

MS Attacks

43. What is an MS attack?

An MS attack (also called exacerbation, flare up or relapse) implies worsening of symptoms that is usually abrupt and develops within a day or two. The symptoms can be entirely new to the patient or simply be worsening of previous symptoms such as leg weakness that become a lot worse within a day or two. It is believed that focal areas of severe inflammation can lead to an attack experienced by the patient. Therefore, quick recognition of an attack by the neurologist is important. This may help in successful and timely treatment leading to complete recovery.

44. How are MS attacks treated?

In evaluating an MS attack, it is important to check for an infection (such as a urinary tract infection), which can precipitate an attack or cause old MS symptoms to recur (a pseudo-exacerbation). In such cases, when there is evidence of active infection, it is best to treat the infection or wait for it to subside before instituting any treatment for the relapse.

Typically, MS attacks are treated with high-dose intravenous (IV) steroids, one gram a day for 3 to 5 days. Under certain circumstances, such as in patients with poor venous access or when a patient is traveling away from home, steroids can be given orally.

Steroids used for the treatment of the MS attack are not muscle builders or performance enhancing steroids. The steroids used in MS and often in other conditions such as arthritis or asthma, decrease inflammation. The goal of steroid treatment of MS attacks is to speed up the recovery of deficits and minimize tissue damage from severe inflammation.

Studies are underway to compare the efficacy of intravenous versus oral steroids in the treatment of MS attacks. It is possible that comparable doses of oral and intravenous steroids may be equal in their effect.

45. Is it necessary to administer steroids in the hospital?

No, if a patient is clinically stable and safe at home, then IV steroids can be administered at home. However if there is a risk of falling or other safety concerns, or complicating medical conditions such as diabetes, then it is preferable to admit the patient into the hospital for this treatment. In case of diabetes, it is always preferred that the patient receives steroids in the hospital to closely monitor blood sugar levels and give insulin as needed.

46. Is it necessary to take an oral taper of steroids after the IV course?

There is no good data to prove that an oral taper with prednisone is needed after finishing a course of IV steroids. Some neurologists use oral prednisone because in their experience their patients do better with the taper. This option should be evaluated on a case-by-case basis. There are some studies suggesting that oral steroids given after IV steroids make no difference on recovery from an attack.

47. What are the side effects of steroids?

Short-term side effects usually resolve once the steroid course is over or soon thereafter. They include:

- Mood irritability
- Euphoria (sense of well being)
- Headache
- Flushing of the face
- Increase in appetite, weight gain
- Metallic taste
- Heartburn
- Increase in blood pressures
- Increase in blood sugars
- Oral and/or vaginal fungal infection
- Overall increase in energy

Side effects seen with prolonged steroids that can persist or even become permanent complications of steroid use include:

- Osteoporosis (thinning of the bone)
- Menstrual irregularities
- Cataracts
- High blood pressure
- Diabetes
- Suppression of the immune system leading to infections

48. Do steroids have an effect on long term outcome of the disease?

This subject is still a matter of debate. Recently some studies have shown steroids to have a beneficial effect on long-term outcome while other studies failed to do so. The main indication for steroid use in MS is the treatment of an attack. However IV steroids can be used on a monthly basis as an additional treatment to stabilize active disease, which is not being controlled by the current therapy (for example, either Interferon beta or Copaxone®). This type of disease stabilizing approach can be continued for several months.

If steroids cannot be used or are not effective, other option to consider is plasmapheresis.

49. What is plasmapheresis?

Plasmapheresis is a medical procedure used to “clean” blood. It is done at an outpatient center or hospital and usually takes 3 to 4 hours to complete. The procedure requires placing an intravenous (IV) line in one of the big veins in the neck or under the collar bone. The IV line takes blood into a machine which removes the “water” or “plasma” part of the blood and replaces it with “neutral” protein fluid. This procedure is thought to remove inflammatory substances contained in the plasma which may be contributing to the MS attack. The procedure is typically repeated 5 to 6 times on alternate days. However, the exact mechanism of why plasmapheresis works to help recover from an MS attack is not well understood. Overall, it is a safe procedure but more expensive and difficult to perform than giving steroids to treat an MS attack.