

*Abstract:*

*The author of this dissertation presents in the introduction the definition and historical context of the formation and gradual development of bariatric surgery. Both former i.e. historical, as well as modern most-used bariatric surgeries are thoroughly and clearly described.*

*An integral theoretical part is the focus on metabolic surgery and gastrointestinal hormones, which are involved via the changes of their levels in the complex metabolic effects of these bariatric surgeries.*

*The greatest attention is turned to a relatively new type of bariatric surgery – sleeve gastrectomy, which is conducted with an increasing frequency worldwide.*

*The underlying practical part of this dissertation is composed of two subparts. In the first subpart, the long-term statistically computed results of a reduction and maintaining the weight loss within a group of patients after the sleeve gastrectomy are described in order to show the efficiency of this surgery in the long run.*

*The second subpart is deemed to prove safety regarding a technical modification of sleeve gastrectomy, which lies in conducting a radical resection of pyloric antrum of stomach while expecting a deepening restriction effect of this surgery.*

*Key words: bariatric surgery, metabolic surgery, sleeve gastrectomy, gastric emptying, pyloric antrum, scintigraphy .*