

Hypokalemia

Hypokalemia also **hypopotassemia** or **decreased serum potassium** refers to the condition in which the concentration of potassium in the blood is low.

Mild hypokalemia is often without symptoms, although it may cause a small elevation of blood pressure, and can occasionally provoke cardiac arrhythmias. Moderate hypokalemia, may cause muscular weakness and muscle cramps (owing to disturbed function of the skeletal muscles), and constipation (from disturbed function of smooth muscles). With more severe hypokalemia, flaccid paralysis and hyporeflexia may result. There are reports of rhabdomyolysis, Respiratory depression from severe impairment of skeletal muscle function is found in many patients.

Hypokalemia can result from one or more of the following medical conditions:

- Perhaps the most obvious cause is insufficient consumption of potassium (that is, a low-potassium diet) or starvation. However, without excessive potassium loss from the body, this is a rare cause of hypokalemia.
- A more common cause is excessive loss of potassium, often associated with heavy fluid losses that "flush" potassium out of the body. Typically, this is a consequence of diarrhea, excessive perspiration, or losses associated with surgical procedures. Vomiting can also cause hypokalemia, although not much potassium is lost from the vomitus.
- Certain medications can cause excess potassium loss in the urine. Diuretics, antifungal, amphotericin B, or the cancer drug, cisplatin, can also cause long-term hypokalemia.
- A special case of potassium loss occurs with diabetic ketoacidosis.

The most important treatment in severe hypokalemia is addressing the cause, such as improving the diet, treating diarrhea or stopping an offending medication. Mild hypokalemia may be treated with oral potassium chloride supplements. As this is often part of a poor nutritional intake, potassium-

containing foods may be recommended, such as leafy green vegetables, tomatoes, citrus fruits, oranges or bananas. Both dietary and pharmaceutical supplements are used for people taking diuretic medications.

Severe hypokalemia may require intravenous (IV) supplementation. Difficult or resistant cases of hypokalemia may be amenable to a potassium-sparing diuretic.

In all above cases patients or patients' guardians should consult an Endocrinologist immediately.

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