Abstract

This bachelor thesis is focused on idiopathic short stature. Idiopathic short stature can be found a tup to 80% of children, who suffer from growth disorders. I tis a short stature without definite reasons. ISS is a very heterogenous group which can be also described as children „short, but healthy“. These children have normal length for gestational age at birth, normal body proportions. They have no sings of chronic disease, food intake andnutritional status are normal. There is no evidence of endocrine disorders. Most of these children can be divided into two groups. The first group consists of children with familial short stature, the second group consists of children with constitutional delay of growth and puberty. 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, NPR-B* (or *NPR2*) and *ACAN.* In the final part a few case reports will be mentioned.

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