

Incidence of Cesarean Section at the Department of Gynecology and Obstetrics of Hospital in Travnik During 2012

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ABSTRACT

Introduction: Cesarean section is obstetrical surgery by which through incision of the abdominal wall and the lower uterine segment performs extraction of the fetus in the advanced stages of pregnancy and childbirth ends by abdominal myomectomy. Because of its significance it is one of the most important surgical procedures performed in gynecology and obstetrics. **Material and methods:** The goal of this study is to show the incidence of cesarean section in the Public Hospital in Travnik during 2012, and the most frequent indications for surgical completion of delivery. During 2012 at the Department of Gynecology and Obstetrics of Cantonal Hospital Travnik there was 927 deliveries. **Results:** Of the total number of births, in 115 (12.41%) of cases a cesarean section was performed, while in 812 (87.59%) delivery was completed vaginally. Descriptive analysis reveals that 55 (5.93%) women had repeated cesarean section after a previous cesarean section, while in 60 (6.47%) cases in 2012 for the first time underwent cesarean section. As the most common indications in 7.33% of the women was reported cefalopelvine disproportion and breech presentation. At 6.67% of the women cesarean section was performed due to asphyxia and 4% due to preeclampsia. The incidence of other indications such as abruption, placenta previa, multiple pregnancy and other was less than 3%. **Conclusion:** On the basis of the data we conclude that in the maternity hospital Travnik vaginal birth is most common. However, although the percentage of cesarean sections was much lower than in the regional maternity hospitals, we cannot ignore that the rate of cesarean sections is slowly increasing and requires that obstetricians in their practice make professional triage when setting indications for cesarean section so that a trend of surgically completed births should not reach epidemic proportions.

Keywords: vaginal delivery, cesarean section, Cantonal Hospital Travnik.

1. INTRODUCTION

Caesarean section is obstetrical surgery by which through incisions in the abdominal wall and the lower uterine segment is performed extraction of the fetus in the advanced stages of pregnancy and childbirth ends by abdominal myomectomy. Because of its significance it is one of the most important surgeries performed in gynecology and obstetrics.

Caesarean section is one of the ten most common major surgeries, with marked differences in incidence between different regions of the world and between different hospital institutions (1).

Factors that contribute the most to the frequency of these surgeries are: dystocia (inadequate uterine activity), previous cesarean section, pelvic posture of the fetus, fetal distress (suffering), intrauterine fetal growth, post term pregnancy, multiple pregnancy, late parity, reduced use of vacuum and forceps, greater awareness etc. The frequency today is 10-25% (2).

2. GOAL

To present the incidence of cesarean section in the Public Hospital in Travnik during 2012 and the most frequent indications for surgical completion of the delivery.

3. MATERIAL AND METHODS

This survey covered the period from January 1st to December 31st 2012. We performed a descriptive analysis of the frequency of indications for completion of delivery by Caesarean section, in relation to the total number of births for the given period. Qualitative variables were statistically analyzed by chi square test and quantitative by ANOVA. The level of significance was set at $p < 0.05$.

4. RESULTS

During the 2012 at the Department of Gynecology and Obstetrics of Cantonal Hospital Travnik there was 927 deliveries. Of the total number of births, in 115 (12.41%) of cases was

performed caesarean section, while 812 (87.59%) were delivered vaginally (Table 1).

| | Number | Percent |
|------------------|--------|---------|
| Vaginal delivery | 812 | 87.59 |
| Cesarean section | 115 | 12.41 |
| Total | 927 | 100.00 |

Table 1. The total number of births in 2012

Table 2 shows the frequency of repeated caesarean sections compared to the total number of caesarean sections. Descriptive analysis found that 55 (5.93%) of women that were delivered by caesarean section after a previous caesarean section, while 60 (6.47%) of respondents in 2012 for the first time underwent caesarean section. Chi square test showed no statistically significant differences in the frequency of repeated caesarean sections compared to the first one, $\chi^2=0.217$, $df=1$, $p=0.641$.

| | N | Percent | Valid percent |
|------------------------|-----|---------|---------------|
| Vaginal delivery | 812 | 87.59 | 87.59 |
| Cesarean section | 115 | 12.41 | |
| First Cesarean section | 60 | | 6.47 |
| Iterative | 55 | | 5.93 |
| Total | 927 | 100.00 | 100.00 |

Table 2. The frequency of repeated caesarean sections

A detailed analysis of the diagnoses for surgical completion of the delivery by Caesarean section it was found that in 36.67% pregnant women underwent caesarean section because of a previous caesarean section. As the most common indications in 7.33% of the women reported cefalopelvinea disproportion and breech presentation. At 6.67% of the women caesarean section was performed due to asphyxia, and 4% due to preeclampsia. The incidence of other indications such as abruption, placenta previa, multi fetal pregnancy and the other indications was less

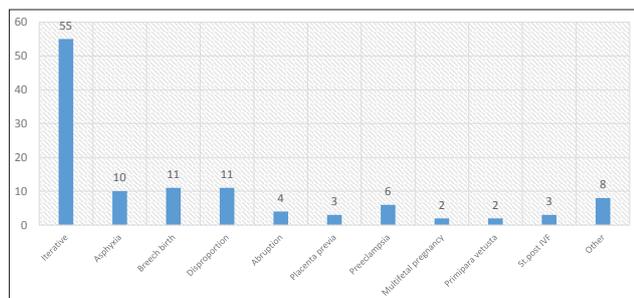


Figure 1. Presentation of indications for caesarean section than 3% as shown in Figure 1.

5. DISCUSSION

The incidence of caesarean deliveries (Latin Sectio Caesarea, SC) and surgically completed pregnancies is on the rise for the past 20 years. In North America and some countries in Western Europe during last couple of years the percentage of the pregnancy completion by caesarean section was about 21%. An analysis at the Department of gynecology and obstetrics of the Cantonal Hospital Travnik found that percentage of Caesarean sections in the 2012 amounted to 12.41% (n=110). If this figure is compared with the Clinic of Gynecology and Obstetrics, Clinical Center University of Sarajevo for the same period, where the percentage of caesarean sections accounted for over 30% (3), we can certainly say that in our hospital there is no epidemic or better to say, pandemic of caesarean sections,

as is the situation in the maternity hospitals in the region. In favor of this, there is the fact that from the total number of caesarean sections in the test period only 60 sections was done with second indication (absolute or relative), while 55 patients underwent repeat caesarean delivery. Abadzic in his research showed that the percentage of caesarean sections in the Clinic of Obstetrics, Clinical Center of Sarajevo University in relation to the total number of births during the 1996 was 8.57% while the percentage in 2007 was 27.75%. For a period of 12 years tripled the number of caesarean sections in relation to the total number of births (4). The increasing trend of caesarean sections has continued in the 2012. Obstetric practice is witness of the world trend of increasing rate of caesarean sections in the past few years. Australia and the United States have the highest rate of caesarean sections in the developed world of 28.5% and 29.1% respectively (5). Similar trends of increasing rates of caesarean sections occur in Latin America, especially in Mexico 25.7 % and Brazil 27.9 %, as well as other developing countries, such as India (State of Kerala) 21.4% (6, 7). There are many indications due to which the obstetrician in clinical practice decide for caesarean delivery, which are in favor of the mothers and infant. In addition to repeated caesarean section, in Travnik hospital as most common indications were present breech presentation, disproportion and fetal asphyxia. Drazancic in the analysis of caesarean sections for 2009 in Croatia, states that from the total number of applied caesarean sections, breech birth was present in 1232 (15.24%) cases (8).

6. CONCLUSION

On the basis of the analyzed data we conclude that in the Department of maternity of the Cantonal Hospital Travnik is mainly present vaginal birth. However, although the percentage of caesarean sections was much lower than in the regional maternity hospitals, we cannot ignore that the rate of caesarean sections have slowly increasing trend and requires that obstetricians in their practice make professional triage when setting indications for caesarean section so that a trend of surgically completed births should not reach epidemic proportions.

CONFLICT OF INTEREST: NONE DECLARED

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