New virus suspected in two SIDS cases

Deaths of Wisconsin babies linked to new germ

The Associated Press

Updated: 5:29 p.m. CT Sept 2, 2004

MILWAUKEE - A virus recently discovered in Japan is suspected in two “crib deaths” in Wisconsin, raising new questions about how many of these mysterious tragedies might be caused by germs.

The cases mark the first time the virus has been identified in the United States. Whether it killed the babies is not clear, but both were sick before they died and had signs of disease in their lungs.

Sudden infant death syndrome — also called “crib death” for the devastating way it is usually discovered — is a catch-all term for unexplained deaths in children less than a year old. About 2,200 occur each year in the United States, mostly involving babies between 2 and 4 months old.

Brain or breathing abnormalities, genetic mutations and birth defects are possible causes. The risk rises if babies live with smokers, are put to sleep on their stomachs, or are bundled in too many clothes or covers.

Infections also have long been implicated. However, many SIDS victims are not tested for viruses that might be the culprit.

The Wisconsin cases should prompt research into whether SIDS is often caused by the newly discovered type of virus, said Dr. Mark Pallansch, who identified it at the federal Centers for Disease Control and Prevention after a Milwaukee virologist detected it.

“That is the question to be asked,” he said. “At this stage we just have very little information about the involvement of these viruses in human disease.”

Protein linked to stillbirths may also play role

Separately, a study in Thursday’s New England Journal of Medicine suggests that a protein long linked to stillbirths and some birth defects may play a role in SIDS. Researchers from England and Scotland found that pregnant women who had high amounts of it in their blood were nearly three times more likely to have a baby die of SIDS than were women with lower amounts.

In recent years, pilot projects in several states have found a surprising number of infections in SIDS victims. It has also long been known that many victims have high amounts of immune system cells and substances, indicating they were fighting germs. SIDS is also more common in winter, when viruses thrive indoors.

Germs that cause mild illness in adults can be fatal to infants. Sometimes they kill indirectly, by magnifying other dangers, said Dr. Marian Willinger, who oversees SIDS research for the National Institute of Child Health and Human Development. If parents pile blankets on a sick child, it becomes harder for the baby to breathe and regulate its body temperature, she said.

Officials are trying to figure how the newly recognized virus, human parechovirus-3, or HPEV-3, fits in. Japanese scientists reported its discovery earlier this year after studying a 1-year-old girl who developed a high fever, diarrhea and temporary paralysis in 1999.

Source in Wisconsin cases unknown

The virus' origin is a mystery. How the Wisconsin babies got it is another.

The first was a 4-week-old Appleton girl who died last September, after she and her family had colds. Her mother is a travel agent, but she worked from home in the two previous months and had no face-to-face contact with clients who went to Asia.

The second case occurred two weeks later, 30 miles away, in a 4-month-old Fond du Lac girl who also had cold symptoms. Her father had recently been to China and Australia, but her family had no known contact with the other victim's family.

"Other than the virus itself, we do not have a linkage," said Wisconsin's state epidemiologist, Dr. Jeffrey Davis.

The virus was detected in Wisconsin through a study that Milwaukee County Medical Examiner Dr. Jeffrey Jentzen launched in 1987 with Gerald Sedmak, the Milwaukee Health Department virologist who discovered the new germ in the two dead babies.

So far, they have found viruses in a third of the 1,200 cases studied, though most are not believed to have caused death. Still, that is a surprisingly high rate, said Dr. Kurt Nolte, who started a similar project in New Mexico.

"All of these viruses are potentially fatal. That's why people protect their newborns when they bring them home. You don't pass your brand-new baby around to 45 people," Nolte said.

In a Chicago study in the 1990s, Dr. Fern Hauck, a University of Virginia SIDS researcher, found that infections were the cause of death in 10 percent of sudden, unexpected infant deaths. She is now helping the CDC revise forms for reporting sudden and unexpected infant deaths.

"The goal is to really have everyone in the country who deals with infant deaths to extensively review everything in the background to make sure no stone is left unturned to find the diagnosis," Hauck said.

Davis agreed: "Not everything reported as SIDS is SIDS. Every one of these situations deserves an answer as to why it occurred."

SIDS deaths declined 50 percent after the federal government's Back to Sleep campaign in 1994, which urged parents to put babies to sleep on their backs.

SIDS is more common in babies of parents who are young or uneducated, and among blacks and American Indians.

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