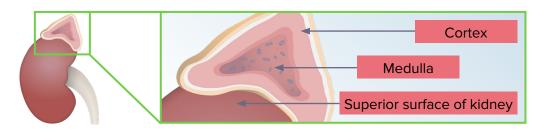
CORTICOSTEROIDS: OVERVIEW



Corticosteroids are a class of steroid that is produced in the adrenal cortex.



Role of corticosteroids

Stress response

Immune response Inflammation regulation

Carbohydrate metabolism

Protein catabolism

Blood electrolyte levels

Behavior

Promote Na⁺ retention in kidneys

Types of corticosteroids

Control carb, fat, protein metabolism

Anti-inflammatory

Mineralocorticoids (e.g. aldosterone)

Glucocorticoids (e.g. cortisol)

Prevent phospholipid release

Decrease eosinophil action

Effect when mineralocorticoids are administered

Aldosterone

Sodium and water retention Potassium exeretion

Increased blood volume

◆ Blood pressure

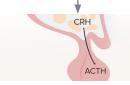
Therapeutic goal of corticosteroid treatment:

- **Anti-inflammatory**
- ◆ Immune reaction

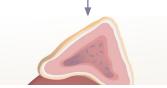
Corticosteroid pathway



Hypothalamus releases CRH.



Anterior pituitary releases ACTH.

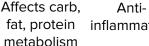


Adrenal cortex releases aldosterone and cortisol.

Effect when glucocorticoids are administered

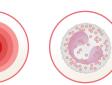
Cortisol







inflammatory



↓ Eosinophil action



Affects alucose metabolism



Affects mood, behavior



♠ Bone reabsorption

NOTES



