r's Ex. 21). The calendar contains information regarding the onset of his alleged injury (including information that he later used when putting together the VAERS report and associated Timeline, as well as his affidavit regarding the onset of his alleged injury).[26] Tr. at 55-56, 59, 74, 79-80. In an affidavit submitted in conjunction with the calendar, Petitioner described its origin, and indicated that the information contained in the calendar was as accurate as he could recall. Pet'r's Ex. 21 at 2.

The submitted calendar spans a period of eight months, from July of 2009 through February of 2010.[27] Pet'r's Ex. 17. It pinpoints August 8th as the date Petitioner's right shoulder blade began to ache. *Id.* at 2. Information from the calendar further states that this aching continued a week later (on August 15th), when Petitioner also began to experience other symptoms (including aching radiating to his back and upper right arm, as well as hand tingling) and that he was at that point also experiencing sleep difficulties as a result of his symptoms. *Id.* By August 18th, Petitioner was experiencing pain in his chest, which felt like it was in the lung area, and coughing became painful. *Id.* By September 1st, the calendar indicates that Petitioner was experiencing severe right arm cramping, and by September 4th his symptoms had intensified and included tingling and numbness on his right side. *Id.* at 3.

I do not give significant weight to the calendar as evidence establishing the onset of Petitioner's symptoms. Although there is nothing in the record to suggest that the calendar was created for the purpose of this litigation, it remains uncertain precisely when the document was

[26] Petitioner indicated that this calendar "probably originated in the cusp between 2009 and '10." Tr. at 56. However, it is unclear whether the filed copy of the calendar is the same calendar that he referenced during his testimony at the hearing. For instance, during the hearing Petitioner indicated that there was information that he would need to redact from the calendar before filing it, because it included certain names and addresses. *Id*. at 80-81. The filed version, however, does not appear to include redactions or such referenced information. Petitioner also indicated that the actual construction projects themselves that he had worked on, and that helped him recall dates, were not added to the calendar (Pet'r's Ex. 21 at 2), yet the submitted calendar appears to reference specific projects ((*see, e.g.,* Pet'r's Ex. 17 at 2)).

[27] During this period of time, a number of events are recorded including doctors' visits, symptoms Petitioner was experiencing, and workers' compensation claim information. *See generally* Pet'r's' Ex. 17. For purposes of this decision I have focused only on entries relating to the onset of Petitioner's alleged vaccine-related injury.

created – and in particular, how close to the time of Mr. Greene's injury and the onset of his symptoms.[28] It may well have been created during the time of, or even in conjunction with, the preparation of Mr. Greene's VAERS report in March 2010. By that date, he clearly understood his injury might be vaccine-related, and was therefore reasonably trying to relate prior facts to this theory. The calendar therefore has less evidentiary value than the contemporaneous medical records or Mr. Greene's own sworn oral and written testimony.

b. *Mrs. Greene's Diary Entry* – As noted above, Mrs. Greene testified that she thought she might possess written diary entries contemporaneous with Petitioner's purported August 2009 onset. Tr. at 96, 98-100, 103. After the hearing, Petitioner filed a copy of a single entry, as well as an affidavit from Mrs. Greene describing its origin. Pet'r's Exs. 18 and 20. The filed document is a one-page, handwritten diary entry dated September 15, 2009,[29] which indicated that Mr. Greene had "been in excruciating pain for over 1 week," and noted that Mrs. Greene was praying for a breakthrough in his healing. Pet'r's Ex. 18.

I find this diary entry to be accurate and a true copy of what it purports to be. However, by its own date and temporal reference to a single week in September, it does not corroborate either Mr. or Mrs. Greene's testimony that Petitioner's symptoms began in August of 2009.

c. *Additional Documentation* – Petitioner also submitted documentation establishing his wife's purchase of homeopathic oils akin to those Mrs. Greene testified that she had used to treat Mr. Greene's initial symptoms. Mr. Greene submitted a receipt dated August 19, 2009, for the purchase of Hydrastis Canadensis at American Health Foods in Houston, Texas, as well as a National Center for Homeopathy membership receipt dated August 29, 2009. Pet'r's Ex. 19. Along with (and in support of) this documentation, Petitioner submitted information from a book or pamphlet regarding homeopathic solutions for puncture wounds, indicating that "hypericum and ledum are generally the first choice, and work amazingly well for reducing swelling, pain and potential infection." *Id.* Petitioner additionally submitted an affidavit from his wife, which indicated that the Hydrastis Canadensis that was purchased on August 19th was specifically intended to help manage pain in Mr. Greene's shoulder/arm area. Pet'r's Ex. 20.

[28] In his affidavit regarding the calendar's creation, Petitioner indicated that "[i]n the version with red text [presumably referring to the filed calendar, as only one calendar was submitted and that calendar contained text in two colors – red and black] I have back filled my five year old memories of the construction process and how my health affected and what work we did." Pet'r's Ex. 21 at 3.

[29] Notably, the submitted entry was dated (*see* Pet'r's Ex. 18) even though Mrs. Greene testified at hearing that Petitioner had opted not to submit Mrs. Greene's diary entries prior to the hearing because the entries relevant to his claim were not individually dated with the day or month of the entry, just the relevant year. Tr. at 99.

I find these additional materials establish the purchase of the homeopathic products in August of 2009 and corroborate in part Mrs. Greene's testimony that she at least possessed such items during the time she purports to have assisted her husband with his initial symptoms.

II. Procedural History

As noted above, Mr. Greene filed his petition in September of 2011, alleging that he experienced a brachial plexopathy[30] after receiving the Td vaccine in July of 2009. Pet. at 1. In support of his petition, Mr. Greene filed medical records from a number of healthcare providers (Pet'r's Exs. 1-12) followed by the filing of a statement of completion on March 9, 2012 (ECF No. 12).

Respondent reviewed the record and then filed her Rule 4(c) report on April 23, 2012. Resp't's Rule 4(c) Report (ECF No. 14). In it, Respondent asserted that although brachial neuritis is listed on the Vaccine Injury Table in association with vaccines containing tetanus toxoid like the Td vaccine, Petitioner was not entitled to a presumption of vaccine causation because he could not demonstrate by preponderant evidence that his first symptom or manifestation of his alleged injury had occurred within twenty-eight days of vaccination, as set forth in the Table. *Id.* at 10-11. In support of this argument, Respondent noted that the first time that Petitioner sought medical care was forty-seven days after administration of the Td vaccine, on September 7, 2009, when he presented to the emergency department at Houston Northwest Medical Center in Houston, Texas complaining of right upper arm pain that he reported had begun four days earlier. *Id.* at 11-12. Respondent further contended that subsequent medical histories set forth in Petitioner's medical records support the timing of onset from this emergency room visit. *Id.* at 12.

Thereafter, Petitioner filed additional medical records (*see* Pet'r's Exs. 13-14), as well as his own affidavit regarding onset of his symptoms (Pet'r's Ex. 15 (ECF No. 41)). As a general matter, Mr. Greene maintained that (although he was not aware of it at the time) he experienced a gradual onset of symptoms of brachial neuritis after his Td vaccination in July of 2009. *Id*. Respondent subsequently filed a report indicating that "Petitioner's affidavit d[id] not change [R]espondent's position on the onset of the symptoms or the merits of the case as set forth in her Rule 4(c) [r]eport." Resp't's Resp. to Pet'r's Filing of Nov. 6, 2014, dated Dec. 8, 2014 (ECF No. 42).

The parties requested that a fact hearing be conducted for the purpose of determining the timing of the onset of Mr. Greene's alleged injury. *See* Order, dated Dec. 18, 2014 (ECF No. 43).

[30] Although Mr. Greene formally refers to his injury in the petition as a brachial plexopathy, it appears that the term is to some extent interchangeable with the term "brachial neuritis" as used in the Vaccine Table, and there is ample support in the Program for treating it in this manner, given the congruence of symptoms and clinical indicia. *See, e.g., Devonshire,* 2006 WL 2970418, at *1.

Prior to the hearing, Petitioner filed an additional affidavit regarding the onset of his symptoms (this time from his wife, Mrs. Greene). ECF No. 47. A fact hearing was held on March 26, 2015, in Houston, Texas, with the above-described witnesses testifying. The parties opted not to file post-hearing briefs (although Petitioner did, at my request, file the additional evidence discussed above regarding onset of his alleged injury (*see* Pet'r's Exs. 17-21)). This matter is now ready for resolution.

III. Legal Standard Governing Fact-Finding

To receive compensation under the Vaccine Program, a petitioner must prove either: (1) that he suffered a "Table Injury" – i.e., an injury falling within the Vaccine Injury Table – corresponding to one of the vaccinations in question within a statutorily prescribed period of time or, in the alternative, (2) that his illnesses were actually caused by a vaccine (a "Non-Table Injury"). *See* Sections 13(a)(1)(A),11(c)(1), and 14(a), as amended by 42 C.F.R. § 100.3; § 11(c)(1)(C)(ii)(I); *see also Moberly v. Sec'y of Health & Human Servs*., 592 F.3d 1315, 1321 (Fed. Cir. 2010); *Capizzano v. Sec'y of Health & Human Servs*., 440 F.3d 1317, 1320 (Fed. Cir. 2006).[31] Mr. Greene alleges both kinds of claims in the alternative, although (as discussed in greater detail below) his Table Injury claim is of greater interest herein, since its resolution is dependent directly on the fact findings of this ruling.

Vaccine Program petitioners bear a "preponderance of the evidence" burden of proof. *See* Section 13(1)(a). That is, a petitioner must offer evidence that leads the "trier of fact to believe that the existence of a fact is more probable than its nonexistence before [he] may find in favor of the party who has the burden to persuade the judge of the fact's existence." *Moberly*, 592 F.3d at 1322 n.2; *see also Snowbank Enter. v. United States*, 6 Cl. Ct. 476, 486 (1984) (mere conjecture or speculation is insufficient under a preponderance standard). A petitioner may not receive a Vaccine Program award for a Table Injury, such as the injury alleged in this case, based solely on his claims alone; the petition must be supported by either medical records or by the opinion of a competent physician. Section 13(a)(1).

The process for making determinations in Vaccine Program cases regarding factual issues, such as the timing of onset of a petitioner's alleged injury, begins with consideration of the medical records. Section 11(c)(2). The special master is required to consider "all [] relevant medical and scientific evidence contained in the record," including "any diagnosis, conclusion, medical judgment, or autopsy or coroner's report which is contained in the record regarding the nature,

[31] Decisions of special masters (some of which I reference in this ruling) constitute persuasive but not binding authority. *Hanlon v. Sec'y of Health & Human Servs.*, 40 Fed. Cl. 625, 630 (1998). By contrast, Federal Circuit decisions are binding on special masters. *Guillory v. Sec'y of Health & Human Servs.*, 59 Fed. Cl. 121, 124 (2003), *aff'd*, 104 F. App'x 712 (Fed. Cir. 2004); *see also Spooner v. Sec'y of Health & Human Servs.*, No. 13-159V, 2014 WL 504728, at *7 n.12 (Fed. Cl. Spec. Mstr. Jan. 16, 2014).

causation, and aggravation of the petitioner's illness, disability, injury, condition, or death," as well as "the results of any diagnostic or evaluative test which are contained in the record and the summaries and conclusions." Section 13(b)(1)(A). The special master is then required to weigh the evidence presented, including contemporaneous medical records and testimony. *See Burns v. Sec'y of Health & Human Servs*., 3 F.3d 415, 417 (Fed. Cir. 1993) (it is within the special master's discretion to determine whether to afford greater weight to contemporaneous medical records than to other evidence, such as oral testimony surrounding the events in question that was given at a later date, provided that such a determination is evidenced by a rational determination).

Medical records that are created contemporaneously with the events they describe are presumed to be accurate and "complete" (i.e., presenting all relevant information on a patient's health problems). *Cucuras v. Sec'y of Health & Human Servs.*, 993 F.2d 1525, 1528 (Fed. Cir. 1993); *Doe/70 v. Sec'y of Health & Human Servs.*, 95 Fed. Cl. 598, 608 (2010) ("[g]iven the inconsistencies between petitioner's testimony and his contemporaneous medical records, the special master's decision to rely on petitioner's medical records was rational and consistent with applicable law"), *aff'd*, *Rickett v. Sec'y of Health & Human Servs*., 468 F. App'x 952 (Fed. Cir. 2011) (non-precedential opinion). This presumption is based on the linked propositions that (i) sick people visit medical professionals; (ii) sick people honestly report their health problems to those professionals; and (iii) medical professionals record what they are told or observe when examining their patients in an accurate manner, so that they are aware of enough relevant facts to make appropriate treatment decisions. *Sanchez v. Sec'y of Health & Human Servs*., No. 11-685V, 2013 WL 1880825, at *2 (Fed. Cl. Spec. Mstr. Apr. 10, 2013); *Cucuras v. Sec'y of Health & Human Servs*., 26 Cl. Ct. 537, 543 (1992), *aff'd*, 993 F.2d 1525 (Fed. Cir. 1993) ("[i]t strains reason to conclude that petitioners would fail to accurately report the onset of their daughter's symptoms. It is equally unlikely that pediatric neurologists, who are trained in taking medical histories concerning the onset of neurologically significant symptoms, would consistently but erroneously report the onset of seizures a week after they in fact occurred").

Accordingly, if the medical records are clear, consistent, and complete, then they should be afforded substantial weight. *Lowrie v. Sec'y of Health & Human Servs*., No. 03-1585, 2005 WL 6117475, at *20 (Fed. Cl. Spec. Mstr. Dec. 12, 2005). Indeed, contemporaneously medical records are generally found to be deserving of greater evidentiary weight than oral testimony – especially where such testimony conflicts with the record evidence. *Cucuras*, 993 F.2d at 1528; *see also Murphy v. Sec'y of Health & Human Servs.,* 23 Cl. Ct. 726, 733 (1991), *aff'd*, 968 F.2d 1226 (Fed. Cir.), *cert. den'd, Murphy v. Sullivan*, 506 U.S. 974 (1992) (citing *United States v. United States Gypsum Co.*, 333 U.S. 364, 396 (1947) ("[i]t has generally been held that oral testimony which is in conflict with contemporaneous documents is entitled to little evidentiary weight.")). In making contemporaneous reports, the declarant's motivation for accurate explication of symptoms is more immediate, as opposed to testimony offered after the events in question, which is considered inherently less reliable. *Reusser v. Sec'y of Health & Human Servs.*, 28 Fed. Cl. 516, 523 (1993).

However, there are situations in which compelling oral testimony may be more persuasive than written records, such as where records are deemed to be incomplete or inaccurate. *Campbell v. Sec'y of Health & Human Servs*., 69 Fed. Cl. 775, 779 (2006) ("like any norm based upon common sense and experience, this rule should not be treated as an absolute and must yield where the factual predicates for its application are weak or lacking."); *Lowrie v. Sec'y of Health & Human Servs*., No. 03-1585V, 2005 WL 6117475, at *19 (Fed. Cl. Spec. Mstr. Dec. 12, 2005) ("[w]ritten records which are, themselves, inconsistent, should be accorded less deference than those which are internally consistent") (quoting *Murphy v. Sec'y of Health & Human Servs.*, 23 Cl. Ct. 726, 733 (1991), *aff'd per curiam*, 968 F.2d 1226 (Fed. Cir. 1992)). Ultimately, a determination regarding a witness's credibility is needed when determining the weight that such testimony should be afforded. *Andreu v. Sec'y of Health & Human Servs.*, 569 F.3d 1367, 1379 (Fed. Cir. 2009); *Bradley v. Sec'y of Health & Human Servs.*, 991 F.2d 1570, 1575 (Fed. Cir. 1993).

When witness testimony is used to overcome the presumption of accuracy afforded to contemporaneous medical records, such testimony must be "consistent, clear, cogent, and compelling." *Sanchez*, 2013 WL 1880825, at *3 (citing *Blutstein v. Sec'y of Health & Human Servs*., No. 90-2808, 1998 WL 408611, at *5 (Fed. Cl. Spec. Mstr. June 30, 1998)). In determining the accuracy and completeness of medical records, the Court of Federal Claims has listed four possible explanations for inconsistencies between contemporaneously created medical records and later testimony: (1) a person's failure to recount to the medical professional everything that happened during the relevant time period; (2) the medical professional's failure to document everything reported to her or him; (3) a person's faulty recollection of the events when presenting testimony; or (4) a person's purposeful recounting of symptoms that did not exist. *La Londe v. Sec'y Health & Human Servs*., 110 Fed. Cl. 184, 203-04 (2013), *aff'd*, 2014 WL 1258137 (Fed. Cir. Mar. 28, 2014). In making a determination regarding whether to afford greater weight to contemporaneous medical records or other evidence, such as testimony at hearing, there must be evidence that this decision was the result of a rational determination. *Burns*, 3 F.3d at 417.

Despite the weight afforded medical records, special masters are not bound rigidly by those records in determining onset of a petitioner's symptoms. *Vallenzuela v. Sec'y of Health & Human Servs.*, No. 90-1002V, 1991 WL 182241, at *3 (Fed. Cl. Spec. Mstr. Aug. 30, 1991); *see also Eng v. Sec'y of Health & Human Servs*., No. 90-1754V, 1994 WL 67704, at *3 (Fed. Cl. Spec. Mstr. Feb. 18, 1994) (Section 13(b)(2) "must be construed so as to give effect also to § 13(b)(1) which directs the special master or court to *consider* the medical records (reports, diagnosis, conclusions, medical judgment, test reports, etc.), but does not require the special master or court *to be bound* by them").

III. Analysis

Petitioner's Table Injury claim is based on the factual allegation that he experienced brachial neuritis after receiving the Td vaccine, which is a vaccine containing tetanus toxoid. Pet. at 2. The evidence offered by Mr. Greene establishing his post-vaccination symptoms would appear to satisfy the definition of a brachial neuritis as set forth in the Qualification and Aids to Interpretation (QAI) that accompany the Vaccine Act. 42 C.F.R. § 100.3(6).[32] However, the Vaccine Table also requires a petitioner alleging this kind of claim to establish that his injury occurred within two to twenty-eight days of vaccination (42 C.F.R. § 100.3(a)(I)(B)) – here, sometime between July 24, 2009, and August 19, 2009.

It is undisputed that Mr. Greene was not seen by a healthcare provider in August 2009, at the time that he now alleges that his symptoms began, and there are no contemporaneous records for that time period documenting his alleged symptoms. The first records from his treatment history relevant to onset are those from both the start and end of September of 2009 – all of which offer strong support for the conclusion that Mr. Greene's symptoms began no sooner than the start of that month, in the days before his emergency room visit. Indeed – the very fact that Mr. Greene went to the emergency room at this time, while not dispositive, lends support to the conclusion that onset occurred around that time period, as a sick person would presumably not wait to treat severe pain, and would also attempt to explain to his treaters the nature of his symptoms and their duration as accurately as possible.

The subsequent records from early October, when Petitioner visited Dr. Chu, are also consistent with onset having occurred around the time of Petitioner's Labor Day emergency room visit. When given the chance to write down his symptoms and reason for seeking treatment from Dr. Chu, Mr. Greene specified early September as the onset of his pain. Pet'r's Ex. 4 at 87-90. He also characterized the start of his post-accident numbness not as "gradual" (which would be more consistent with his testimony that his symptoms were increasing in severity over time) but instead

[32] The QAI defines *brachial neuritis* as "dysfunction limited to the upper extremity nerve plexus (i.e., its trunks, divisions, or cords) without involvement of other peripheral (e.g., nerve roots or a single peripheral nerve) or central (e.g., spinal cord) nervous system structures. A deep, steady, often severe aching pain in the shoulder and upper arm usually heralds onset of the condition. The pain is followed in days or weeks by weakness and atrophy in upper extremity muscle groups. Sensory loss may accompany the motor deficits, but is generally a less notable clinical feature. The neuritis, or plexopathy, may be present on the same side as or the opposite side of the injection; it is sometimes bilateral, affecting both upper extremities." Moreover, "[w]eakness is required before the diagnosis can be made. Motor, sensory, and reflex findings on physical examination and the results of nerve conduction and electromyographic studies must be consistent in confirming that dysfunction is attributable to the brachial plexus. The condition should thereby be distinguishable from conditions that may give rise to dysfunction of nerve roots (i.e., radiculopathies) and peripheral nerves (i.e., including multiple mononeuropathies), as well as other peripheral and central nervous system structures (e.g., cranial neuropathies and myelopathies)." 42 C.F.R. § 100.3(6).

to create a new check-in box, "delayed," which is more reasonably construed to mean beginning later, rather than sooner but growing in magnitude over time.[33] *See Id*. 4 at 87.

The typewritten page from Dr. Chu's records contains two entries that could be interpreted as placing onset prior to Labor Day, or at least suggesting that the development of Petitioner's symptoms was gradual. Pet'r's Ex. 3 at 15. But Dr. Chu persuasively explained why a patient's handwritten questionnaire entries would be more trustworthy than a subsequently-transcribed version, and also why the characterization of Mr. Greene's numbness in those typewritten records as "gradual" was less likely to be correct than what Mr. Greene himself had written down ("delayed"). *See generally* Tr. at 6-42.

The records from the latter period of Mr. Greene's initial treatment (in the late fall of 2009) similarly support onset as around Labor Day rather than weeks before. *See, e.g.,* Pet'r's Ex. 2 at 4. It was only by the time that Petitioner completed the VAERS report and Timeline – in March of 2010 – that he began to identify August 2009 as the beginning of his symptoms. The fact that these documents were prepared months after the symptoms that Petitioner was reporting had occurred (and seven months from his receipt of the Td vaccine) makes them less reliable than the contemporaneous records from the time of his initial treatment in September 2009 and thereafter. The same goes for Mr. Greene's calendar; while it may reflect his sincere attempt to record the dates of occurrences relevant herein, I cannot be sure when it was created, and I do not find that it more accurately identifies the date of onset, since it primarily reflects Petitioner's own recollection.

In the face of the above evidence, Petitioner offered his own contrary testimony plus that of his wife. But the Greenes's testimony was not sufficiently "clear, cogent, convincing, [or] compelling" to rebut the treatment record, which was not itself incomplete or demonstrably inconsistent. *See, e.g*., *Cucuras*, 993 F.2d at 1528 (discussing the presumption of accuracy afforded to contemporaneous medical records). Mr. Greene persuasively explained why a person in his position might not have immediately realized that the symptoms he was experiencing were vaccine-related. But he was not persuasive in differentiating between the milder August symptoms he alleged and the more severe pain and numbness that resulted in his Labor Day emergency room visit. In addition, Petitioner's explanation for his personal understanding of numbness, and why he distinguished it from his purported earlier symptoms, did not make sense. And he did not persuasively explain why he would have told so many of his treaters that onset of his symptoms occurred later than he now proposes.

Mrs. Greene for her part established that at some point, the Greenes attempted to self-treat Petitioner's symptoms with natural remedies, and that she had purchased some of these items in August 2009. But her testimony did not establish that these home treatments occurred in August.

[33] Something is delayed if it is "postpone[]d until a later time." *Webster's Second, New College Dictionary* (Houghton Mifflin Co. 1995) at 298.

Indeed, the diary entry she offered to establish Mr. Greene's August onset was dated in September – after Mr. Greene's emergency room visit – and thus not only did not support the alleged August onset, but could be understood to suggest that her husband's nocturnal suffering actually began ***after*** his emergency room visit rather than before (which is consistent with the treatment record).

Overall, Petitioner did not offer enough sufficiently compelling testimony or other evidence to refute the contemporaneous medical records, which firmly support an onset period a few weeks later than that alleged by Mr. Greene. It is understandable that an individual might have trouble recalling, several years later, whether a symptom began earlier or later within a five-week period (measured here between the start of August and the first week of September). But in this case, Petitioner has not shown it to be more likely than not that his recollection is correct, and the medical records wrong.

Conclusion

Based on consideration of the record as a whole, I find that the onset of Mr. Greene's brachial neuritis more likely than not began no earlier than September 1, 2009 (or 41 days post-vaccination). Based on this determination, Petitioner cannot succeed on his Table Injury claim, and accordingly it is DISMISSED.

Petitioner may nevertheless proceed with his Non-Table claim. The parties are ordered to provide this ruling to any expert whom they retain for the purpose of litigating that claim. I am unlikely to find persuasive expert opinion that is inconsistent with these findings of fact. *See Burns*, 3 F.3d at 417 (special master did not abuse his discretion in refraining from conducting a hearing when the petitioner's expert "based his opinion on facts not substantiated by the record"). The parties shall also immediately contact my chambers and schedule a telephonic status conference in this case to discuss next steps.

IT IS SO ORDERED.

/s/ Brian H. Corcoran
Brian H. Corcoran
Special Master