The aim of the diploma thesis was to find out, whether there is any statistically significant difference in prenatal development and otolith system in patients with idiopathic scoliosis (IS) and healthy individuals. For the research it has been chosen 23 children with idiopathie scoliosis aged from 8 to 18 years and 23 healthy children aged from 9 to 18 years have been examined as a control group. Prenatal factors effects were looked on according to a retrospective questionaire which was aimed to scrutinise the process of pregnancy running, childbirth and early child development. For examination of otholith functions a new method for evaluating a subjective vertical visual perception was used -"The Bucket Method". The results of the examination has in comparison with healthy individuals discovered disturbed perception of subjective visual vertical (SVV) in patients with idiopathic scoliosis.