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**Review**

## Growth hormone therapy in children and adults

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**Abstract:**

Growth hormone (GH) is a polypeptide hormone, secreted by somatotrophic cells of the anterior part of the hypophysis. Its application in therapy, first limited to GH deficient children, has now been widened to various other clinical conditions, not necessarily related to short stature. Clinical trials conducted in recent years have proved the safety of its administration in both children and adults. The efficacy of this form of therapy varies, according to different authors, from enthusiastic data to very critical opinions. For many pediatric diseases, such as GH deficiency or Turner syndrome, GH is regarded by many experts, despite the high costs of the therapy, as the first-line treatment. Mounting evidence suggests that GH is safe and effective also in children with chronic renal failure and cystic fibrosis. Recently, it has also been administered to adults with GH deficiency and short bowel syndrome. The aim of this paper is to summarize the current data on GH administration in modern pharmacotherapy. In this paper we have included the results of the recently published studies and discussed not commonly known indications for GH therapy, as well as its experimental administration in both children and adults.

**Key words:**

growth hormone, indications, contraindications, adverse effects, experimental administration, adults, children

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