Recommendations for Vaccinations against Influenza, Pneumonia and Tetanus

This text discusses recommendations for vaccinations against influenza (flu shot and flu spray), pneumococcus (pneumonia shot, pneumovax) and tetanus. In general people with MG should receive yearly influenza vaccinations; a pneumococcal vaccination if they are over 65, have impaired breathing due to a respiratory disorder such as severe asthma or chronic obstructive pulmonary disease and a tetanus shot with booster shots every 10 years. Concerns about vaccinations and MG sometime arise out of fears that vaccinations will trigger attacks of MG or worsen its course. There is no evidence to indicated that receiving yearly flu shots, vaccination against pneumonia or a tetanus booster shot will worsen the course of MG. Another concern is that people who are taking medications that compromise their immune systems such as Novantrone or large doses of glucocorticoid medication (steroids, prednisone, prednisolone) will contract the disease they are being vaccinated against. The agents in the injected influenza, pneumonia and tetanus booster vaccinations are inactive. These vaccinations cannot produce disease.

Influenza Vaccination

Influenza season begins in the fall and extends through the winter. Influenza causes substantial illness and can be fatal. People with chronic diseases, such as MG, and people who have difficulty breathing, as can occur due to MG, are especially susceptible to be injured by influenza. Influenza vaccine is the most effective way to protect against influenza disease and to prevent the severe complications of influenza. Each year, influenza vaccine is made up of inactivated components of the different strains of influenza virus that are likely going to cause disease that flu season. Some people do not want to get influenza vaccinations because in the past they received a vaccination and for a few days they had a low grade fever and felt ill. Hence, some people do not want to receive a flu shot because they believe that the "flu shot gave them the flu." The low grade fever is part of the body’s response to the vaccination that enables the body to defend against influenza infection. A person who develops a mild reaction to the flu shot would likely have a much more severe illness if that individual contracted influenza. Vaccination can prevent family members infecting each other with influenza. Sometimes people fear that getting a flu shot will cause them to get Guillain Barre syndrome. Guillain Barre syndrome refers to a group of peripheral nerve disorders that cause paralysis. More than a decade ago there was a national campaign to vaccinate all Americans against a very dangerous type of influenza that was believed would cause world-wide devastation, the swine flu. Some people developed Guillain Barre syndrome after receiving swine flu vaccination. This was briefly misinterpreted as indicating that the swine flu shot caused some people to develop Guillain Barre syndrome. However, careful detailed studies demonstrated that number of cases of Guillain Barre syndrome was not increased during the period that people received Swine flu vaccinations. People should not receive a flu shot if they are sick with a fever. The flu shot should be delayed until after the fever has cleared for several days.
There are some people who should not receive yearly influenza shots. People who have allergic sensitivity to eggs or who have had severe reactions to prior influenza shots should not receive flu shots.

There is an alternative form of influenza vaccination that uses live attenuated influenza virus that is administered as a nasal spray. The live virus nasal spray form of influenza vaccine should not be used in people with MG.

Additional information about influenza vaccination can be obtained at the following internet web site that is administered by the Centers for Disease Control:

The vaccine information site for the inactivated vaccine is:

The vaccine information site for live attenuated influenza vaccine is:

**Vaccination against Pneumonia (Pneumovax)**

Pneumonia refers to an infection of the airways, lungs or both that is often associated with high fever. People with MG are at elevated risk to develop pneumonia and are more likely to be harmed when they contract pneumonia when they contract pneumonia. The most common bacteria that causes pneumonia is pneumococcus. There is a vaccine made from inactivated pneumococcus that is effective in reducing the likelihood of a person developing pneumococcal pneumonia. People MG who are over 65 years old should receive an injection of pneumoccal vaccine. People who have had their spleen removed should receive a pneumovax shot. It is currently recommended that pneumococcal vaccinations be repeated after 5 years if the first vaccination was done before a person was 65 and that everyone be re-vaccinated at age 75.

A good web site for information about the pneumovax shot is:
http://www.acsu.buffalo.edu/~shlevy/immune.htm

**Tetanus Vaccination**

Tetanus is a severe, potentially fatal, that can cause paralysis of the entire body or a region of the body. Tetanus can be caused by a wound that becomes infected with the tetanus bacteria (*clostridium tetani*) or due to tetanus bacteria growing the gut (intestinal form of tetanus. Wound tetanus is the most form of tetanus. Prevention of wound tetanus is the reason that people are questioned about their tetanus shot history when they are treated for a wound. The intestinal form of tetanus can develop in people with intestinal disease or following some types of intestinal surgery. People are initially vaccinated against tetanus in childhood. The vaccination in childhood is a vaccine that builds resistance to tetanus and other childhood diseases – pertussis (whooping cough) and diphtheria. People should get a booster tetanus shot every 10 years. The usual booster also rejuvenates resistance against diphtheria. The booster vaccine is made of inactivated components of the tetanus-causing and diphtheria-causing bacteria. While people may get a local reaction to the tetanus booster shot (pain, swelling, heat), the local reactions usually resolve in a few days and generalized reactions are extremely rare. People with MG should receive tetanus booster shots every 10 years.

A good web site for information about tetanus is:
http://www.cdc.gov/vaccines/vpd-vac/tetanus/default.htm