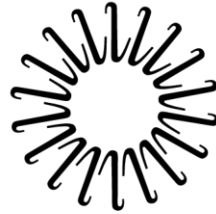


Prednisone!



Lifespan Cardiovascular Institute

**Rhode Island Hospital • The Miriam Hospital
Newport Hospital**

Delivering health with care.®

Center For Cardiac Fitness
Pulmonary Rehab Program
The Miriam Hospital

What is prednisone?

- Corticosteroid
- Available:
 - By mouth only (tablets)
- Similar drugs include:
 - Prednisolone (liquid)
 - Methylprednisolone (IV)
 - Dexamethasone (IV, tablet)
 - Hydrocortisone (IV, tablets, cream)

Mechanism of Action

- Decreases inflammation by:
 - Suppressing migration of leukocytes
 - Reversing capillary permeability
- Suppresses adrenal function
 - Stress hormones
- Suppresses the immune system
 - Lymphatic system
- Anti-tumor effects
- Anti-nausea effects

Uses

- Anaphylaxis
- Auto-immune diseases
 - Systemic Lupus Erythematosus (SLE)
 - Autoimmune Hepatitis
- Skin diseases
 - Psoriasis
 - Eczema
- Endocrine diseases
 - Addison's disease

Uses con't

- GI diseases
 - Crohn's disease
 - Budesonide tablets
 - Ulcerative colitis
- Rheumatic diseases
 - Rheumatoid arthritis

Short-term Side Effects

- Upset stomach
 - Insomnia
 - Psychiatric disturbances
 - Myopathy
-
- What short-term side effects have you noticed?

Long-term Side Effects

- Suppression of the adrenal system
- Immunosuppression

Long-term Side Effects

- Ocular effects
- Psychiatric disturbances
- Heart failure
- Diabetes

Long-term Side Effects

- Gastrointestinal disease
- Liver disease
- Myasthenia gravis
- Thyroid disease

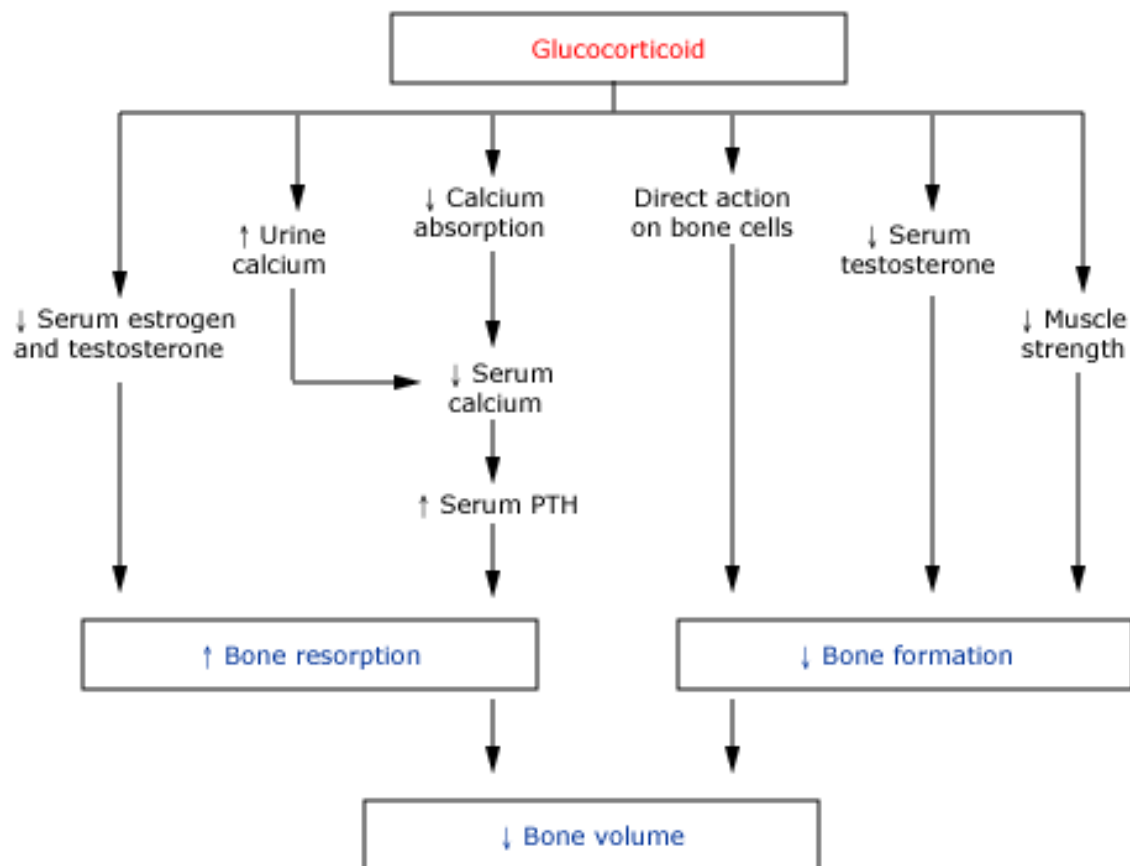
Long-term Side Effects

- Osteoporosis
 - Decrease bone formation
 - Osteoblasts
 - Increase bone resorption
 - Osteoclasts
 - Decrease calcium absorption
 - Calcitriol
 - Increase calcium excretion

Long-term Side Effects

- Osteoporosis con't
 - Dose-related
 - One year vs. Several years
 - Fractures

Glucocorticoid-induced osteoporosis



Schematic representation of the mechanisms of bone loss in patients with glucocorticoid-induced osteoporosis.

Adapted from Libanati, CS, Baylink, DJ, Chest 1992; 102:1426.

Counseling Pearls

- Take with a meal or big snack
 - Take it early in the morning
 - Take calcium and vitamin D supplements
 - Take bisphosphonates
 - Take steps to prevent infections
 - See your physician on a regular basis
-
- Never suddenly stop steroids – talk to your doctor or pharmacist about tapering SLOWLY!