Prednisone

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Prednisone is an orally administered glucocorticoid medication that is primarily used in the treatment of inflammatory and autoimmune conditions.

**Uses:**
Prednisone is used to treat a variety of inflammatory and autoimmune conditions, including:
- Rheumatoid arthritis
- Systemic lupus erythematosus
- Vasculitis
- Dermatomyositis
- Sjögren's syndrome
- Scleroderma
- Primary biliary cirrhosis
- Wegener's granulomatosis
- Inflammatory bowel disease
- Diffuse idiopathic pulmonary nodular sclerosis
- Systemic mastocytosis
- Sarcoidosis
- Hematologic malignancies
- Lymphoma
- Multiple myeloma
- Aspergillosis
- Cushing's syndrome
- Myasthenia gravis
- Chronic idiopathic urticaria
- Ankylosing spondylitis
- Gastrointestinal ulcers
- Allergic reactions
- Rhinitis
- Diabetic neuropathy
- Glomerulonephritis
- Crohn's disease
- Inflammatory arthropathies
- Acute inflammatory disorders
- Postoperative immune suppression
- Adverse effects
- Weight gain
- Edema
- Alteration of glucose, lipid, and protein metabolism
- Hypertrichosis
- Hirsutism
- Osteoporosis
- Hypertension
- Peptic ulceration
- Tachycardia
- Palpitations
- Malignancy
- Psychiatric disorders
- Depression
- Mania
- Insomnia
- Irritability
- Anxiety
- Seizures
- Rebound rebound

**Chemical Structure:**
- Prednisone is a synthetic glucocorticoid that is used to treat a variety of inflammatory and autoimmune conditions.
- It is a prodrug that is converted to prednisolone in the body.
- The chemical structure of prednisone is shown in the diagram above.

**Mechanism of Action:**
Prednisone acts by inhibiting the production of inflammatory mediators and by suppressing the immune response.

**Dosage and Administration:**
- Prednisone is typically administered orally in capsules or tablets.
- The dosage and duration of treatment depend on the condition being treated.
- Common dosages for prednisone include:
  - Rheumatoid arthritis: 5 to 60 mg/day
  - Systemic lupus erythematosus: 5 to 60 mg/day
  - Sjögren's syndrome: 5 to 60 mg/day
  - Scleroderma: 5 to 60 mg/day
  - Sarcoidosis: 5 to 60 mg/day
  - Gastrointestinal ulcers: 5 to 60 mg/day

**Side Effects:**
- Common side effects of prednisone include:
  - Weight gain
  - Edema
  - Alteration of glucose, lipid, and protein metabolism
  - Hypertrichosis
  - Hirsutism
  - Osteoporosis
  - Hypertension
  - Peptic ulceration

**References:**
- Additional research and information may be found by exploring the links provided in the references section of the presentation.