

No. 92-341V

(Filed: March 16, 1999)

CHRISTIAN RHYS VANT ERVE, a minor, by
and through his next friends, RON VANT ERVE
AND CATHY VANT ERVE,

Petitioners,

National Vaccine Injury
Compensation Program; vaccine
injury table exclusion.

v.

SECRETARY OF HEALTH AND HUMAN
SERVICES,

Respondent.

A. *Leroy Toliver*, Atlanta, Georgia, for petitioners.

Michael P. Milmo, Washington, D.C., appeared for respondent with whom were *Acting Assistant Attorney General David W. Ogden*, *Director Helene M. Goldberg*, *Deputy Director John Lodge Euler*, and *Assistant Director Gerard W. Fischer*, United States Department of Justice, Washington, D.C.

OPINION

BRUGGINK, *Judge.*

This is an action under the National Childhood Vaccine Injury Act of 1986, 42 U.S.C. §§ 300aa-1 through 300aa-34 (1994) ("Act"). It comes before the court on petitioners' motion, pursuant to 42 U.S.C. § 300aa-12(e)(1), and Appendix J of the RCFC, for review of: (1) this court's November 21, 1997 order setting aside the Special Master's June 27, 1997 decision granting compensation and remanding the case for further consideration of the issue of entitlement; and (2) the Special Master's December 3, 1998 decision on remand denying compensation to petitioners. Ron and Cathy Vant Erve, petitioners, assert that their son, Christian, suffered injuries arising allegedly from a diphtheria-pertussis-tetanus ("DPT")

inoculation. Petitioners claim that this court abused its discretion by substituting its judgment for the determinations made by the Special Master in his June 27, 1997 decision. They further argue that the Special Master's decision on remand, finding that petitioners were not entitled to compensation under the Act because their child's injuries were due to a factor unrelated to his DPT inoculation, was arbitrary and capricious, an abuse of his discretion, and inconsistent with the law. The issues are fully briefed and oral argument is deemed unnecessary. For the reasons set forth below, the Special Master's decision on remand is affirmed.

BACKGROUND

The background facts are discussed in *Vant Erve v. Secretary of Health & Human Services*, 39 Fed. Cl. 607, 608-11 (1997) and are summarized and supplemented here. Christian Vant Erve was born on April 27, 1989, and received a DPT inoculation on June 23, 1989. Two days later, he experienced episodes in which his left arm and leg shook. The following day, June 26, Christian's seizures worsened to the point that he displayed major movements of all of his extremities, causing him to be admitted to the hospital. After being diagnosed with seizures and given anti-seizure medication, the seizures stopped and Christian was discharged.

Christian did not exhibit any further seizures after June 1989. By December 7, 1990, however, it became apparent that Christian's development was delayed. Since that time, Christian has suffered from severe physical and mental problems, including spastic diplegia, a neurological condition that results in severe stiffness of limbs on both sides of his body. Currently, he suffers with diminished mental, hearing, and visual capacities connected with his neurological condition.

On May 14, 1992, petitioners filed for compensation under the Act for injuries to Christian, allegedly arising from his DPT inoculation. Petitioners alleged that Christian suffered either or both of the table injuries residual seizure disorder⁽¹⁾ and encephalopathy⁽²⁾ within three days of inoculation. Petitioners also alleged that Christian's present physical and mental conditions were *sequelae* of either or both table injuries. During the initial review, respondent argued that Christian's injuries were caused by a factor unrelated to his DPT vaccination. Specifically, respondent alleged that Christian's neurologic condition was caused by a prenatal injury and recommended against an award.

At the May 26, 1994 entitlement hearing, both petitioners and respondent presented evidence through several medical experts. Dr. Arnold Gale, a pediatric neurologist, and Dr. Charles Fitz, a pediatric neuroradiologist, testified for respondent. Dr. Gale stated that Christian's clinical course after his inoculation indicated that he had suffered a prenatal injury. Dr. Fitz similarly testified that based upon his analysis of Christian's 1989 "computed tomography" ("CT") and 1991 "magnetic resonance image" ("MRI") scan, he suffered from "periventricular leukomalacia" ("PVL"), a condition of damage to or loss of the brain's white matter which occurs during the prenatal or perinatal period. Both experts testified that Christian's neurologic symptoms, including his seizures, were the product of a static injury to his brain which occurred during his prenatal period.

Dr. Roy Strand, a pediatric neuroradiologist, Dr. Jan Mathisen, Christian's pediatric neurologist since 1989, and Dr. Marcel Kinsbourne, a pediatric neurologist, provided countering testimony for petitioners. Dr. Strand testified that the images relied upon by Dr. Fitz did not provide a substantial basis to conclude that Christian had experienced PVL. Dr. Mathisen and Dr. Kinsbourne both testified that Christian's neurological problems were caused by the DPT vaccination, rather than any prenatal injury, that as a result of his vaccination, Christian suffered a "Table Injury encephalopathy," and that his current problems are *sequelae* of such an injury.

On June 21, 1994, the Special Master ruled in favor of petitioners on the issue of entitlement.

Specifically, he found that: (1) petitioners demonstrated that Christian suffered a table-enumerated seizure disorder with residual effects lasting more than six months from his inoculation; (2) respondent failed to demonstrate that the seizure disorder was the result of a "factor unrelated to the administration of the vaccine;" (3) petitioners also demonstrated that Christian suffered a table-enumerated encephalopathy; and (4) respondent failed to demonstrate that the encephalopathy was the result of a "factor unrelated to the administration of the vaccine." *Vant Erve v. Secretary of Health & Human Servs.*, 1994 WL 325426 (Fed. Cl. Spec. Master June 21, 1994).

There were a total of four MRI scans. The first was taken in December 1991. It formed the basis of the petition and for respondent's presentation at the 1994 evidentiary hearing. Although the second and third MRI scans were taken in August 1992 and April 1993, they were not furnished to respondent until sometime after the evidentiary hearing.⁽³⁾ The last MRI scan was performed in January 1997. All four scans were ordered by Dr. Mathisen.

Following the Special Master's ruling on entitlement, the parties discussed settlement as to the amount of compensation. Between February 1995 and January 1997, five different life-care plans were filed with the court: four by petitioners and one by respondent. Also during this period, Linda L. Cosby, a professional nurse and respondent's life-care planner, visited with Christian to assist in developing respondent's version of Christian's life-care plan.⁽⁴⁾

Respondent filed a motion to reopen the issue of entitlement on June 2, 1997. In support of its motion, respondent relied on expert reports prepared by Dr. Fitz and Dr. Gale. Based on their review of the supplemented medical record, both Dr. Fitz and Dr. Gale concluded in their reports that Christian's injuries were due to a metabolic disturbance and not the DPT vaccination. On June 26, 1997, the Special Master denied respondent's motion to reopen the issue of entitlement. *Vant Erve v. Secretary of Health & Human Servs.*, 1997 WL 383144 (Fed. Cl. Spec. Master June 26, 1997).

On June 27, 1997, the Special Master directed an award to petitioners and ordered respondent to set up an annuity to pay for Christian's care. *See Vant Erve v. Secretary of Health & Human Servs.*, No. 92-341V, slip op. (Fed. Cl. Spec. Master June 27, 1997). On July 28, 1997, respondent filed a motion for review of the Special Master's decision. Respondent argued that the Special Master abused his discretion and violated fundamental fairness by refusing to consider relevant and reliable evidence pertaining to Christian's entitlement under the program before awarding compensation.

On November 21, 1997, this court held that the Special Master erred by: (1) not giving Drs. Fitz's and Gales' expert reports adequate weight in his decision; (2) giving weight to irrelevant factors in his analysis;⁽⁵⁾ and (3) finding respondent negligent in failing to seek records. Accordingly, the court set aside the Special Master's award of compensation to the petitioners and remanded the case for further consideration. As part of their current motion, petitioners have requested that the court reconsider the November 21, 1997 decision. We see no basis for doing so.

On remand, a second entitlement hearing was held on September 18, 1998. Drs. Gale and Fitz testified again for respondent and Dr. Mathisen testified for petitioners. At that proceeding, both Dr. Fitz and Dr. Gale testified that the changes in Christian's MRI scans performed in 1991, 1992, 1993, and 1997, demonstrate that Christian's neurologic condition is a result of a progressive metabolic disorder. Dr. Fitz testified that the MRI images show a progressive deterioration of the white matter in Christian's brain as the result of "dysmyelination." This means that the myelin protective sheath around the brain's white matter is defective because the myelin that Christian's body produces is itself abnormal and defective. Dr. Fitz described Christian's progressive, dysmyelinating disorder as a "metabolic" disorder, meaning that it results from an error in Christian's metabolism. According to Dr. Fitz, the progressive deterioration of the

white matter in Christian's brain, as demonstrated by the MRI images, could not have been produced by a vaccination or any other type of static injury.

Dr. Gale agreed with Dr. Fitz that, based on a review of all of the MRIs, Christian's neurologic condition is a result of a progressive dysmyelination metabolic disorder. He also agreed that a progressive dysmyelination process would necessarily result from a metabolic disorder. He testified that Christian's progressively worsening MRI images could not result from an injury caused by his vaccination because such an injury would be static in nature. Although they had little doubt that his progressive metabolic disorder was the cause of his tragic neurologic symptoms, both experts acknowledged that, based upon the evidence available to them, they could not specify the exact type of metabolic disorder that affects Christian.

Drs. Fitz and Gale also acknowledged that their latest conclusions conflict with the testimony they offered in 1994, in which they explained that Christian's injuries were most likely caused by a prenatal static injury to his brain. They explained that this change was due to the additional medical records which were not available to them prior to the 1994 hearing. Dr. Fitz explained that he had previously only reviewed Christian's 1991 MRI. By 1998, he had seen Christian's 1992, 1993, and 1997 MRI scans as well. The additional MRIs provided him with the an opportunity to compare the subsequent MRIs and the ability to measure Christian's white brain matter loss over time. Dr. Fitz testified that, after doing so, Christian's progressive metabolic disorder became apparent.

Petitioners' expert, Dr. Mathisen, testified that Christian's DPT vaccination is the cause of his neurologic disorder. He testified that based primarily on his clinical exams, Christian's injuries are neither progressive nor metabolic in nature. Although Dr. Mathisen agreed with respondent's experts that Christian's MRI scans show a progressive decrease in his white brain matter, he testified that Christian's clinical exams have been fairly stable, especially over the last two years. Dr. Mathisen opined that Christian's neurologic abilities and disabilities have not regressed in accordance with what one would conclude by reviewing just his MRI results. According to Dr. Mathisen, Christian's clinical evidence should be given greater weight than the MRI results in making a final analysis of his condition. He therefore concluded that, based on Christian's clinical exams, he suffers from a static injury directly related to his vaccination.

On December 3, 1998, the Special Master denied compensation under the Act. *See Vant Erve v. Secretary of Health & Human Servs.*, 1998 WL 887126 (Fed. Cl. Spec. Master Dec. 3, 1998) (*Vant Erve IV*). He found substantial evidence that Christian's neurologic condition is the result of a progressive, dysmyelinating, metabolic disorder. In weighing the testimony of the medical experts, the Special Master wrote: "the theory of Drs. Gale and Fitz seems to fit the overall record of Christian's condition much more so than that of Dr. Mathisen. In addition, I have strong doubts about the candor of Dr. Mathisen." *Id.* at *7. With respect to encephalopathy, the Special Master found that because respondent established that Christian's injuries were caused by a metabolic disturbances, he did not suffer an encephalopathy constituting a "Table Injury." *See id.* at *8; *see also* 42 U.S.C. § 300aa-14(b)(3)(B). As to Christian's alleged "residual seizure disorder," the Special Master found that respondent had successfully demonstrated that Christian's injuries were due to a factor unrelated to his DPT inoculation -- a metabolic disturbance. He therefore denied petitioners recovery under section 300aa-13(a)(2) of the Act.

On January 4, 1999, petitioners filed a motion seeking review of the Special Master's decision on remand. They argue that the decision was arbitrary and capricious, an abuse of the Special Master's discretion, and inconsistent with the law.

DISCUSSION

Petitioners have put forth two primary arguments. They first allege that the Special Master erred in determining that the medical record shows a pattern of significant clinical regression that is consistent with the progressive brain deterioration demonstrated by Christian's MRI images. Petitioners contend that Christian's clinical picture demonstrates that his neurological condition results from a static injury to his brain caused by his DPT inoculation. Additionally, petitioners argue that the Special Master erred in finding that respondent made a successful showing of a factor unrelated because respondent has neither proven that the alleged metabolic disturbance was the cause of Christian's injuries nor established the origin of the metabolic disturbance as required by the Act. For these reasons, petitioners assert that the 1998 decision of the Special Master is arbitrary and capricious and request this court to set aside that ruling and reinstate the Special Master's decision of June 27, 1997.

A. Statutory Scheme

This court may "set aside any findings of fact or conclusion of law of the special master found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. § 300aa-12(e)(2)(B). This standard is "highly deferential to the factual findings of the special master." *Munn v. Secretary of Health & Human Servs.*, 970 F.2d 863, 869 (Fed. Cir. 1992). The court, accordingly, may not simply substitute its own judgment for that of the Special Master. *See Snyder v. Secretary of Health & Human Servs.*, 117 F.3d 545, 548 (Fed. Cir. 1997). "It is, after all, the special masters to whom Congress has accorded the status of expert, entitling them to the special statutory deference in fact-finding normally reserved for specialized agencies." *Munn* at 871. Accordingly, if "the special master has considered the relevant evidence of record, drawn plausible inferences and articulated a rational basis for the decision, reversible error will be extremely difficult to demonstrate." *Hines v. Secretary of Health & Human Servs.*, 940 F.2d 1518, 1528 (Fed. Cir. 1991).

Under the Act, petitioners are entitled to a presumption of causation if they prove, among other criteria, that the claimant:

sustained, or had significantly aggravated, any illness, disability, injury, or condition set forth in the Vaccine Injury Table in association with the vaccine referred to in subparagraph (A) or died from the administration of such vaccine, and the first symptom or manifestation of the onset or of the significant aggravation of any such illness, disability, injury, or condition or the death occurred within the time period after vaccine administration set forth in the Vaccine Injury Table

42 U.S.C. § 300aa-11(c)(1)(C)(i). Specifically with respect to the "Table Injury encephalopathy," however, section 300aa-14(b)(3)(B) states: "If in the proceeding on a petition it is shown by a preponderance of the evidence that an encephalopathy was caused by infection, toxins, trauma, or *metabolic disturbances* the encephalopathy shall not be considered to be a condition set forth in the table." *Id.* § 300aa-14(b)(3)(B) (emphasis added).⁽⁶⁾

In addition, the presumption of causation for table injuries may be rebutted if respondent shows by a preponderance "that the illness, disability, injury, condition, or death described in the petition is due to factors unrelated to the administration of the vaccine described in the petition." *Id.* § 300aa-13(a)(1)(B). The term "factors unrelated" does not include "any idiopathic, unexplained, unknown, hypothetical, or undocumentable cause, factor, injury, illness, or condition." *Id.* § 300aa-13(a)(2)(A). It may, however,

"include infection, toxins, trauma (including birth trauma and related anoxia), or *metabolic disturbances* which have no known relation to the vaccine involved, but which in the particular case are shown to have been the agent or agents principally responsible for causing the petitioner's illness, disability, injury, condition, or death." *Id.* § 300aa-13(a)(2)(B) (emphasis added).

Is Christian's Neurologic Condition the Result of a Static or Progressive Brain Injury?

At the 1998 entitlement hearing, respondent argued that Christian's injuries are the result of a progressive deterioration of the white matter in his brain. It further asserted that his injuries could not have been caused by his DPT inoculation because vaccine related injuries are static in nature rather than progressive. The Special Master agreed. He found that "that the overall record does show a pattern of significant clinical regression in Christian that corresponds to the progressive brain deterioration that Drs. Fitz and Gale have observed on the MRI images." *Vant Erve IV* at *5.

Petitioners contend that this finding is not supported by the record, relying primarily on the opinion of their medical expert, Dr. Mathisen. Dr. Mathisen argues that Christian's clinical exams have been relatively stable, especially over the last two years, and do not correlate with a progressive neurologic condition as presented by respondent's experts. Although Dr. Mathisen agreed that the MRI images do show a progressive loss of white brain matter, he testified that Christian's recent clinical examinations demonstrate that he has suffered from a static injury caused by his DPT vaccination rather than a progressive neurologic condition. The Special Master, however, did not find Dr. Mathisen's testimony persuasive.

In his decision, the Special Master cites to seven different medical records which he characterized as "irrefutable evidence" of a significant regression of Christian's clinical neurologic condition from late 1991 through late 1994:

First, on March 6, 1992, Dr. Mathisen himself wrote that--

some of Christian's development seems to be slowing down a bit. He was eating fairly well last year but this has stopped. . . . Cruising appears to be present but is not as well developed as it has been previously. He is having a much harder time holding his spoon. . . . In summary, Christian . . . has had some evidence of mild developmental regression.

(Dam. Ex. C, p. 13.) Similarly, on April 22, 1993, Dr. Mathisen wrote that Christian--

has been having . . . more significant neurologic problems. . . . Previously he could sit up well but, at this time, is not able to do so. He is having a greater difficult time with his tone increasing His eating has decreased. . . . [He has a] degree of regression that we are seeing.

(*Id.* at 8.) On April 30, 1993, another physician described Christian as experiencing "worsening physical performance." (*Id.* at 32.)

On June 7, 1993, Dr. Mathisen wrote of Christian's "progressive worsening of spasticity and swallowing difficulties." (Dam. Ex. C at 47.) On September 16, 1993, the same physician wrote of Christian's "history of . . . worsening neurologic status, with decreased sitting, increased drooling," added that Christian's ability to walk with a walker "is now decreased," and also remarked upon Christian's "history of progressive neurologic deterioration in the last several weeks and months." (*Id.* at 48.) On December 13, 1994, Dr. Mathisen wrote that Christian's examination that day was "notable for progressive difficulties with back support, increased drooling and poor hand usage," and that there "has been some concern recently of developmental regression, especially in muscle groups involving his back." (*Id.* at 2.)

Dr. Mathisen added on the same day that Christian "seems to have more fisting and difficulty with back control," summarizing that the child "appears to have a little bit of worsening of some of his neurologic features." (Id. at 4.)

Vant Erve IV at *4-*5.

Additionally, the Special Master had serious misgivings as to Dr. Mathisen's credibility. He was troubled by Dr. Mathisen's lack of candor and found his testimony "unresponsive" and "disingenuous." The Special Master also found that Dr. Mathisen's testimony at the first evidentiary hearing is "suspect" in light of the supplemented medical record. Dr. Mathisen testified in 1994 that the follow-up MRI scans do not show progressive white matter changes. With regard to the 1993 MRI scan, however, Dr. Mathisen wrote: "the MRI scan was quite abnormal with evidence of both brain stem and cerebellar atrophy with relatively minimal changes involving the cerebral cortex. The findings were thought to be more compatible with an underlying genetic disorder involving the brain stem and cerebellar region." Resp.'s Damages Ex. C at 7. Further, the Special Master pointed out that in the April 22, June 7, and September 16, 1993 documents cited above, Dr. Mathisen wrote of recent regression in Christian's condition, yet he testified in 1994 that Christian was not regressing. Hence, the Special Master found that "Dr. Mathisen's 1994 testimony was not candid, and that certainly casts doubt upon the credibility of his 1998 testimony as well." *Vant Erve IV* at *5.

The Special Master found that the contemporaneous medical records of Christian's clinical condition during the period from 1991 to 1994 are more reliable than the testimony provided by Dr. Mathisen. The Federal Circuit has explained that a special master can credit contemporaneous medical records over conflicting witness testimony. *See Cucuras v. Secretary of Health & Human Servs.*, 993 F.2d 1525, 1528 (Fed. Cir.1993) ("oral testimony in conflict with contemporaneous documentary evidence deserves little weight"); *see also Whitecotton v. Secretary of Health & Human Servs.*, 81 F.3d 1099, 1107-08 (Fed. Cir. 1996) (discussing scope of inquiry and special master's discretion with regard to evidence). To the extent that petitioners argue that the Special Master erred in finding Dr. Mathisen not credible or by not giving proper weight to his testimony, such arguments do not demonstrate reversible error. *See Hines*, 940 F.2d at 1527. The Special Master's analysis and reasoning in support of his determination that Christian's clinical neurologic condition regressed from late 1991 through late 1994, are well supported by the record.

With respect to Christian's clinical condition subsequent to 1994, the Special Master found that the record contained "less direct, but still compelling, evidence of additional clinical regression." The Special Master cites the four different life-care plans submitted by petitioners. He found that each subsequent plan demonstrated "increased needs for Christian's care." Thus, the Special Master concluded, as this court did earlier, that additional plans were required because of Christian's worsening condition. *See Vant Erve IV* at *5.

Petitioners argue that the Special Master erred by assuming that the multiple life-care plans meant further regression. According to petitioners, the first life-care plan was a "preliminary plan." It indicated that petitioners had requested additional information and that the plan would be supplemented. Petitioners allege that the additional life-care plans were submitted only to provide additional information not available as of the date of the preliminary plan and merely updated the expected cost for certain items already included. They contend that the assumption made by the Special Master is not supported by the record and is thus arbitrary and capricious.

The mere fact of submitting multiple life-plans, it is true, would not constitute evidence of "additional clinical regression." Here, however, the Special Master found that each succeeding plan generally reflected an increase in the amount of care for Christian not included in the previously submitted plan.

The plan of May 19, 1997, included a cover letter from Helen M. Woodard, Christian's rehabilitation counselor, in which she referred to Christian's worsening condition: "Christian has become less capable from a motor perspective, and has lost some of the skills he previously had, such as some verbalizing and hand use." Pet.'s Pre-hr'g Submission of May 19, 1997. The Special Master's reliance on the life-care plans as evidence of Christian's clinical regression was thus not arbitrary or capricious.

Is Christian's Neurologic Condition Caused By a Metabolic Disturbance?

Petitioners also assert that respondent did not put forth sufficient evidence that the alleged metabolic disturbance was the cause of Christian's injuries. They argue further that, even assuming such a showing exists, the Special Master erred by not requiring respondent to identify the exact type of metabolic disturbance. We disagree.

As explained above, the Special Master relied on the testimony of respondent's expert to support his conclusion that Christian suffers from a metabolic disturbance. The Special Master found that "Drs. Gale and Fitz simply seemed to be much better able to explain and defend their theory, in a straightforward and lucid fashion, than was Dr. Mathisen." *Vant Erve IV* at *7. The Special Master found "that it is substantially 'more probable than not' that Christian's entire history of neurologic dysfunction, including his seizures as well as his devastating array of additional neurologically-related disabilities, has been the result of a progressive, dysmyelinating, metabolic disorder." *Vant Erve IV* at *16.

Respondent's experts acknowledged the changes in their theories regarding Christian's condition. They explained, however, that the additional evidence now in the record justifies their current conclusions. In 1994, only the 1991 MRI scan was made available. In 1998, they were able compare this scan with the subsequent MRI images to determine if Christian was experiencing a progressive loss of white brain matter. The Special Master found no reason to discredit this explanation, nor does the court. This court will not second guess the credibility determinations of the Special Master when they appear sound and rational. The Special Master's conclusion that Christian's metabolic disturbance was the cause of his injuries is soundly based on evidence in the record. We find, therefore, that the Special Master's conclusion that a factor unrelated caused the injury was not arbitrary or capricious.

Petitioners' final contention is that respondent's proof falls short of what is required by the Act. Specifically, petitioners allege that respondent cannot meet its burden of proof merely by showing that Christian suffers from a genetic metabolic disorder of unknown origin. Because respondent has not proven the type of Christian's metabolic disturbance, petitioners assert that the proffered factor fails because it is "idiopathic, unexplained, unknown, hypothetical and undocumented."

We do not agree. There is nothing in the Act which expressly requires respondent to identify the specific metabolic disturbance it is relying on as a factor unrelated. *See* 42 U.S.C. §§ 300aa-13(a)(2), -14(b)(3) (B). As the Special Master pointed out, the Federal Circuit ruled on a similar question in *Knudsen v. Secretary of Health & Human Services*, 35 F.3d 543 (Fed. Cir. 1994). The legal issue addressed in *Knudsen* was "whether a viral infection can be found to be an alternative causation if the specific viral type is not identified." *Id.* at 547. The Federal Circuit found that just as an "alternative causation is not automatically proved simply by the mere fact that a child is infected with a virus, even of a specifically identified type. . . [T]here is nothing in the Vaccine Act that requires a per se rule that alternative causation cannot be proved when the specific virus is not identified." *Id.* at 549. The Court held that a "viral infection" can be an alternative causation, even though the viral infection is not specifically identified by type or name so long as respondent proves that there was in fact a viral infection, and that the viral infection "in the particular case [was] . . . principally responsible for causing the petitioner's illness, disability, injury, condition, or death." *Id.* at 549 (quoting 42 U.S.C. § 300aa-13(a)(2)). Similarly in this case, it is sufficient that a metabolic disturbance caused Christian's neurologic injuries.

Accordingly, we find no reason to disturb the Special Master's decision.

CONCLUSION

Petitioners' Motion for Review is denied. Accordingly, the Special Master's December 3, 1998 decision on remand is affirmed. The Clerk is directed to enter judgment accordingly.

ERIC G. BRUGGINK

Judge

1. *See* 42 U.S.C. § 300aa-14(b)(2).
2. Encephalopathy is defined under the Act as "any significant acquired abnormality of, injury to, or impairment of function of the brain." 42 U.S.C. § 300aa-14(b)(3)(A).
3. It is unclear at what point respondent came into possession of these documents. According to respondent's motion to reconsider of June 2, 1997, it made numerous requests for documents. Petitioners delivered a "stack" of documents on July 12, 1996.
4. As a result of Ms. Cosby's visit, respondent subpoenaed additional medical records relating to Christian. The documents consisted of school records, language skills reports, laboratory tests, and a physical-therapy assessment; no medical records from Dr. Mathisen or any other doctor were produced. The only prehearing data was a 1992 auditory brainstem test.
5. The factors considered by the Special Master in determining prejudice to the petitioners included: (1) emotional prejudice, in that "petitioners would suffer special anguish of losing award" if the 1994 decision is reversed; (2) petitioners "may have" expended resources in reliance on a award; and (3) respondent would not experience prejudice since the Vaccine Fund has "grown to nearly \$1.1 billion." The court found these to be inappropriate considerations.
6. The court will assume that respondent has the burden of showing that the alleged encephalopathy was caused by the factors expressed under this section of the Act.