

Mistaken infection 'on the prairie'?

4 February 2013, by Serena Gordon, Healthday Reporter



The Ingalls: Carrie, Mary and Laura
Photo: Museum of the American
Printing House for the Blind

Mary Ingalls, of 'Little House on the Prairie', probably didn't go blind from scarlet fever, experts suggest.

(HealthDay)—Fans of the pioneer tales known as "Little House on the Prairie" are familiar with the ravages of scarlet fever. That's because Mary Ingalls—sister of the autobiographical series' author, Laura Ingalls Wilder—went blind, supposedly because of complications from the illness. But medical experts today think it's time that explanation went the way of the wagon wheel.

"[Scarlet fever](#) is unlikely because there isn't eye involvement with that disease," said Sarah Allexan, coauthor of a new article detailing Mary's illness.

The results of Allexan's detective work were released online Feb. 4 in the journal *Pediatrics*.

In a book from the *Little House* series called *By the Shores of Silver Lake*, Ingalls Wilder wrote: "Mary and Carrie and baby Grace and Ma had all had scarlet fever. Far worst of all, the fever had settled in Mary's eyes and Mary was blind."

Scarlet fever, caused by [Streptococcus pyogenes](#), caused many deaths of U.S. children between 1840 and 1883, according to the historical review. Up to 30 percent of children who had scarlet fever

died during that time period. In the early 1900s, scarlet fever, measles, meningitis and other "diseases of the head" were believed to be the top four causes of blindness in the United States.

Without a known explanation, deaths from scarlet fever began to drop in the early 1900s, even before antibiotics were introduced, according to the review.

What also remains largely unexplained is how scarlet fever could have caused blindness. Allexan, who was studying at the University of Michigan in Ann Arbor when she started the review and is now a student at the University of Colorado School of Medicine in Aurora, suspects that many cases of blindness that were attributed to scarlet fever might have been caused by meningitis instead.

According to historical records, Mary went blind in 1879 at age 14. But, in Laura Ingalls Wilder's memoirs, she only talks about scarlet fever during the winter of 1872. Yet she later describes Mary being sick in the winter of 1879, and then in April 1879, she wrote that Mary was, "taken suddenly sick with a pain in her head and grew worse quickly. She was delirious with an awful fever. We feared for several days that she would not get well."

Ingalls Wilder goes on to describe her sister as having one side of her face "drawn out of shape." Her mother told her that Mary had had a stroke. As Mary recovered from the stroke, her eyesight grew worse.

The local doctor wasn't sure what caused Mary's blindness and consulted another physician. "They had a long name for her sickness and said it was the result of the measles [sic] from which she had never wholly recovered," Ingalls Wilder wrote.

In 1937, in a letter to her daughter, Ingalls Wilder wrote that her sister had gone blind from spinal meningitis, and then crossed that out and wrote "some sort of spinal sickness."

A historical register from 1889 lists the cause of Mary's blindness as "brain fever," which at the time was the term for meningoencephalitis, the swelling of the brain and the membranes covering the brain.

The review authors suspect that during revisions of the novels, "brain fever" was changed to "scarlet fever" because it was a more recognizable illness at the time.

They suspect that meningoencephalitis caused by a virus is the most likely cause of Mary's blindness. An actual stroke is unlikely because she had no other areas of paralysis. A bacterial form of meningoencephalitis, caused by a disease like scarlet fever, is also unlikely, they said, because Mary likely would have had other brain damage as a result of a bacterial infection. She would have had learning problems, whereas from all accounts she remained as bright as ever.

Dr. Bruce Hirsch, an infectious disease specialist at North Shore University Hospital in Manhasset, N.Y., agreed that scarlet fever probably didn't cause Mary's blindness.

"I don't think scarlet fever causes blindness directly, though it is possible that there was some febrile illness that could have been mislabeled as scarlet fever," he said. A febrile illness is sickness that includes a fever.

Hirsch is also skeptical that meningoencephalitis caused her blindness because this usually causes damage to more than one area. "If meningoencephalitis caused enough nerve damage to blind you, it would be unusual for it to just hit that part of the brain without causing a more general injury," he said.

He suspects that it's more likely that she had a viral illness with a high fever and became dehydrated, which resulted in a blocked vein in a blood vessel that supplies the eyes with blood (retinal vein occlusion).

Whatever the actual cause was, Allexan said the message for doctors is that it's "important what labels we use to talk about disease. People still

think scarlet fever is a serious, deadly disease that can cause [blindness](#)."

More information: Learn more about scarlet fever from the [U.S. Centers for Disease Control and Prevention](#).

[Health News](#) Copyright © 2013 [HealthDay](#). All rights reserved.

APA citation: Mistaken infection 'on the prairie'? (2013, February 4) retrieved 17 April 2021 from <https://medicalxpress.com/news/2013-02-mistaken-infection-prairie.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.