

IN THE UNITED STATES COURT OF FEDERAL CLAIMS
OFFICE OF SPECIAL MASTERS

* * * * *

SUSAN KREIDER,	*	No. 99-426V
	*	Special Master Christian J. Moran
Petitioner,	*	
	*	
v.	*	Filed: April 18, 2007
	*	
SECRETARY OF HEALTH	*	Findings of fact; hepatitis B;
AND HUMAN SERVICES,	*	connective tissue disease; Raynaud's
	*	phenomena; conflicting
Respondent.	*	contemporaneous medical records.

* * * * *

Anne C. Toale, Maglio, Christopher & Toale, Sarasota, Florida, for petitioner
Catherine Reeves, United States Department of Justice, Washington, D.C., for respondent

FINDINGS OF FACT - NOT TO BE PUBLISHED¹

I. Introduction

Susan Kreider filed a petition pursuant to the National Childhood Vaccine Injury Act, 42 U.S.C. §§ 300aa-1 et seq. According to Ms. Kreider, she was healthy before receiving the hepatitis B vaccine. However, her health today, is poor. Ms. Kreider attributes this change to the

¹ Because this unpublished decision contains a reasoned explanation for the special master's action in this case, the special master intends to post it on the United States Court of Federal Claims's website, in accordance with the E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899, 2913 (Dec. 17, 2002).

Vaccine Rule 18(b) states that all decisions of the special masters will be made available to the public unless they contain trade secrets or commercial or financial information that is privileged and confidential, or medical or similar information whose disclosure would clearly be an unwarranted invasion of privacy. When such a decision or designated substantive order is filed, petitioner has 14 days to identify and to move to delete such information before the document's disclosure. If the special master, upon review, agrees that the identified material fits within the banned categories listed above, the special master shall delete such material from public access.

hepatitis B vaccine, which was given in three doses between September 22, 1990 and March 19, 1991. As explained in more detail below, the parties dispute the state of Ms. Kreider's health at the time that she received the vaccinations. Respondent questions whether, to at least some degree, the problems that Ms. Kreider currently suffers originated before the vaccinations. Supp. Rep't, filed June 26, 2006, at 16. This ruling establishes the facts about Ms. Kreider's health in 1990 through 1994.

In contrast to the controversy about events occurring approximately 16 years ago, there appears to be little doubt about Ms. Kreider's current state of health. Presently, Ms. Kreider suffers from some physical problems. One problem is that she has lost, or at least has severely diminished, reflexes in her legs and feet. Her inability to receive stimuli produced by her brain hampers her ability to walk and prevents her from driving without the assistance of hand controls. Tr. 140-41. Relatedly, Ms. Kreider experiences tingling and paresthesia, a pins and needles feeling, in her right hand and both feet. Finally, Ms. Kreider's extremities sometimes display bluish or purplish coloration. Exhibit 69 (affidavit of Ms. Kreider, dated Oct. 17, 2006, at 1-2). This last condition is a sign of Raynaud's phenomenon. Exhibit 2; exhibit 22 at 1; exhibit G at 1.

Raynaud's phenomenon is sometimes the first manifestation of an underlying connective tissue disease. Exhibit G at 1. Some doctors attribute Ms. Kreider's current health problems to an underlying connective tissue disease. If their diagnosis is correct and Ms. Kreider experienced Raynaud's phenomena before receiving the series of hepatitis B vaccinations, then it is less likely that the hepatitis B vaccinations caused her current health problems. (However, in that event,

Ms. Kreider may claim that the hepatitis B vaccinations “significantly aggravated” her pre-existing problems and caused her current problems to be worse than they would be otherwise.)

Although Ms. Kreider’s symptoms have remained more or less the same for about ten years, doctors have given her condition(s) different names. Some doctors diagnose Ms. Kreider as having a connective tissue disorder. Exhibit 51 at 10 (report of Dr. Vidhu Gupta, neurologist, dated March 19, 2002); exhibit 51 at 3 (report of Dr. Andrew L. Mermelstein, rheumatologist, dated April 29, 2002). Doctors also diagnose Ms. Kreider as having a neuropathy. Id.; see also exhibit 43 at 3 (report of Dr. Jennifer Chu, specialist in rehabilitation medicine, dated May 16, 2002). The difference, if any, between these conditions is not significant for the purpose of resolving the present issue, which is to find facts relating to Ms. Kreider’s health around the time she received the hepatitis B vaccine.

Defining the state of Ms. Kreider’s health immediately before and immediately after receiving the hepatitis B vaccine is a foundational step in adjudicating Ms. Kreider’s claim. Respondent maintains that at least some of Ms. Kreider’s problems existed before receiving the series of hepatitis B vaccinations. Resp’t Supp. Rep’t, filed June 26, 2006, at 16-17; Resp’t Rep’t, filed Sep. 6, 2002, at 17-18. The parties recognize that all existing evidence is not consistent. Based upon different histories taken by different practitioners at different times, some medical records contradict other medical records. This inconsistency extends to Ms. Kreider’s own narratives, some of which were created during litigation.

To determine what problems, if any, Ms. Kreider displayed before her first hepatitis B vaccine on September 21, 1990, a hearing was held in Philadelphia, Pennsylvania on February 1, 2007. See Campbell v. Sec’y of Health & Human Servs., 69 Fed. Cl. 775, 779-80 (2006);

Skinner v. Sec’y of Health & Human Servs., 30 Fed. Cl. 402, 410 (1994). At this hearing, Ms. Kreider called five witnesses: Ben Berenstein, a friend; Estelle Crossly, another friend; Susan Cole, another friend; Ben Kreider, Ms. Kreider’s brother; and Ms. Kreider herself. All witnesses appeared credible in the sense that they intended to testify as honestly as possible. However, the completeness and accuracy of their testimony were limited by the witnesses’ observations about Ms. Kreider’s health approximately 16 years earlier and their ability to recall those observations when testifying.

The Vaccine Act permits a finding of when a first symptom appeared, despite the lack of a notation in a contemporaneous medical record. 42 U.S.C. § 300aa-13(b)(2) (2006). The preponderance of the evidence standard requires that the Special Master "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 [special master] of the fact's existence." In re Winship, 397 U.S. 358, 371-72 (1970) (Harlan, J., concurring) (*quoting* F. James, Civil Procedure 250-51 (1965)).

In weighing divergent pieces of evidence, contemporaneous written medical records are usually more significant than oral testimony. Cucuras v. Sec’y of Health & Human Servs., 993 F.2d 1525, 1528 (Fed. Cir. 1993). However, compelling oral testimony may be more persuasive than written records. Campbell, 69 Fed. Cl. at 779 (“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”); Camery v. Sec’y of Health & Human Servs., 42 Fed. Cl. 381, 391 (1998) (this rule “should not be applied inflexibly, because medical records may be incomplete or inaccurate”); Murphy v. Sec’y of Health & Human Servs., 23 Cl. Ct. 726,

733 (1991), aff'd, 968 F.2d 1226 (Fed. Cir. 1992). Whether contemporaneous medical records or later-given oral testimony is more persuasive is a determination that “is uniquely within the purview of the special master.” Burns v. Sec’y of Health & Human Servs., 3 F.3d 415, 417 (Fed. Cir. 1993).

These criteria provide a basis for evaluating the evidence presented. The evidence includes not only the testimony presented by the five witnesses but also all the exhibits filed by the parties. After the hearing, the parties filed a Joint Statement of the Issues to be Resolved by the Special Master. These are addressed at the end of this ruling.

II. Findings of Fact

As noted above, the critical time surrounds Ms. Kreider’s hepatitis B vaccination. Ms. Kreider received that vaccination while she was in nursing school. Her entry into nursing school, therefore, divides the following two sections.

A. Before Nursing School

1. General Findings

Ms. Kreider was born on May 23, 1957. Exhibit 71 at 16; tr. 49. Except for a few relatively routine conditions associated with childhood, Ms. Kreider’s infancy, youth, and adolescence were medically unremarkable. Transcript from hearing held on Feb. 1, 2007 (“Tr.”) 52, 69; exhibit 16 at 5; exhibit 49 at 1-5.

When Ms. Kreider was approximately 30 years old, a dentist placed amalgam fillings in her mouth that contained mercury. Exhibit 43 at 1. (Later, Ms. Kreider attributed her problems, in part, to the mercury from these fillings. Exhibit 52 at 415; tr. 119. Consequently, Ms. Kreider had these fillings removed. Exhibit 52 at 23-24.)

Through the time she entered nursing school, she was an athletic, active person. (As discussed in the following section, she continued some of these activities during nursing school.) Her constitution is demonstrated by her participation in karate for approximately 10 years and earning a third degree blackbelt in 1989. Exhibit 16 at 5; tr. 60-64. Ms. Kreider also often skied with her family. Tr. 85-86, 150.

By spring 1990, Ms. Kreider decided to apply to attend the Dixon School of Nursing at Abington Hospital. Tr. 70; exhibit 71 at 16. In considering to pursue a career in nursing, Ms. Kreider did not think that the physical burdens of being a nurse presented any obstacle. Tr. 78. Her brother and a longtime friend also were not concerned about Ms. Kreider's ability to perform the duties of a nurse. Tr. 16, 152.

As part of the application process for nursing school, Ms. Kreider submitted to two physical examinations, both performed on June 12, 1990. One examination, which was performed by doctors affiliated with Abington Hospital, showed that Ms. Kreider was normal in all areas. Exhibit 71 at 32-38; tr. 73-74. The results were the same in the other examination performed by Ms. Kreider's personal physician. Exhibit 71 at 68; tr. 71-72. As part of this examination, Ms. Kreider denied that she had any problem with joint pain or skin conditions. Id. (questions 4 & 16). The doctor found that Ms. Kreider's skin was "normal."

2. Findings regarding Ms. Kreider's hands before August 1990

Throughout her life, Ms. Kreider's hands have appeared blue, particularly when exposed to cold weather, such as during family ski trips. Tr. 86, 89, 156; exhibit 7 at 85. Ms. Kreider considered this condition to be normal, especially because she has a fair complexion that more readily shows changes in color. Tr. 87-92, 96. Ms. Kreider did not seek medical attention for the

blueness in her hands until 1991. Tr. 130, 146; exhibit 7 at 93 (application for nursing school, denying any problem with her skin or joints).

Until Ms. Kreider entered nursing school, her hands functioned normally. They turned blue when the weather was cold. However, they did not display a mixture of blue, red, and white, a pattern known as “mottling.” Tr. 93. Her hands were sensitive to cold weather, but her response was within the range of normal people. Tr. 89-90, 96.

Three medical records provide some basis for questioning whether Ms. Kreider’s functional problems with her hands began before she entered nursing school. Two records (a report by Dr. Bird and a report by Dr. Chu) are easily addressed because both records contain clear errors. The remaining record – a report from April 1, 1991 – carries more weight. However, in considering all the evidence, this report falls short of establishing that the problem with Ms. Kreider’s hands began before she started nursing school. These three reports are discussed below.

First, in a report from April 1994, Dr. Shawn Bird reports that Ms. Kreider stated that her Raynaud’s phenomena began in 1981. Exhibit 25 at 1. Dr. Bird’s use of 1981 appears to be a simple error in typing “1981,” rather than “1991.” In attributing the onset of her problems to 1981, Dr. Bird’s report stands alone; no other medical report locates the beginnings of Ms. Kreider’s problems until 1990 at the earliest. Ms. Kreider denied having problems in 1981. Tr. 112. Given the abundance of medical records that indicate that Ms. Kreider’s problems began in either 1990 or 1991, Dr. Bird’s isolated reference to 1981 is simply a clerical mistake.

Second, Dr. Jennifer Chu stated that Ms. Kreider’s problems began on March 18, 1990. Exhibit 43 at 1. This statement is also based upon an error. When Ms. Kreider visited Dr. Chu

in 2002, Ms. Kreider provided a history in which Ms. Kreider responded to the question “Date of Onset” with the answer “3/18/90.” Exhibit 43 at 10 (question 2.A.). At the hearing, Ms. Kreider testified that the date she provided was incorrect. By the time Ms. Kreider saw Dr. Chu, Ms. Kreider believed that the hepatitis B vaccine caused her problems. Tr. 104; exhibit 52 at 415 (letter written by Ms. Kreider to Mothering Magazine, dated April 12, 2001). Thus, Ms. Kreider intended to list the date of the third hepatitis B vaccine, March 19, 1991. But, she made a mistake by writing “3/18/90.” Tr. 104-08. In another part of the same form, Ms. Kreider presented the information with the correct year by stating that the “date of accident” was “3/18/91.” Exhibit 43 at 10. Dr. Chu, in turn, repeated the (erroneous) information Ms. Kreider conveyed. Exhibit 43 at 1; see also exhibit 76 (statement by Dr. Chu explaining how she prepared her report). Thus, Dr. Chu’s report is not a reliable basis for concluding that Ms. Kreider’s problems began on March 18, 1990.

The final record that indicates that Ms. Kreider’s problems with her hands began before she entered nursing school is more difficult to harmonize with the other evidence. On April 1, 1991, Ms. Kreider was seen by Dr. Leal at Abington Hospital’s rheumatology clinic as a follow up to her visits about ten days earlier. Dr. Leal’s April 1, 1991 report states that Ms. Kreider was being seen for cyanotic and mottled hands for about one year. Exhibit 2 at 5; tr. 110. This history implies that Ms. Kreider’s hands were cyanotic and mottled in April 1990, a date before she entered nursing school and before she received the hepatitis B vaccine.

The April 1, 1991 report does not fit with the more abundant evidence that shows that Ms. Kreider’s problems with her hands began after she started nursing school. Thus, the history

given in the April 1, 1991 report is rejected. Evidence from contemporaneous medical records and the observations of a witness from the fall of 1990 is more persuasive.

After April 1990 (the approximate date that Ms. Kreider's hands started becoming cyanotic and mottled as reported in the April 1, 1991 report), Ms. Kreider underwent two physical examinations. In June 1990, her personal physician indicated that her skin was "normal." Exhibit 71 at 68. As part of this examination, Ms. Kreider denied that she was having any problems with her skin or joints. Id. at 67. In addition, a doctor from Abington Hospital also examined her. While this report was not especially thorough, it did indicate that Ms. Kreider was normal in all areas, including her joints. Exhibit 71 at 32-38.

These two medical records are contemporaneous about Ms. Kreider's condition after April 1990. "Contemporaneous" means "[o]riginating, existing, or happening during the same period of time." The two examinations happened during the time in which Ms. Kreider was supposedly having cyanotic and mottled hands. The lack of any finding by two doctors strongly suggests that Ms. Kreider's hands were not cyanotic or mottled in June 1990. In accord with common sense and the presumption recognized in Cucuras, 993 F.2d at 1528, the June 1990 records are more persuasive than the history given one year later.

In addition to the contemporaneous medical records, two witnesses testified that Ms. Kreider did not have a problem with her hands in the fall of 1990. Susan Cole testified that she recalled that Ms. Kreider's hands always looked "nice" in the fall of 1990. Tr. 44. Ms. Cole recalled that Ms. Kreider received manicures about every two weeks. Ms. Cole's testimony on this point was especially credible for two reasons. First, Ms. Kreider began to live in Ms. Cole's home as a boarder in the fall of 1990. Because there is no dispute that Ms. Kreider started living

in Ms. Cole's house when she started nursing school and there is no dispute that Ms. Kreider started nursing school in the fall of 1990, the fall of 1990 certainly is anchored in Ms. Cole's recollection. Tr. 41. Second, Ms. Cole observed her daughter and Ms. Kreider giving each other manicures. It is therefore more likely than not that Ms. Cole had the opportunity to see the condition of Ms. Kreider's hands, but did not observe any discoloration or swelling. Tr. 48.

Ms. Cole's testimony receives some support from the testimony of Ms. Estelle Crossley. Ms. Crossley operated a fitness center that Ms. Kreider joined in the fall of 1990. Again, there is no doubt that Ms. Kreider joined this gym in the fall of 1990 because she joined it just after she started nursing school. Tr. 19. When Ms. Kreider joined the gym, Ms. Crossley tested Ms. Kreider's general level of health and fitness to design an exercise program for her and to identify, for liability reasons, any pre-existing conditions. Tr. 20-22. According to Ms. Crossley, Ms. Kreider was in excellent health and physical condition.

Standing alone, Ms. Crossley's testimony holds limited value about the condition of Ms. Kreider's hands around the time in question. Little evidence shows that Ms. Crossley observed Ms. Kreider's hands specifically. For example, Ms. Crossley did not test Ms. Kreider's strength in her grip. Tr. 33.

Although Ms. Crossley's testimony about Ms. Kreider's health in the fall of 1990 is not especially persuasive, it is not the only evidence on this point. As discussed above, two contemporaneous medical records and the testimony of Ms. Cole also support a finding that Ms. Kreider's hands were not usually cyanotic or mottled from June 1990 until sometime in the spring of 1991. Thus, the inference from the April 1, 1991 report is rejected as inconsistent with the weight of the evidence.

In sum, before Ms. Kreider started nursing school, Ms. Kreider's hands were occasionally blue, especially during cold weather. If the blueness were a sign of an underlying health problem, the problem was not so severe that it prevented Ms. Kreider from skiing. Her hands did not prevent her from participating in other athletic events, such as karate. Her hands also did not cause either Ms. Kreider, her brother, or her friends to question Ms. Kreider's ability to perform the physical aspects of being a nurse.

B. During Nursing School

Ms. Kreider entered the Dixon School of Nursing at Abington Hospital in the fall of 1990. Tr. 70. When Ms. Kreider started nursing school, she could walk normally. Tr. 75 (wearing heels to classes). As described above, Ms. Kreider's hands were sometimes blue, especially when the weather was cold. However, her hands did not display the triphasic pattern (mottled red, white, and blue) that is characteristic of Raynaud's phenomena. Tr. 92. Before she started nursing school, no doctor had diagnosed Ms. Kreider with any mixed connective tissue disease. Exhibit 2 at 5; see also tr. 146 (testimony of Ms. Kreider, denying that she saw anyone about the condition of her hands before 1991).

Ms. Kreider received some vaccinations when she began nursing school. She received her first dose of the hepatitis B vaccine on September 21, 1990. Exhibit 2 at 2; exhibit 6 at 1. Also during September, she received a tetanus vaccination. Exhibit 6 at 1; tr. 79-80. Ms. Kreider did not have an immediate reaction to the first dose of the hepatitis B vaccination. Tr. 132.

On October 21, 1990, Ms. Kreider received her second dose of the hepatitis B vaccine. Exhibit 2 at 2; exhibit 6 at 1. Again, she did not have an immediate reaction. Tr. 132.

As discussed above, throughout the fall of 1990, Ms. Kreider regularly engaged in physical activity. She exercised at a gym operated by Ms. Crossley approximately four times per week. Tr. 26, 42, 81. She sometimes went dancing. Tr. 15. She also did not have any difficulty performing the duties of a nurses' aide for a three hour shift. Tr. 78.

In February 1991, Ms. Kreider developed a tingly sensation in her right hand for the first time. Exhibit 2 at 17; exhibit 7 at 85.² Ms. Kreider is left-handed. Tr. 94.

In early March 1991, Ms. Kreider met with an instructor from the nursing school, Ms. Sandra Baird. Tr. 147. Ms. Baird noticed that Ms. Kreider's hands were blue and did not look right. Ms. Baird recommended that Ms. Kreider present herself at the hospital's rheumatology

² Some evidence, in particular, a report from May 1994 and a statement by Ms. Crossley, shows that the tingling in Ms. Kreider's hand did not begin until 1992. However, this evidence is weaker than the evidence indicating that the tingling began in early 1991.

First, in May 1994, Ms. Kreider reported that the tingling in her right hand began in 1992. Exhibit 7 at 8; exhibit 19. Ms. Kreider was attempting to provide a history of events that took place either two or three years earlier. In contrast, the record from her first visit to the hospital's rheumatology clinic in March 1991 indicates that she was experiencing tingling in one finger. Exhibit 7 at 85. Because this record was created around the time that the tingling allegedly occurred, this record is presumptively correct. Cucuras, 993 F.2d at 1528. Furthermore, its accuracy is reinforced by a report from February 1993. Ms. Kreider stated that the tingling in her hand began in approximately February 1991. Exhibit 2 at 17. It is more likely that the 1991 report and the 1993 report are accurate because they were given closer in time to the events in question.

Second, Ms. Crossley stated in a letter filed shortly before trial that Ms. Kreider had tingling in her hand in 1992. Exhibit 77. Ms. Crossley's statement on this point is not persuasive for several reasons. First, Ms. Crossley is attempting to recall events that took place approximately 15 years earlier. Without any concrete event to anchor Ms. Crossley's memory, Ms. Crossley's statement cannot be more persuasive than a statement given by Ms. Kreider to a doctor in 1993, 14 years earlier. Second, Ms. Crossley, herself, expressed equivocation about when the tingling began. The letter says "It seems to me that this [the tingling] occurred in 1992." Her testimony at trial confirmed that Ms. Crossley is uncertain about the dates when Ms. Kreider's problems became worse. Tr. 38. Finally, Ms. Crossley's information about Ms. Kreider's problem derives from Ms. Kreider. It is possible that Ms. Kreider was experiencing tingling in her hand in 1991, yet did not confide this problem to Ms. Crossley until 1992.

clinic. Exhibit 7 at 85; tr. 85, 147. Ms. Baird's suggestion prompted Ms. Kreider to present at the rheumatology clinic. Tr. 93. Because the rheumatology clinic was open on a limited schedule, it is likely that the meeting between Ms. Kreider and Ms. Baird happened in early March 1991. Tr. 86.

Ms. Kreider went to the rheumatology clinic on March 19, 1991. She asked to see a doctor because the blueness in her hands and feet were "worsening." Exhibit 7 at 85. In this context, "worsening" refers to a comparison between the occasional blue from cold weather that Ms. Kreider experienced throughout her life and a more persistent blue that Ms. Baird, an experienced clinical instructor, suspected was a sign of something wrong. Tr. 85-86. Her fingers displayed a mottled pattern of blue, white, and red. Tr. 92-93. In addition, Ms. Kreider was also experiencing tingling and numbness in one finger on her right hand. Exhibit 2 at 17.

Also on March 19, 1991, Ms. Kreider received the third dose of the hepatitis B vaccine. Exhibit 2 at 2; exhibit 6 at 1. Ms. Kreider had no immediate reaction to this vaccination. Tr. 133.

The next day, Ms. Kreider returned to the rheumatology clinic for a follow up examination. She reported an increase in cyanosis and discoloration of her upper and lower extremities. She also reported that "her hands had 'always' been mildly discolored but of late have become markedly discolored / cyanotic." Exhibit 7 at 85. Ms. Kreider stated that she had a mild feeling of "pins and needles" on her fourth and fifth fingers only. The doctor appears to have observed mottling in Ms. Kreider's thighs and mild swelling. Id. These contemporaneous evaluations are consistent with Ms. Cole's recollection that Ms. Kreider's hands were puffy and swollen in the spring of 1991. Tr. 44; exhibit 60.

On April 1, 1991, Ms. Kreider was again seen in Abington Hospital, this time by Dr. Alfred Leal. (This visit generated the report containing the erroneous information that Ms. Kreider's hands were cyanotic and mottled for about one year.) Dr. Leal noted that Ms. Kreider described blue and red stages of discoloration in her hands and feet. Dr. Leal, himself, observed cyanosis in both hands and feet and that her knees were purplish. Dr. Leal did not see any edema. ("Edema" means the presences of fluid, indicating swelling. See Dorland's Illustrated Medical Dictionary (30th ed.) at 589.) Dr. Leal diagnosed Raynaud's phenomena with a positive anti-nuclear antibodies (2560). The possible underlying conditions included systemic lupus erythematosus, scleroderma, and mixed connective tissue disorder. Exhibit 2 at 5-7.

Other than the discoloration in her hands and tingling in her right hand in the beginning of 1991, Ms. Kreider was not impaired. She continued to exercise regularly at Ms. Crossley's fitness center. Ms. Crossley, Ms. Kreider, and others began taking walks on Sunday mornings for several miles in the spring of 1991. Tr. 27, 35. The group's normal route took them along an old, hilly street with a bumpy terrain. Ms. Kreider did not have problems with her balance that interfered with her walking. Tr. 28. Additionally, Ms. Crossley and Ms. Kreider often went dancing. Tr. 29.

On May 6, 1991, Ms. Kreider received the first dose of the mumps, measles, and rubella vaccine. On June 10, 1991, Ms. Kreider received a second dose of the same vaccine. Exhibit 6 at 1. (In this lawsuit, Ms. Kreider has not alleged that these vaccinations contributed to her problems. But see exhibit 43 at 1 (history claiming that Ms. Kreider had an adverse reactions to these vaccinations). However, these facts are included for sake of completeness.)

In June 1991, Ms. Kreider began working at Chestnut Hill Hospital. During the summer break between classes, she worked full-time as a nurses' assistant. Tr. 134-35. On June 26, 1991, Ms. Kreider returned for a follow-up appointment at Abington Hospital. Ms. Kreider complained that her hand was stiff with swelling. She reported having white, blue, and red changes in coloration with paresthesia, but without pain. She also did not have any pain in her other joints. Exhibit 2 at 9; exhibit 7 at 64.

After June 1991, the problems expanded beyond just Ms. Kreider's right hand. She observed that her feet were "dusky blue" and "scary looking." Tr. 90. The tingling in her right hand, which is described in medical terminology as "paresthesia," continued. By the end of the summer in 1991, Ms. Kreider was experiencing glove and stocking paresthesia in her right foot and later in her left foot. She also was having decreased reflexes and proprioception. Exhibit 8 at 31; 49 at 37.³

After Ms. Kreider started her second year of nursing school, she again consulted a doctor in the hospital's rheumatology clinic about her persistent symptoms of Raynaud's phenomena. Exhibit 2 at 10. X-rays taken on October 9, 1991, did not show any fractures in her hand. The joint spaces appeared intact. Exhibit 2 at 12-13; exhibit 7 at 69.

The pain in Ms. Kreider's hands prompted her to try biofeedback and acupuncture in November 1991. These alternative treatments did not help her. Exhibit 2 at 10.

Around this time, Ms. Kreider completed a "Health History" for her nursing school. On this form, she disclosed that she was diagnosed with a mixed connective tissue disease. Exhibit

³ This report actually indicates that these problems started in 1981. However, as explained in the text, "1981" is a typographical error. The correct year is 1991.

71 at 71; tr. 143. Her statement is consistent with the information provided by her treating doctors. See exhibit 2 at 5-7, 10, 14.

After this treatment in November 1991, there was another visit to the Abington clinic in January 1992. This visit seems to be for the refill of a prescription. Exhibit 2 at 15. After the January 1992 visit, several months passed without Ms. Kreider seeking medical attention. The next recorded visit to a doctor was on August 17, 1992. In the interim, Ms. Kreider worked during the summer at Chestnut Hill Hospital. Tr. 134-35.

From August 1992 through January 1993, Ms. Kreider saw doctors on three occasions. Her general condition did not change significantly. Exhibit 2 at 15 (visit on August 17, 1992); exhibit 7 at 68 (same); exhibit 2 at 16 (visits on October 14, 1992 and December 9, 1992); exhibit 7 at 65 (same). At the October 14, 1992 visit, Ms. Kreider reported a decrease in the reflexes of her right knee. Exhibit 2 at 16; exhibit 7 at 65. During this time, to rule out Sjogren's syndrome, a test was run to detect certain antibodies. No antibodies associated with Sjogren's syndrome were detected. Exhibit 7 at 55.

On February 4, 1993, Ms. Kreider sought assistance from a doctor who practiced as part of an entity called Abington Rehabilitation Medicine. She reported having a tingling sensation, particularly in her feet. She said that difficulty with her balance affects her walking. The treating doctor observed an unsteady gait and a bluish discoloration in both sets of upper and lower extremities. The doctor ordered an electrodiagnostic study. The results of this test were consistent with a motor-sensory peripheral polyneuropathy of a demyelinating type. Exhibit 2 at 17.

Ms. Kreider returned to the clinic at Abington Hospital approximately one month later. She reported that she had tingling in both legs. Exhibit 2 at 22; exhibit 7 at 66. The doctor ordered additional labs. These labs showed that her anti-nuclear antibodies were elevated (5120). Exhibit 2 at 25; exhibit 7 at 102. In March 1993, she submitted a third “Health History” to her nursing school, on which she indicated that she was diagnosed with arthritis and lupus. Exhibit 71 at 69; tr. 144. The chronology of medical records shows a gap in treatment spanning from the end of March 1993 to December 1993.⁴

During her second or third year of nursing school, Ms. Kreider’s fingers became so swollen that she needed to have her rings resized. Tr. 86.⁵

Ms. Kreider graduated from nursing school in May 1993. Exhibit 71 at 9. She worried about going up the steps to the stage during her graduation ceremony because of problems walking. Tr. 97.

In December 1993, Ms. Kreider began to develop problems with proprioception. She was having more difficulty walking and had fallen several times. Exhibit 7 at 8; tr. 46-47. These

⁴ Some gaps could be attributable to Ms. Kreider’s inability to obtain medical records from Dr. Judith Bronstein, who saw Ms. Kreider during this time. Exhibit 55; see also exhibit 8 at 35 (letter thanking Dr. Bronstein for the referral).

⁵ In a medical report from May 1994, Ms. Kreider reported that her rings were resized in 1991. Exhibit 7 at 8. It is more likely than not that this history was provided inaccurately.

In October 1991, Ms. Kreider was seen by a doctor and had an x-ray of her hands. Exhibit 2 at 10-13; exhibit 7 at 69. However, the doctor does not indicate that Ms. Kreider complained that she needed to have her rings resized. If Ms. Kreider had, in fact, had her rings resized before seeing this doctor, she would have said something about her swollen fingers. The omission of any problem about swollen fingers in October 1991 strongly suggests that Ms. Kreider did not have her rings resized during 1991.

symptoms coincided with the start of a particularly icy and snowy winter. Throughout this entire winter, Ms. Kreider fell numerous times. Id.; tr. 45, 97.

On December 27, 1993, Dr. Charles Selby, a rheumatologist, saw Ms. Kreider. His examination revealed Raynaud's phenomena around Ms. Kreider's feet and knees. Her digits were also described as "sausages" without frank scleroderma. Dr. Selby diagnosed Ms. Kreider with undifferentiated mixed connective tissue disease. Exhibit 22 at 2.

Throughout the winter of 1994, Ms. Kreider continued to have difficulty walking. The problems became significant enough that, on March 3, 1994, Ms. Kreider reported to a local neurologist, Dr. Stephen Silberstein, to complain about her worsening gait, numbness in her right hand, stiffness in her legs, balance problems, and trouble in aerobics. The doctor diagnosed a progressive sensory neuropathy. Exhibit 7 at 71, exhibit 8 at 35-36.

Starting with that visit on March 3, 1994, Ms. Kreider sought medical attention much more frequently. During the next two months, Ms. Kreider saw six different doctors. (The count of six doctors does not include doctors who were seeing Ms. Kreider for a mass on her lung. This problem resolved and appears not to be a condition for which Ms. Kreider is seeking compensation.)

The details of these visits are not particularly relevant to deciding the present question, which is when Ms. Kreider's problems began. It is well established that by the beginning of May 1994, Ms. Kreider was experiencing problems of a much greater severity than she experienced before entering nursing school. Ms. Kreider was experiencing headaches more frequently.⁶

⁶ Ms. Kreider testified that she regularly experienced headaches in college after drinking beer or red wine. After eliminating these beverages from her diet, she did not testify that she regularly experienced headaches of any other kind. Tr. 55-56.

Exhibit 19 (report of Kendra Kaye, of the Philadelphia Arthritis Consultants, dated May 6, 1994), 9 at 11 (notes from Elizabeth Carroll from April 1, 1994). In addition to the discoloration in her hands, Ms. Kreider reported weakness in her hands for the first time. Exhibit 9 at 23 (report of Matthew B. Stern, neurologist, dated April 21, 1994). She was having significant trouble walking. Exhibit 64 at 12 (report of Shawn Bird, neurologist, dated April 29, 1994). She had no reflexes in her lower extremities. Exhibit 64 at 12 (report of Dr. Bird); 19 (report of Dr. Kaye). She had impairment of proprioception. Id. The doctors could not identify an underlying malignancy that was causing her problems. Exhibit 64 at 7 (report of Dr. Bird, dated June 28, 1994).

After 1994, Ms. Kreider's condition has not changed significantly. See exhibit 64 at 2 (report of Dr. Bird, dated September 25, 1998, stating no changes in last four years); exhibit 34 at 11 (report of Vidhu Gupta, neurologist, dated March 19, 2002, stating that Ms. Kreider's symptoms progressed until 1994 and then stabilized). Walking remains challenging, but, Ms. Kreider is able to overcome some of the difficulties and, in 2007, still can walk several miles on even terrain. Tr. 137.

While Ms. Kreider's current abilities and impairments may affect the amount of compensation to which she is entitled, there has been no adjudication that she is entitled to any compensation. She has not presented an expert's opinion that the hepatitis B vaccination caused her problems. Ms. Kreider deferred obtaining an expert's opinion until the factual discrepancies in the medical records were resolved. This opinion has done so.

Thus, Ms. Kreider is expected to obtain an expert report based upon the facts found in this ruling. The deadline will be set at a future status conference.

III. SUMMARY

The preceding factual findings provide a basis for deciding the questions presented in the Joint Statement of Issues to be Resolved by the Special Master. To address these subjects, the undersigned special master expressly finds that a preponderance of the evidence supports the following facts :

1. Ms. Kreider has been experiencing some blueness in her hands⁷ since she was young. The blueness generally developed in cold weather. This blueness happened before she received her first hepatitis B vaccination. The blueness also occurred after she received her first hepatitis B vaccination.
2. Ms. Kreider first experienced the serve discoloration, “mottling,” in her hands in February 1991. This date is after she received the first and second hepatitis B vaccinations, but before she received the third dose. Mottling was, and is, significantly worse than the blueness that she previously experienced.
3. Before she received the first dose of the hepatitis B vaccine, Ms. Kreider did not suffer from any physical impairment severe enough to limit her activities.
4. Ms. Kreider first experienced swelling of her fingers in June 1991, a date after she received the first, second, and third doses of the hepatitis B vaccine. See exhibit 2 at 5-7 (report of Dr. Leal, dated April 1, 1991, stating that he found no edema); exhibit 2 at 9

⁷ Although the parties requested findings about the condition of not only Ms. Kreider’s hands, but also her face and feet, there appears to be no evidence about Ms. Kreider’s face or feet before she received the first dose of the hepatitis B vaccination. Thus, the findings describe the condition of her hands, a topic about which the parties submitted abundant evidence.

(clinic note, dated June 26, 1991, stating that Ms. Kreider was complaining about swelling in her hands).

5. In February 1991, Ms. Kreider developed a tingly sensation in her right hand for the first time. See exhibit 2 at 17; exhibit 7 at 85; see also page 12, n. 2, above. This date is after the first and second doses of the hepatitis B vaccine, but before the third dose.
6. In February 1993, Ms. Kreider started having difficulty walking. Exhibit 2 at 17. This date is after Ms. Kreider received all three doses of the hepatitis B vaccine.

The parties are instructed to call Shana Siesser, at (202) 357-6358, to schedule the next status conference.

IT IS SO ORDERED.

S/ Christian J. Moran

Christian J. Moran
Special Master