ABSTRACT

The aim of the bachelor's thesis is to introduce assisted vaginal delivery and to relate the end of delivery by the extraction method to the condition of the newborn immediately after delivery. The thesis is divided into theoretical and practical parts.

The theoretical part is focused on defining the concepts on the topic of childbirth and birth mechanism. Furthermore, it deals with the characteristics of vaginal operative delivery and the characteristics of different extraction equipment methods – technique of execution, indications, contraindications and complications. Furthermore, the thesis is focused on defining basic concepts about the newborn, both general and more specific to the topic of the thesis. An important chapter in the neonatal section is the postpartum adaptation and injury of the newborn.

The practical part is conceived as a research part and analytical data collection from medical records and the hospital information system Medea was used for this purpose. The research was conducted at the Gynaecology and Obstetrics Clinic of the 1st Faculty of Medicine of Charles University and the General University Hospital in Prague. The collected data were processed in the web application for medical research data collection – REDCap. The aim of the practical part of the bachelor thesis was to evaluate the degree of impaired postpartum adaptation of the newborn in relation to the indications for the use of the extraction method during delivery. A summary of the data obtained and the interpretation of the research results is presented in the discussion chapter.

Key words: forceps, vacuum extractor, assisted vaginal delivery, newborn's adaptation, APGAR score, umbilical arterial and venous pH, cord blood gas