## Abstract

The bachelor thesis deals with gestational diabetes and its influence on the management and course of labour and early neonatal adaptation. Gestational diabetes mellitus (GDM) is one of the most common perinatal complications that poses risks to both mother and fetus. The fetus is particularly at risk for diabetic fetopathy with macrosomia, which can be a complication during the labour. Depending on the compensation of diabetes and the birth weight of the baby, the mother is at risk of more severe birth injuries.

The aim of this study was to determine whether gestational diabetes has an effect on the management and course of labour compared to women without diabetes. We also attempted to clarify whether mothers with gestational diabetes suffer more extensive perineal lacerations, whether the average birth weight of newborns of mothers with GDM is higher, and whether GDM is associated with poorer postpartum adaptation. These objectives were complemented by 3 hypotheses that helped to meet the stated objectives.

The research part of the study consisted in retrospective collection of patient data from the MEDEA system at the Department of Gynaecology and Obstetrics, First Medical Faculty of Charles University and General University Hospital in Prague. The data were collected from November 2021 to March 2022. The participants were divided into two groups, which included 100 women with GDM and a control group of 100 women without GDM. Subsequently, the results of both groups were statistically processed and compared using tables and graphs.

The results of the study showed that in the sample of women studied, gestational diabetes did not affect the management and course of labour, nor did it have a worse postpartum adaptation of the newborns. However, it is necessary to take into account the good compensation of diabetes of the studied women and the small number of women in the study sample. It would be useful to look at this issue in more detail in future studies and to compare the outcomes of diabetic women with low-risk and high-risk diabetes complications.

## Key words

gestational diabetes mellitus, pregnancy, labour, cesarean section, perineal lacerations