estrol acetate exhibits intrinsic glucocorticoid activity and prolonged administration can induce secondary adrenal insufficiency. Abrupt withdrawal of megestrol acetate, especially after chronic use, can precipitate acute adrenal insufficiency

Autopsy findings:

Autopsy studies have revealed adrenal gland involvement in 40-90% of cases and pituitary gland involvement in 30% of cases. Adrenal and pituitary functions may be affected by infection, malignancy, hemorrhage, necrosis and fibrosis. Cytomegalovirus infection of the adrenals is the most common finding at autopsies. CMV adrenalitis is characterized by the presence of intracytoplasmic and intranuclear inclusion bodies in enlarged adrenal glands. Adrenal insufficiency arises after more than 80% of adrenal tissue has been destroyed. Interestingly, 3% of the autopsies performed in unselected patients with AIDS revealed CMV infection and adrenal necrosis in more than 80% of adrenal tissue.

Management of Adrenal Insufficiency in HIV-Infected Patients

Identification of adrenal insufficiency in HIV-infected patients is imperative because treatment with corticosteroids might be life-saving. On the other hand, institution of therapy without confirmed adrenal insufficiency might worsen underlying opportunistic infections. The diagnosis of adrenal insufficiency in the setting of HIV infection may be challenging because many of these patients have nonspecific symptoms such as fatigue, weight loss, nausea and vomiting, resembling those of adrenal insufficiency. However, prompt evaluation of HPA axis function should be performed in all end-stage AIDS patients, in patients with specific manifestations of adrenal insufficiency (skin and mucosa hyperpigmentation, hyponatremia and hyperkalemia) and in patients at increased risk of developing adrenal insufficiency (patients with tuberculosis or disseminated cytomegalovirus infection). In such patients, determination of baseline plasma cortisol and ACTH levels and a cosyntropin stimulation test should be carried out. As in other forms of adrenal insufficiency, if the response to cosyntropin is inadequate, patients should be treated for adrenal insufficiency. If the response to the cosyntropin test is normal and there is still a strong suspicion of secondary adrenal insufficiency (for example, due to hypopituitarism, glucocorticoid or megestrol acetate use), then testing with CRH or insulin-induced hypoglycemia should be performed for the evaluation of the integrity of the HPA axis.

HIV patients with increased baseline cortisol levels might have blunted response to the cosyntropin test, suggesting impaired adrenal reserve. The management of this subset of patients is often challenging. Among this subset, hydrocortisone supplementation should be administered cautiously because chronic glucocorticoid therapy may have significant adverse consequences in these individuals, who are already immunocompromised. Whenever adrenal insufficiency can be attributed to an identifiable etiologic factor, specific therapeutic measures should be undertaken. If drugs known to impair adrenal function are being administered to AIDS patients, then alternative