Long months of dealing with the Covid-19 pandemic have illustrated the importance of advances in the medical field over the past two centuries. During the 19th and 20th centuries scientists made considerable progress in the identification and prevention of illness and gained an understanding of how bacteria and viruses gain access to and interact with the human body. These breakthroughs led to a clearer understanding of the causes and treatments of different types of infectious disease and helped the world react to the current outbreak. The story of the “spotted fever” epidemic in central New England in 1812 illustrates how the limited medical knowledge of the time meant that the medical profession was not well equipped to diagnose and treat victims of the outbreak.

During the early months of the year 1812, Thomas and Hannah Grier of Acworth, NH visited friends in Massachusetts. Upon their return home to Acworth, both fell ill. Their 18-year-old daughter Jennie prepared dinner for a party of young men who came to the Grier house to provide the family with wood for the winter. Jennie was stricken with a violent headache after placing the food on the table. Dr. Stephen Carleton was called to the house and immediately diagnosed it as a case of spotted fever. He administered medicine, but Jennie was dead before midnight.

Soon a child of the Davidson family, who lived nearby, fell ill. The Davidsons eventually lost three children to the outbreak. The disease spread rapidly throughout the town. The McCollum family was also sickened. Father and husband Alexander died on March 30. Children James, Eliza and Lucinda died the following day. The McCollum’s final child, young Fanny, died two weeks later, leaving mother Jane alone. These cases may have been the starting
point for the outbreak that spread through neighboring towns and then across the Connecticut River into Vermont where it spread even more widely.

Symptoms of the disease included a sudden headache, chills, and nausea, followed by fever and delirium. This could be followed by coma, the appearance of spots on the skin, weakened pulse, and, in some cases, death. Medical professionals of the 20th century believed that this spotted fever was what we now call typhus, which is spread by insects such as ticks, lice and fleas. The disease was not well understood at the time, however, and struck fear into the families of Acworth and neighboring towns.

Throughout 1812 and into the next spring the disease ravaged the population. Seven people died in as many days in Walpole. Before the summer of 1813 fifty-three people died in Acworth. By the end of 1814 about 90 died in Alstead.

Miss Sally Nesmith of Acworth wrote to her sister that: “many sicken and die in a few hours,” and that a mass funeral was held in the meetinghouse for five people who died near the same date. Sally went on to say that: “for three weeks I have done nothing but help to take care of the sick and attend funerals.” She closed her letter to her sister with the words: “If the fever should continue as bad as it has been, I am afraid there will not be enough people to care for the sick.” Despite Sally’s close work with the infected, she survived the outbreak.

There were several factors that contributed to the spread of the disease. First, it was winter so family members were confined in close quarters inside their homes to stay warm during the cold winter months of northern New England, thereby enabling transmission of the disease. They were not completely isolated, however, because care givers were traveling from house to house to aid the sick, and undoubtedly carried the illness with them. The infection was highly contagious and was fast acting, often killing within hours of the first symptoms. Finally, the doctors were confused about the outbreak. The illness did not present exactly like spotted fever.

The outbreak abated during the summer, but strengthened again the following winter. Before it ran its course in 1814, nearly 100 residents of Acworth were dead from its effects. Its
impact was even more devastating in Vermont where the epidemic spread across the state, where it is believed to have killed almost 6,000 people, or one of every forty inhabitants of the state. It also spread into southern Quebec.

The so called spotted fever epidemic touched many families in Acworth and neighboring towns of southwest New Hampshire. Its impact has been memorialized in the Old Cemetery in Acworth. The Grier family obelisk there is engraved with the following words:” Jane, daughter of Thomas and Hannah Grear, died Feb. 17, 1812 at age 18. She was the first victim of the spotted fever in this town. Fifty-three others followed within three short months.”

As mentioned above, this spotted fever epidemic was later described more specifically as typhus by medical professionals. However, due to today’s more advanced knowledge and understanding of the causes, symptoms and progress of viral and bacterial infections, it is very likely that the 1812 outbreak in western New Hampshire was not typhus at all, but was a form of meningitis caused by meningococcal bacteria. Meningitis is an acute swelling of the protective membranes that cover the brain and spinal cord. The bacteria are transmitted person to person though direct and indirect contact, such as coughing, sneezing, saliva, or kissing.

Because the epidemic in Acworth and surrounding towns occurred more than two centuries ago it is impossible for us to determine conclusively what the infection was. However, contemporary descriptions of the symptoms offer important clues. Several of the symptoms of typhus and meningitis are similar, such as headache, fever, and a rash on the skin. Two important differences, however, are the ages of those affected and the speed with which the infection seriously impacts the human body. Meningitis is especially prevalent in young people through their teen years, which was clearly the case in the Acworth area, but the real telltale feature was the speed with which many of those infected became dangerously ill and died. As we know, Jennie Grier, Acworth’s first fatality, died just a few hours after her first symptoms appeared. Typhus simply does not attack that fast, but meningitis does.
It is interesting to note that even if our ancestors had known what they were fighting, they would not have had the weapons to make an impact in the battle against the disease. Two centuries of medical study and technological advancement have made vast differences in the ways that we diagnose, treat and immunize to battle diseases. Today bacterial meningitis can be diagnosed through lumbar puncture, a process that involves removing and inspecting cerebrospinal fluid from around the spinal cord. The disease can also be treated with antibiotics. Most importantly, the development and use of meningitis vaccines has drastically reduced the incidence of the disease worldwide.

In 1812 the residents of Cheshire County had none of these medical tools to fight the frightening epidemic that encompassed them. We are fortunate that science and technology have combined to result in much more rapid and effective treatment in the 21st century, such as the rapid development of vaccines to immunize people around the world against the effects of Covid-19.