

John, I think you
might be interested
in the

July 23, 2006

Bill and Melinda Gates Foundation
P.O. Box 23350
Seattle, Washington 98102

Dear Mr. & Mrs. Gates:

I have often wondered what happens to infants born in poverty ridden countries who have cerebral palsy. Are they even allowed, when possible, to survive? Please let me assure you that I am not making any personal request for assistance. I only want to make it better for those who come after me.

Even in this country there are many problems to be solved. Once an individual leaves the public school system there are few if any services available. Among the major problems are the lack of employment, the failure to provide opportunities for higher education, and poverty. A rising number of multiple births and teenage pregnancies have resulted an increase in the number of infants in this country who have cerebral palsy, which I find extremely disappointing.

As for myself, I am grateful that in spite of the constant struggle that results from being severely disabled, I have created a meaningful life for myself. I am also very grateful for the wonderful friends who help me and have provided an excellent support group for many years.

Please find enclosed several articles. The most important of these is concerned with the research on cerebral palsy. If they have found the cause, I am hoping that it can be prevented. Then it can be prevented in the countries suffering from so many of the ills of this world.

Thank you for your time and consideration. I saw the interviews on the Charlie Rose program.

Cordially yours,
Jean Riley
1909 Robins Lair Court
Arlington, Texas 76012 .

W Evidence on Main Cause of Cerebral Palsy

CHOLAS BAKALAR

Study undermines the long-standing view among obstetricians that oxygen deprivation, or hypoxia, is the main cause of cerebral palsy in premature infants. A study, published in the October issue of *The American Journal of Obstetrics and Gynecology*, found that infection was much more common than hypoxia in injury that leads to cerebral palsy, said Dr. Ernest

Graham, an assistant professor in the department of obstetrics and gynecology at Johns Hopkins and the lead author of the study, have important implications for both research and clinical practice.

"This changes our thinking," Dr. Graham said. "In the past, we've focused primarily on hypoxia," but the study suggests that monitoring for hypoxia "isn't likely to help very much."

Finding ways to prevent and treat infections, on the other hand, "may have a huge impact on the problem," he said.

The researchers studied premature infants born from 1994 to 2001 in a university hospital. They looked at cases of periventricular leukomalacia, or PVL, a specific kind of damage to the white matter of the brain. The white matter transmits signals in the brain and from the brain to the spinal cord, and is particularly subject to injury in premature infants.

While there are other factors associated with brain damage in premature infants, like bleeding into the brain and pregnancies in which a woman carries two or more fetuses, a large majority of infants with PVL

develop cerebral palsy. The symptoms may not be evident for many months after birth, but the damage can be seen on brain scans, which reveal the characteristic cysts that form after brain tissue is damaged.

In time, the cysts are reabsorbed, leaving abnormally enlarged ventricles where the brain tissue has died. PVL can cause a range of physical and mental disabilities from mild to very severe, but the most common is spastic diplegia, tightly contracted muscles in the legs that cannot function normally.

When researchers looked at 150

preterm babies with PVL and matched them to a control group of 150 preemies born in the same time period who did not have brain damage, the results were surprising. Hypoxia, as measured by umbilical cord blood tests, was no more common in the premature babies with PVL than it was in the other babies.

Delivery by Caesarean section was not associated with PVL, nor did tests of blood chemistry distinguish injured from noninjured babies. Even babies whose fetal heart rates were reduced during labor and delivery were not any more likely than other babies to suffer brain injury.

What did make a difference, and it was a large one, was whether the babies had suffered infections. Infants who had positive bacterial cultures of the blood, cerebrospinal fluid or throat were two to four times as likely to suffer brain damage as those who did not. *Staphylococcus* infections predominated, but the researchers found more than 10 other kinds of infections as well, and the type of infection made no difference in the rates of injury.

"This is an important and fascinating paper," said Dr. Larry Gilstrap, chairman of obstetrics, gynecology and reproductive sciences at the University of Texas Medical School at Houston. Dr. Gilstrap, who was not involved in the study, noted that with a possible cause for the brain injuries, methods of preventing them might be found.

BILL & MELINDA
GATES *foundation*

August 7, 2006

Jean Riley
1909 Robins Lair Court
Arlington, TX 76012

Dear Jean Riley:

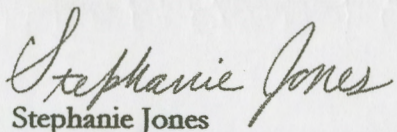
Thank you for writing to the Bill and Melinda Gates Foundation. Your letter to Mr. and Mrs. Gates has been forwarded to me for reply.

We appreciate the information that you have shared about cerebral palsy with the foundation and will save your letter for future program development.

We invite you to visit our website periodically at www.gatesfoundation.org for changes to our programs.

Please accept our best wishes for your endeavors.

Sincerely,


Stephanie Jones
Grants Inquiry Administrator