

# Prednisone

Neurologic disorders can be caused by excessive activity of the immune system. Excessive activity can be treated by medications that dampen down the immune system. Prednisone is an effective medication to help control immune-mediated disorders and reduce the damaging effects.

Prednisone has many actions in the body, including effects that dampen down the immune system. It is not known which action on the immune system is important in treating neurologic disorders, and prednisone likely works at a number of different sites in the immune system.

Prednisone is a corticosteroid, and corticosteroids are compounds that our body needs and makes in the adrenal gland. Cortisol is the corticosteroid made by the body. Prednisone is a synthetic corticosteroid that can be taken by mouth.

When prednisone is given, the body senses that it is receiving a large amount of corticosteroids and the adrenal gland stops making cortisol. It takes several weeks for the adrenal gland to restart making cortisol. As a result, if prednisone is abruptly stopped, the body may be lacking in natural cortisol until it can make it again, and this can cause problems. The plan is to slowly reduce or taper the prednisone dose, giving the adrenal gland time to start making cortisol again. Thus, it is important not to stop prednisone suddenly, but if there is a need to reduce it rapidly, it can be done, but under supervision.

Prednisone is taken by mouth, initially at a high daily dose to have maximum effect on the immune-mediated disease. It is then slowly tapered. Side effects of prednisone are felt to be lower if the daily dose is shifted to an every other day dose during the taper.

There are potential side effects of prednisone, listed in order of most common to least common:

- 1- Increased appetite: Increased appetite does not automatically result in increased weight! With attention to eating habits patients may gain no weight. A handout is available with suggestions on how to manage an increased appetite without weight gain.
- 2- Facial puffiness: With high doses of prednisone there may be an increase in facial fullness – chipmunk cheeks. This resolves at lower doses of prednisone.
- 3- Irritable mood: Patients may note an irritable mood. Recognizing these mood changes is usually all that is necessary. Very rarely do patients become depressed while taking prednisone.
- 4- Disturbed sleep: Prednisone can be stimulating for a few hours, and it is recommended that it be taken in the morning so that the stimulating effects will wear off by night time. Occasionally, patients need medication to help them sleep.
- 5- Capillary fragility: Mild trauma to the skin can cause a burse. This is cosmetic and resolves over a week or two. It occurs more commonly in older patients.

6- Demineralization of bone. This is more of a problem in postmenopausal women. It is recommended that everyone take calcium 500-600mg twice a day for people under age 50 and three times a day for people over age 50. Vitamin D should also be taken, 400mg under age 50 and 800mg over age 50. Inexpensive brands of calcium are effective and vitamin D may be included in the calcium formulation or taken separately.

7- Tremor: A fine hand tremor may occur with higher doses, and resolves with lower doses.

8- Diabetes: Prednisone can promote diabetes. This is more likely in someone who has risk factors for diabetes such as a family history of diabetes, excess weight, and older age. Accordingly, preventing weight gain is important. If a patient has diabetes it may require more medication to control it. If diabetes occurs during treatment, it usually goes away or requires less treatment as prednisone is tapered.

9- Stomach distress: It is rare for prednisone to cause stomach distress. Temporary discomfort with each dose can be treated with anti-acid medications. Stomach pain that persists or is of an unusual nature should be brought to medical attention that day.

10- Aseptic hip necrosis: This is a very rare complication. The small blood vessels going to the hip joint can become blocked causing premature degeneration of a hip joint.

11- Acceleration of cataracts: Prednisone can accelerate the advancement of cataracts, usually in older people who already have cataracts.

12- Prednisone does not significantly increase the risk of infections, but prudent care should be exercised, such as washing hands, and so forth. If you have had tuberculosis (TB) had a positive TB test, or been exposed to someone who had or has TB please let us know.

This list may seem long, but all drugs have side effects. This list is intended to be complete, and most patients have few annoying side effects and rarely serious side effects.

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