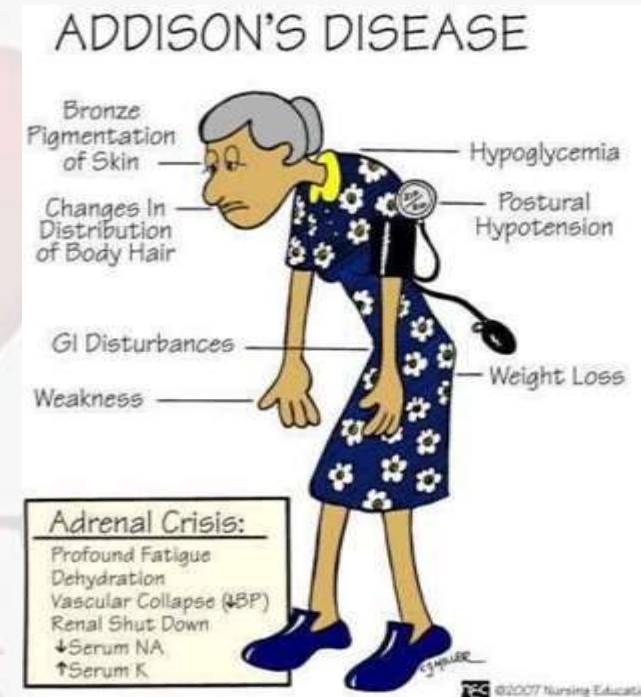


# ADDISON'S DISEASE



## Introduction

- **○ Addison's disease (also known as primary adrenal insufficiency or hypoadrenalism) is a rare disorder of the adrenal glands. It affects the production of two hormones - cortisol and aldosterone.**
- **○ Cortisol is released in stressful situations and helps to maintain your energy levels, your blood sugar levels and carbohydrate metabolism.**
- **○ Aldosterone maintains the balance of salt and water in your body, which helps to control blood pressure.**

## DEFINITION

Addison's disease, also called adrenal insufficiency or adrenocortical insufficiency, an uncommon disorder that occurs when body doesn't produce enough amount cortisol hormones.

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## **INCIDENCE**

- Addison's disease occurs : All age groups

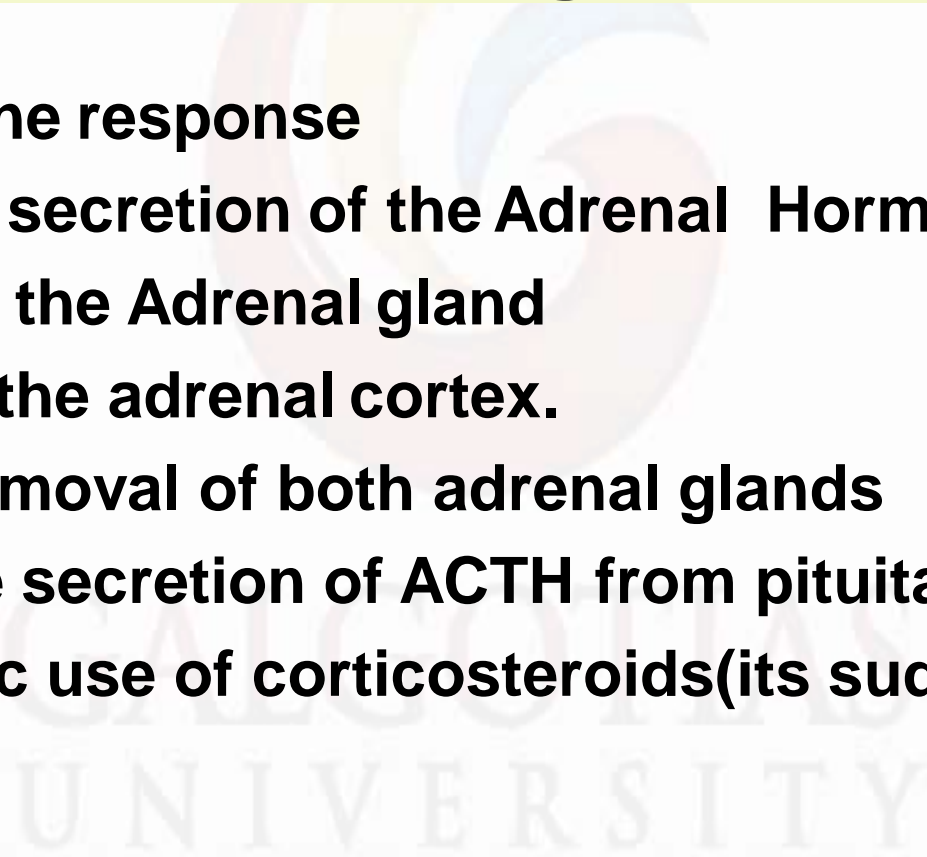
Both sexes

can be life-threatening.

- It occurs in both men and women equally and in all age groups,
- But is most common in the 30-50 year-old age range.

## Etiology

- Auto immune response
- Inadequate secretion of the Adrenal Hormone
- Infection of the Adrenal gland
- Atrophy of the adrenal cortex.
- Surgical removal of both adrenal glands
- Inadequate secretion of ACTH from pituitary gland
- Therapeutic use of corticosteroids(its sudden cessation)



## Pathophysiology

○ Due to any factor

○

**Adrenal cortex function is inadequate to meet needs for cortical hormone**

**Causes deficiencies of the adrenocortical secretions (glucocorticoids, sex hormones, and mineral corticoids)**

**Addison's disease**

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## CLINICAL FINDINGS

- ○ Fatigue
  - ○ Muscle weakness
  - ○ Muscle/joint pain
  - ○ confusion
  - ○ Nausea
  - ○ Anorexia (decrease in appetite)
  - ○ Irritability
  - ○ Depression
  - ○ Dehydration
  - ○ Hyperpigmentation
  - ○ Hyponatremia
  - ○ Hypotension
  - ○ Hypoglycemia
  - ○ Hyperkalemia
  - ○ Hypovolemia ○
- Vomiting
- ○ Diarrhea
  - ○ Constipation
  - ○ Mouth lesions
  - ○ Decrease in body hair
  - ○ Weight Loss
  - ○ Low BMR

## CLINICAL FINDINGS





## Diagnostic Findings

- **History collection**
- **Physical examination**
- **ACTH Stimulating Test**
- **24 Hrs urine studies**
- **Lab studies(Decrease glucose and sodium level and Increased potassium and WBC level)**
- **Blood Chemistry(Plasma cortisol and aldosterone level)**

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## Diagnostic Findings

- Computed tomography (CT scan):

A CT scan might be done to evaluate the adrenals and/or pituitary gland. For example, it can show if the immune system has damaged the adrenal glands or if the glands are infected.



## Addisonian crisis causes:

- **low blood pressure,**
- **high potassium in the blood, and**
- **low blood sugar levels.**

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## TREATMENT

- Hydrocortisone pills to replace cortisol.
- If patient also lacking aldosterone, fludrocortisones acetate pills will be provided.
- If patient are taking fludrocortisones, need to increase salt intake, especially in hot and humid weather and after exercise.
- In emergencies and during surgery, the medicine is given intravenously (directly into a vein).

## Patient Education

- Increase salt intake during hot weather and heavy exercise
- Never skip a dose. This could lead to an Addisonian crisis.
- Learn to recognize the symptoms of an Addisonian crisis. (Ex: pain in lower back, severe vomiting and diarrhea , extreme weakness, fainting.-Contact physician immediately.)
- Wear Med alert tag
- Frequently monitor weight
- Refrain from stressful activities

## Nursing Consideration

- **Monitor BP and weight**
- **2hr postprandial glucose test.**
- **Chest x-ray if prolonged tx.**
- **Electrolytes (k+); I&O ratio (decreasing output and increasing edema).**
- **Plasma cortisol levels (norm: 6- 23mcg/dL); signs of infection cardiac symptoms (edema, HTN)**

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## Nursing Consideration

- Monitor patient frequently for dysrhythmias
- Administer NaCl IV to increase sodium
- Administer Insulin
- Administer an antiemetic as tolerated by the patient
- Provide high calorie snacks and finger foods
- Daily weight
- Nutritional supplements

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## Nursing Diagnosis

- **Electrolyte Imbalance r/t vomiting, diarrhea hyperkalemia and hyponatremia**
- **Imbalanced nutrition: less than body requirements r/t anorexia, decrease in weight and inadequate food intake.**
- **Fluid volume deficit r/t renal loss of sodium and water.**
- **Activity intolerance r/t decreased cortisol production and fatigue.**