

Guillain-Barre Syndrome

Vaccination Déjà Vu?



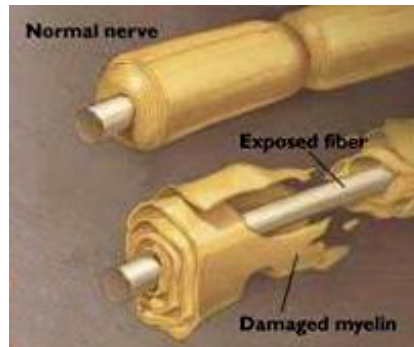
By Jay Hardy, CLS, SM (NRCM)

Jay Hardy is the founder and president of Hardy Diagnostics. He began his career in microbiology as a Medical Technologist in Santa Barbara, California.

In 1980, he began manufacturing culture media for the local hospitals. Today, Hardy Diagnostics is the third largest culture media manufacturer in the U.S.

To ensure rapid and reliable turn around time, Hardy Diagnostics maintains six distribution centers, and produces over 3,000 products used in clinical and industrial microbiology laboratories throughout the world.

Guillain-Barre Syndrome (GBS) is an uncommon autoimmune disorder, in which antibodies attack the myelin sheath of the nerve cells. Foreign antigens cause an immune response that is mis-targeted to the nerve cells, resulting in temporary or permanent paralysis.



Weakness, tingling and numbness in the fingers and toes are usually the first symptoms. These sensations can quickly spread up the arms, legs and to the upper body. As the disorder progresses, muscle weakness can evolve into paralysis. Extreme cases cause difficulty in breathing and require hospitalization.

One in ten cases result in a permanent disability. Since there is no cure, only supportive therapy can be provided. Even



with the best medical care the death rate is 2-3%. The incidence of GBS increases with age. Most cases are found in those over 50 years old.

Guillain-Barre (pronounced ge-lan bar-ay) was first described by the French physician Jean Landry in 1859, and further characterized by Guillain and Barre in 1916.



At the time, President Franklin Roosevelt's paralysis was attributed to polio. It is now thought that, due to the symptoms and his age, a more likely diagnosis would be Guillain-Barre Syndrome.

The exact cause of Guillain-Barre syndrome is unknown, but it is often preceded by an infectious illness such as a respiratory infection, vaccinations, *Campylobacter jejuni* infection, stomach flu, or other viral infections (Epstein-Barr, CMV, and HIV).

The cause of the association with GBS and *Campylobacter* is unknown. A [study](#) revealed that over a quarter of all GBS cases were preceded by a *Campylobacter* infection; and that these ensuing cases developed a more severe form of GBS.

Fortunately, Guillain-Barre syndrome is relatively rare, affecting only 1 or 2 people per 100,000. In the United States, 3,000 to 6,000 people will suffer from GBS annually.

Guillain-Barre, unlike disorders such as multiple sclerosis and Lou Gehrig's disease (ALS), is a peripheral nerve disorder and does not generally cause nerve damage to the brain or spinal cord.

Concerns of Vaccination

Currently, there is concern about GBS due to the promotion of vaccinations to control the pandemic 2009 H1N1 influenza virus.

A [study](#) that examined data from the CDC from 1990 to 2005, showed that there were

1,000 cases of GBS recorded within the Vaccine Adverse Event Reporting System as administered by the CDC and FDA. In most cases, the disease developed within six weeks of the vaccination. Of the 1,000 cases, 63% followed an influenza vaccination; 1% followed the hepatitis B vaccine. One fifth of the cases resulted in death or disability.



The Swine Flu of 1976

During the Swine flu outbreak of 1976, it is thought that the vaccination program resulted in over 500 cases of GBS with 25 deaths reported. [Studies](#) have shown that those who received the influenza vaccine had a higher risk of GBS. As a result of the increase in GBS incidence early in the vaccination program, it was halted in December of 1976, after 40 million people had lined up to receive their injections.

The federal government eventually paid millions of dollars in damages to the victims and their families, since the vaccine manufacturers had

previously negotiated an agreement with the government to free them from all possible liability claims.



President Ford demonstrates his willingness to be vaccinated to halt the spread of the much feared Swine Flu of 1976.

It is encouraged that any reaction due to a vaccine be immediately reported. The CDC and FDA maintain a national program known as [VAERS](#) (Vaccine Adverse Event Reporting System) whereby all adverse effects due to vaccinations may be reported, compiled, and analyzed. There are other private groups that are interested in the dissemination of information regarding the effectiveness and the risks involved with vaccinations, such as the [National Vaccination Information Center](#).

It is hoped that many lessons were learned from the tragic experiences of 1976. However, the fear of these unexpected consequences, such as Guillain-Barre Syndrome, still haunts the public health programs of today.

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