Abstract

This bachelor thesis is focused on idiopathic short stature. Idiopathic short stature can be found at up to 80% of children, who suffer from grown diseases. It is a short stature without definite reasons. ISS is a very heterogenous group, which can be also described as children "short, but healthy". These children do have usual stature upon birth, no apparent chronic diseases, standard food intake, and they have no discoverable endocrinal disorders. Most of these children can be divided into two groups. The first group consists of children with familiar short stature, the second group consists of children with constitutional delay of grown and adolescence. The combination of these two groups is the usual cause, why the parents of short children search a medical expert.

This thesis is focused on the ISS as itself, on its subgroups, its treatment methods, especially on using growth hormones on the ISS and on ethical questions associated with this treatment. Another chapter is focused on genes associated with short stature - genes SHOX, ROR2 and NPR-B (or NPR2). The final chapter has also a few case reports.

Key words: growth failure, growth hormone, idiopathic short stature, treatment, familial short stature, constitutional delay in growth and puberty.