

Prednisone can lead to steroid-induced osteoporosis with long-term use. Thus, patients are recommended prophylactic calcium and vitamin D. Children taking prednisone may develop growth retardation due to inhibition of osteoblast function and decreased gastrointestinal calcium absorption.

Immunosuppression

Moon-suppressed

As glucocorticoid medications lead to immunosuppression, patients are more susceptible to illness. Decreased immune response may lead to infections, and patients taking prednisone should not be given live vaccines, as they may contract the illness.

Hyperglycemia

Hiker-glue

These medications alter glucose metabolism in the body, and patients can develop hyperglycemia. Long-term use can lead to glucose intolerance, and often patients can be found to have glycosuria.

Ulcers

Ulcer-volcano

Use of glucocorticoids can lead to the development of peptic ulcers, along with impaired healing of existing ulcers. Thus patients with a history of ulcer disease should not take these medications long term.

Considerations

Adrenal Insufficiency

Adrenal-gland Damaged

Administration of steroid medications can lead to adrenal insufficiency, as the body decreases adrenal output of steroid hormones. Thus, patients who abruptly stop treatment can develop acute adrenal crisis, which is an emergency. During stress or illness, extra prednisone should be prescribed, and patients should carry a medical alert ID, as well as carry an emergency supply of the medication.

Taper Gradually

Tape-dispenser with Gradual amounts of pills

In order for the body to slowly compensate and increase output of steroid hormones, patients taking prednisone should be gradually tapered off. A sudden stop in treatment can lead to adrenal crisis.