4. ASSISTED VAGINAL DELIVERY. INDICATIONS, MANAGEMENT, MATERNAL – FETAL COMPLICATIONS

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Introduction. Assisted vaginal delivery is the birth of the fetus with the help of special tools to ensure efficient extraction of the fetus. Although World Health Organization statistics have estimated that about 68% of births occur naturally, operative vaginal delivery remains at a fairly high level and represents about 10% in the UK, 3% in the USA, and in the Republic of Moldova - 6%. Globally, the quality of assisted deliveries is of particular interest and importance, the aim being reducing perinatal mortality and maternal-fetal complications. Now, there are 2 main options for operative delivery: vacuum extraction and forceps extraction. For the first time vacuum extraction was described by Dr. James Young and by 2000 it had reached 66% of all assisted vaginal deliveries. On the other hand, forceps extraction represents now only 1,1 % of all operative deliveries but, nevertheless, once it is applied correctly the probability of caesarean section is reduced considerably. The most occurred clinical situations that require assisted delivery are fetal distress and maternal indications as maternal exhaustion and failure of pushings. Contraindications serve unengaged fetal head, unknown fetal position, preterm pregnancies of < 34 weeks and fetal bleeding disorders.

Aim of study. The aim of the study is to reduce maternal-fetal mortality and complications after attending instrumental delivery.

Methods and materials. The retrospective study was conducted in the Obstetrics Department no.1 of IMSP SCM no.1 during 2021. All cases of operative vaginal deliveries were analyzed, which were 555 cases out of the 6319 natural births that were registered in total.

Results. The first place among indications for assisted vaginal delivery was fetal distress which was registered in 270 cases, followed by maternal indications in 12% of cases and thereafter by failure of maternal pushings in 6% of cases. In 194 cases the duration of application was up to 1 minute, in 106 cases - up to 2 minutes, in 44 cases - 3 minutes and in 14 cases - more than 3 minutes. In 73% of cases the fetal head was in the cavity, in 21% - at the exit of the small pelvis, in 6% - with the large segment at the entrance of the small pelvis and all of the 358 cases were successfully completed. When assessing the Apgar score of newborns in the first minute after delivery, we found that their condition was assessed as satisfactory in 76.5% of cases, and in 23.5% of cases mild hypoxia was determined, which in the following minutes of life has been corrected. The soft tissues of the birth canal were damaged in most cases. It was found that the most damaged was the perineum - in 210 cases, followed by vaginal laceration in 174 cases, cervical laceration in 64 cases and labial laceration in 36 cases.

Conclusion. Operative vaginal delivery is of special practical interest in the field of obstetrics and remains relevant due to its impact on perinatal and maternal outcomes, as well as those with early-onset as with late-onset, taking in consideration the severity of complications that may occur. Early diagnostics of maternal-fetal indications for assisted delivery and a correct instrumental technique are the key factors for a safe operative delivery. It can improve both maternal and fetal outcomes reducing complications at the same time.