

Preinduction of labor ID 4248

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Objective

The objective was to assess the effectiveness of preinduction of labor with Foley catheter in term pregnancy.

Material and Method

The study included the group of 1425 pregnant women, hospitalised between 2017- 2021 in Clinical Unit of Obstetrics, Women's Disease and Gynecological Oncology, United District Hospital in Toruń. All of the patients had indications for induction of labor. Gynaecological examination was performed before and after preinduction. The cervix was assessed with Bishop Scale. Induction of labor was conducted with SIU of Oxytocin dissolved in 50 mL of multi-electrolyte fluid. Depending of indications, high- or low- dosage scheme was used.

The date and time of initiation of induction, labor and eventual termination of induction were registred along with delivery route: vaginal delivery/ vacuum extraction/ cesarean section.

In 98,88% cases of preinduction Foley catheter was used. Another methods were: Prepidil, Misodel, Cervidil.

For statistical analysis the patients were subdivided into groups depending of indications for induction of labor: history of previous cesarean section, obesity and abnormalities in fetal heart rate.

Statistical analysis was performed using Statistica 14 (Statsoft Inc.).

Frequency of the variables was assessed with Frequency tables.

Distribution of the variables was assessed with Pearson Chi- square test for qualitative variables. For groups under 20 patients Yates correction was used. The p- value of <0,05 was considered as statistically significant.

Results

Statistical analysis of the obtained database showed that 1028 cases of induction of labor resulted in vaginal delivery (78,05%), 243 cases resulted in cesarean section (17,77%) and in 46 cases the induction was ineffective (3,49%).

In 374 cases there was no information regarding method of preinduction and for that reason statistical analysis concerning method of preinduction was based on 977 patients. Amongst the methods of preinduction listed above, Foley catheter was most frequently used (98,88%) therefore further statistical analysis is based on this group of patients: in 770 cases the induction resulted in vaginal delivery (79,63%), 172 resulted in delivery by cesarean section (17,79%) and in 25 cases the induction was ineffective (2,59%). Amongst patients included in the study 60 patients with the history of previous cesarean section were distinguished. In this group 22 cases of induction of labor resulted in another cesarean section (36,67%). In group of 1257 patients with no such history only 221 of cases of induction resulted in delivery by cesarean section (17,58%; p<0,05).

Correlation between the age group and cesarean section percentage was not proved.

Depending of indications, in 1092 cases high- dosage scheme of Oxytocin was used and in 151 cases low- dosage scheme was applied. Percentages of delivery by cesarean section in these groups were 16,76% and 31,13% respectively (p<0,05).

Discussion

In conclusion, preinduction with Foley catheter is an effective procedure before administration of oxytocin for induction of labor. More convincing is low cesarean section rate 17,79% compare to general and is still increasing.