



National MS Society Information Sourcebook

www.nationalmssociety.org/sourcebook

Corticosteroids

Corticosteroids are hormones normally produced in the human body by the adrenal glands. They have a number of physiologic effects on different organ systems, but are most widely used for their anti-inflammatory actions.

Treatment for MS Attacks

Corticosteroids were among the first agents used for successful treatment of MS and remain one of the standard treatments for controlling acute exacerbations, (also called relapses or attacks).

Some corticosteroids, such as prednisone, are generally given orally. Others, such as methylprednisolone (Solu-Medrol[®]) and dexamethasone (Decadron[®]) are given intravenously (IV). Most MS specialists recommend a 3-5 day course of high-dose intravenous steroids as the treatment of choice for an acute MS attack—providing maximum benefit with fewest side effects. This treatment may require hospitalization, although it is common to have IV treatment on an outpatient basis. Depending on the physician's preference, the patient's condition, and the length of the treatment, the IV steroids may be followed by a one- to two-week tapering dose of oral steroids.

ACTH (adrenocorticotrophic hormone), administered by injection, is also a recognized treatment for exacerbations of MS.

Treatment for Optic Neuritis

Recent studies suggest that a short course of IV methylprednisolone followed by a tapered course of oral steroids may be useful in helping to reverse inflammation and restore vision in optic neuritis, an inflammation of the optic nerve that is often associated with MS. There is, however, no definitive evidence that this treatment produces a more complete recovery than that which would have happened without treatment.

Steroids Should Be Taken Under Physician's Supervision

Corticosteroids should always be taken under a doctor's supervision. Possible side effects include stomach irritation, elevation of blood sugar, water retention, restlessness, insomnia, and mood swings. Most patients, however, tolerate the treatment well. Even with short courses of IV steroids, the physician may need to prescribe medications to help the person sleep and minimize stomach discomfort.

Oral steroids that have been taken over a period of time should never be stopped abruptly, since they can suppress the body's own steroid production by the adrenal

gland. Gradually tapering the dose downward before discontinuation of the medication allows the body time to normalize production. Since a very short course of IV steroids has no effect on the adrenal gland, an oral steroid taper is not usually required.

Long-Term Use Is Not Indicated

There is no evidence to suggest that continuous steroid administration slows progression of MS or improves symptoms over a long period of time. However, several studies have found that monthly one-day pulses of intravenous methylprednisolone may be helpful in treating patients with active MS. These studies are still preliminary and require larger numbers of patients before making definitive recommendations.

The side effects of long-term continuous steroid use are serious and well-documented. These include stomach ulcers, weight gain, acne, cataracts, osteoporosis (thinning of the bones), deterioration of the head of the thigh bone, and chemical diabetes.

See also...

Sourcebook

- Exacerbation
- Optic Neuritis

Society Web Resources

- Spotlight: Exacerbations
www.nationalmssociety.org/Exacerbation
- Spotlight: MS and Vision
www.nationalmssociety.org/Vision
- Treatments
www.nationalmssociety.org/Treatments

The National Multiple Sclerosis Society is proud to be a source of information about multiple sclerosis. Our comments are based on professional advice, published experience, and expert opinion, but do not represent individual therapeutic recommendations or prescription. For specific information and advice, consult your personal physician.

To contact your chapter, call **1-800-FIGHT-MS** (1-800-344-4867) or visit the National MS Society web site: www.nationalmssociety.org.