

Addison's Disease

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PHR107





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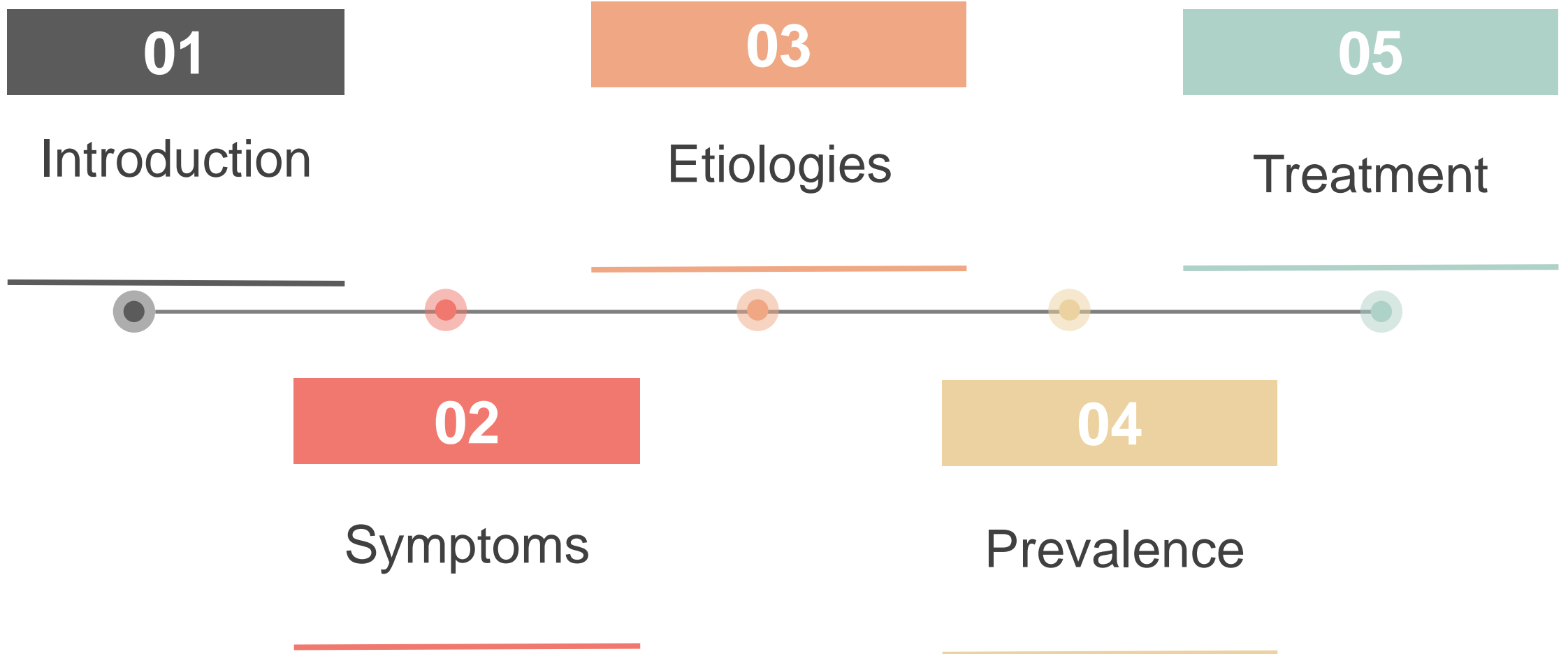
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Introduction

Addison's disease is a condition where adrenal glands work insufficiently and improperly producing either too much or insufficient amount of hormones which are very important for the body to function properly. The outer cortex of adrenal gland located at the superior surface of each kidney produces important hormones like aldosterone which controls the amount of salt and water in the tissues and blood of the body, androgens and estrogens which play important roles in male and female sexual and reproductive functions respectively, cortisol which increases glucose level in blood, enhances the use of glucose in brain, increases the tissue repairing substances and helps in responding stress. But in this disease the outer cortex loses its ability to function properly, producing abnormal amount of hormones. All these hormones are so important that, when the condition arises where adrenal glands do not work properly, immediate hormone replacement therapy is to be arranged for improving the condition and enhancing body's functionality.



Symptoms

01

Nausea, diarrhea and vomiting

02

Pain in muscles, joints and abdomen

03

Low blood pressure and eventually fainting

04

Hyperpigmentation where the skin areas become dark

05

Increased cravings for salt

06

Weight loss and reduced appetite

07

Behavioral symptoms like depression and sexual dysfunction

ADDISON'S DISEASE SYMPTOMS



Fatigue and Lethargy



Low Mood or Irritability



Weight loss

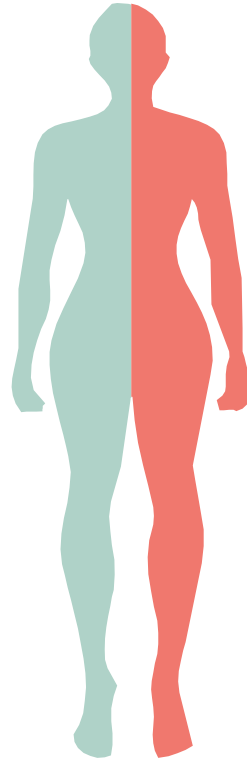


Muscle Weakness

Etiologies

Injury to adrenal glands

- Don't produce enough steroid hormones
 - Cortisol
 - Aldosterone



Auto-immune response

- Destruction of the adrenal glands
- Patients having polyglandular autoimmune syndromes

From other diseases

- HIV/ AIDS
 - Sepsis
- Tuberculosis

Rare causes

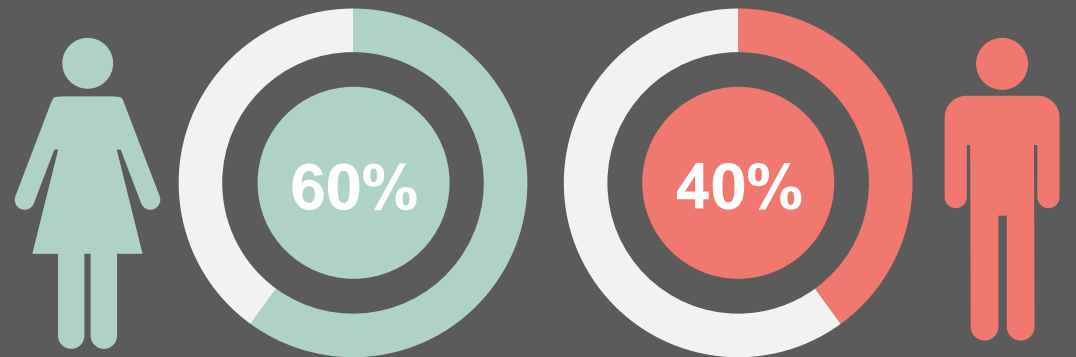
- Sarcoidosis
- Amyloidosis
- Adrenal leukodystrophy

Prevalence

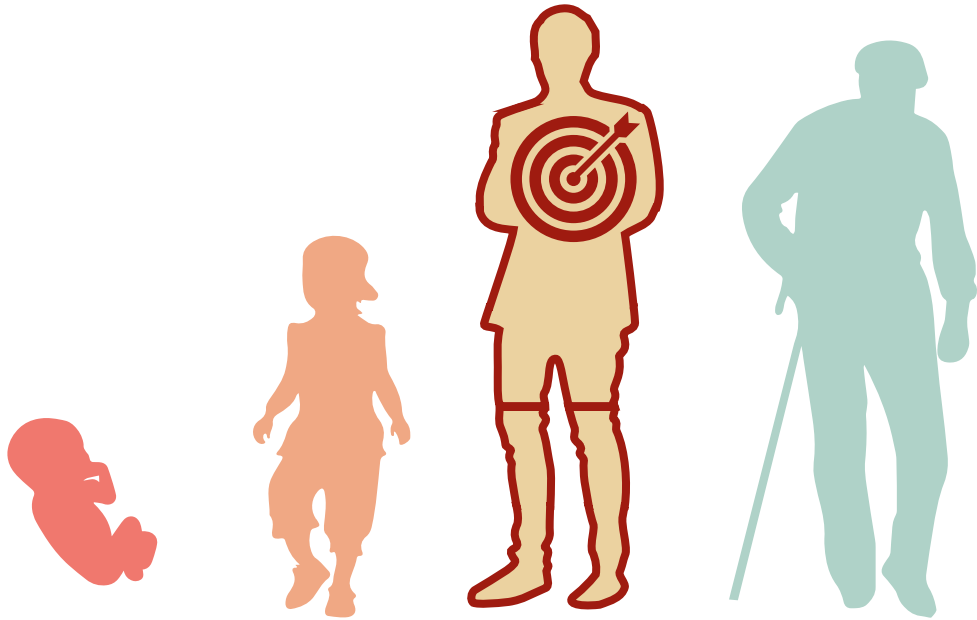


The prevalence of Addison's disease is 40-60 cases per 1 million population worldwide.

Addison's disease can effect persons of both gender. In USA, the prevalence is equal. But in UK, the ratio of male and female is 1:8. Besides, in Germany females are more affected.



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The most common age of presence of Addison's diseases found is 30-50 years.



But the disease could be present earlier in patients with polyglandular autoimmune syndrome or congenital adrenal hyperplasia.

Treatment

Hormone replacement therapy:

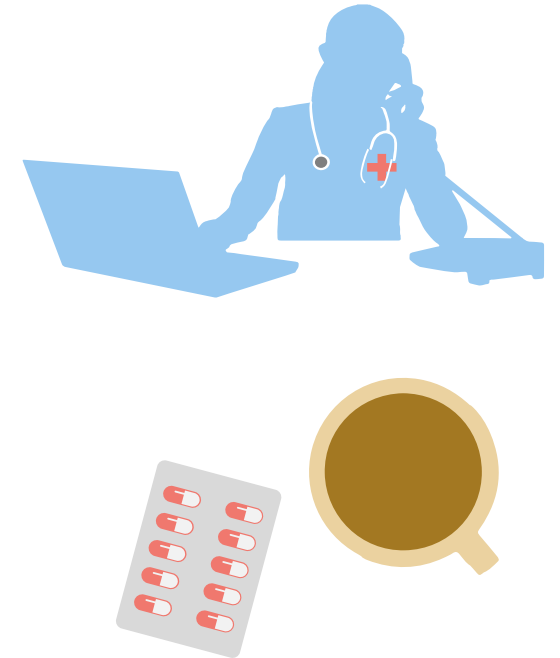
Hormone replacement therapy will be given to correct the levels of steroid hormones if the body is no longer producing.

Oral corticosteroids:

Oral corticosteroids such as- Fludrocortisone acetate is necessary to replace aldosterone and Hydrocortisone (Cortef), prednisone or methylprednisolone to replace cortisol. These hormones are given on a schedule to mimic the normal 24-hour fluctuation of cortisol levels.

Diet:

The patient may need plenty of salt (sodium) in diet, especially during heavy exercise, when the weather is hot or during gastrointestinal upsets, such as diarrhea.



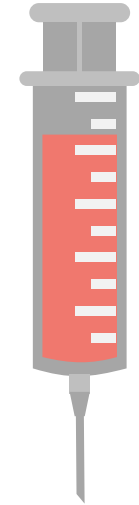
Treatment (cont..)

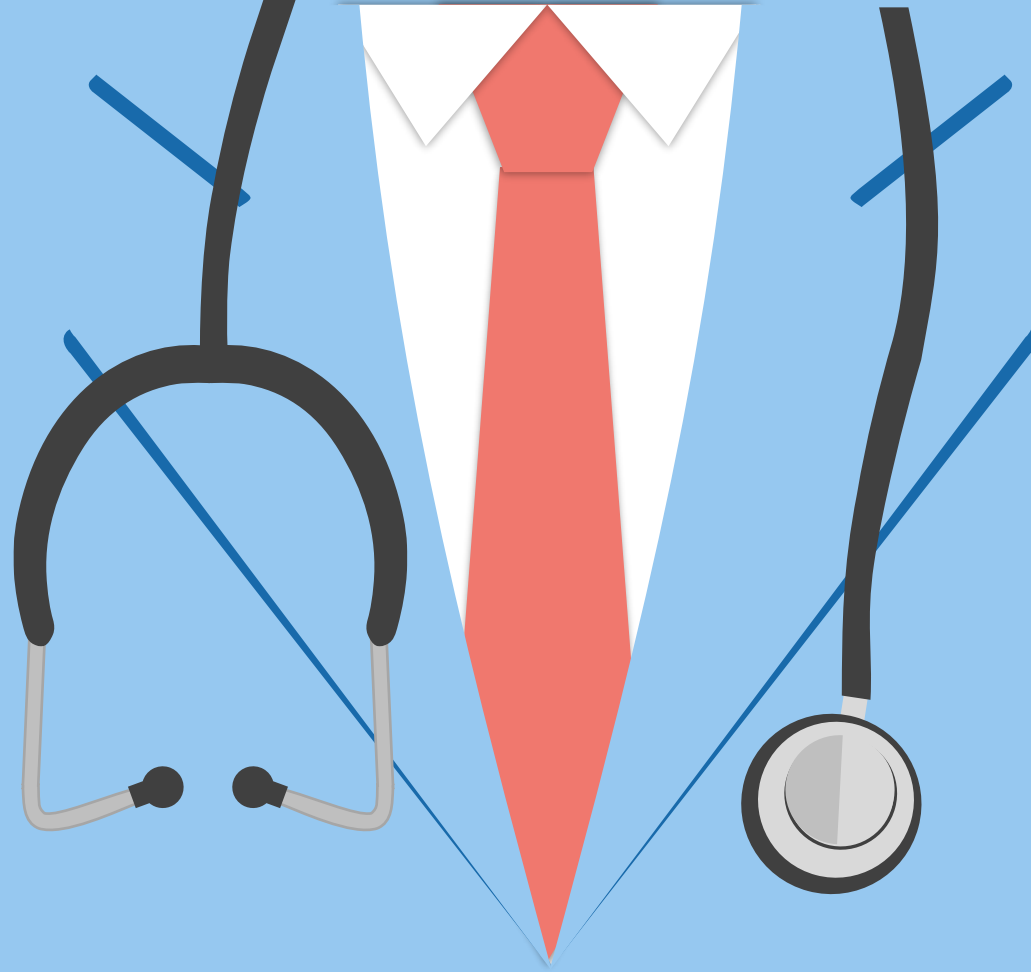
Increase in dosage:

Doctor may also suggest a temporary increase in the medication dosage if the body is stressed, such as from an operation, an infection or a minor illness. If the patient is ill with vomiting and can't keep down oral medications, may need injections of corticosteroids.

Intravenous injections:

Corticosteroids, Saline solution, Sugar (dextrose) are used for addisonian crisis, which is mainly a medical emergency.





THANK YOU