Jurnal Medical Aradean (Arad Medical Journal)
Vol. XXI, issue 1, 2018, pp. 25-28

ANALYSIS OF THE INCIDENCE OF PERIPARTUM HISTERECTOMY IN OBSTETRIC HEMORAGIES FROM THE OBSTETRICS-GYNECOLOGY CLINICAL HOSPITAL IN ORADEA

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ABSTRACT. The objective is to detect the incidence of peripartum hysterectomy in the Oradea Maternity. We conducted a retrospective and descriptive study of the 48 cases identified during the analyzed period, January 2013 - December 2017. From the 19,018 births at the Oradea Maternity (49% natural births and 51% via caesarean section), 48 were completed with hysterectomyperipartum emergency. The average age was 32.27 ± 2 years (range: 19-45). The average parity was 2.93 ± 1 (range: 0-6) and the average gestational age at birth was 35.14 ± 5.3 (range: 17-40) weeks. Of the 48 patients, 41 (88.45%) had a history of caesarean births and their average was 2.12 with a 1-4 interval.
KEYWORDS: the peripartum hysterectomy, natural births, cesarean section, postpartum hemorrhage.

INTRODUCTION

The incidence of peripartum hysterectomy varies across the world with higher reporting rates in developing countries, and is predominantly due to the occurrence of obstetric bleeding that endangers patients' lives (Sebitloane and Moodley, 2001; Kwame-Aryee, 2007; Umezurike, 2008), especially when bleeding remains a major cause of maternal mortality worldwide.

Among the causes of peripartum hysterectomy we identify uterine rupture, uterine atony - causes that continue to be a major problem even in developing countries - placenta accreta, cluster and pertussis, uterine infection, uterine inversion (Plauche, 1988; M. Knight, 2007 ; Kwame-Arye et al., 2007; Umezurike et al., 2008) etc.

Hysterectomy of the urinary peripartum (HPU) is defined in the literature as the proximity to acute loss or severe maternal morbidity (Filippi 1999; M. Knight, 2007)

MATERIAL AND METHOD

In order to analyze the incidence of peripartum hysterectomy in the Oradea Maternity, we conducted a retrospective and descriptive study of the 48 cases identified during the analyzed period, January 2013 - December 2017.

All the cases found during this period in the Oradea Maternity, where the peripartum hysterectomy of urgent emergency was caused by the postpartum hemorrhage that threatened the patients' lives, were analyzed, none of these cases resulted in maternal death.

Age information, parity, previous cesarean operations, estimated blood loss, blood transfusion, and indication for emergency hysterectomy were collected.

The data were analyzed using the SPSS version 17, the quantitative variables were presented as standard deviations (SD), and the qualitative variables were presented as frequencies and percentages, and a 95% confidence interval for indications and complications was estimated to compare the results with other studies.

RESULTS

For the analyzed period, out of the 19,018 births in the Oradea Maternity (49% natural births and 51% through caesarean section) 48 were completed with emergency hysterectomy peripartum.

The incidence of emergency peri-urinary hysterectomy was 2.5 per 1,000 births, being higher after cesarean delivery (0.7%) than after vaginal birth (0.3%).

Table1shows the rate of incidence of peripartum hysterectomy in postpartum hemorrhage patients and highlights the growth trend with increasing age.

Table 1: Incidence rate of peripartum hysterectomy

The age range	Number of patients with hysterectomy in the total population	Incidence rate and P value
<20	1/800	0.125
21-25	5/1171	0.427
26-30	10/985	1.015

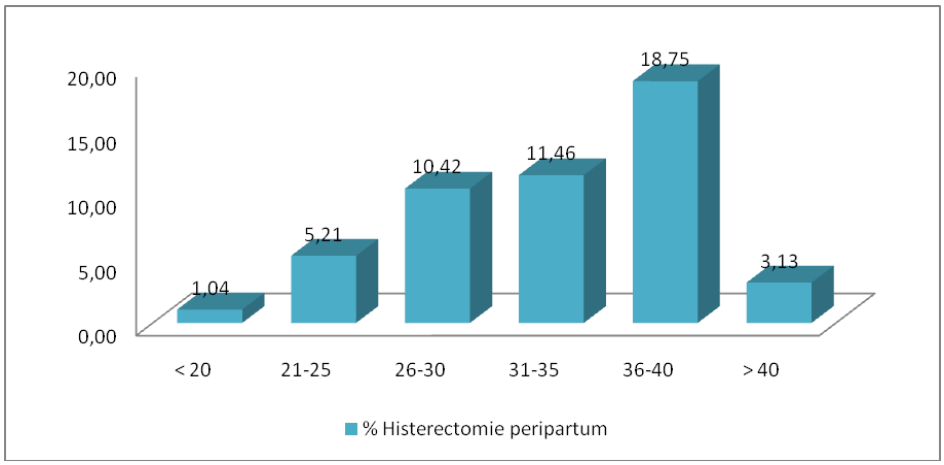
31-35	11/475	2.316
36-40	18/556	3,237
> 40	3/48	6.250
Total	48/4035	1190
P for trend		<0.0001

Source: author's projection

The average age was 32.27 ± 2 years (range: 19-45), and the distribution in age groups of patients with peripartum hysterectomy was shown in Figure 1.

A relatively high concentration (around 60% of cases) around the age of 30 years can be observed.

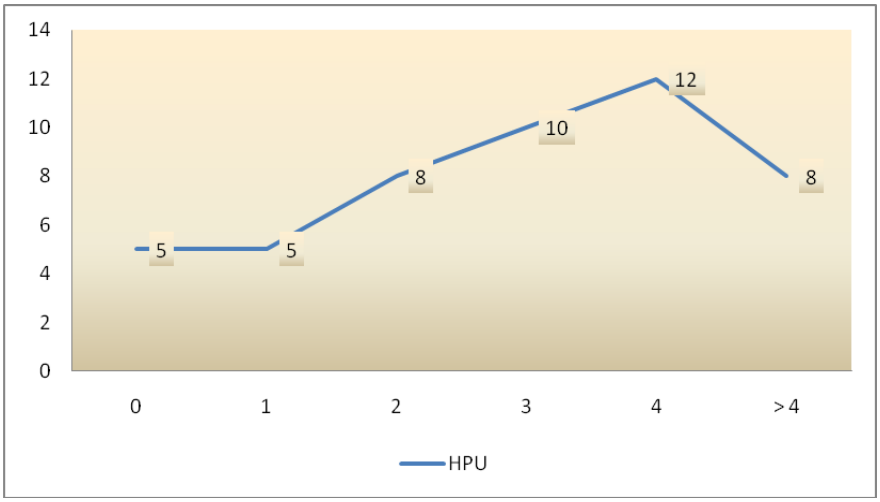
Figure 1: Distribution by age groups of patients with hysterectomy



Source: author's projection

The frequency of the distribution of cases of peripartum hysterectomy after parity shows a linear slope that tends to increase starting with multiple pregnancies (Figure 2).

Figure 2: HPU distribution by parity



Source: author's projection

The average parity was 2.93 ± 1 (range: 0-6) and the average gestational age at birth was 35.14 ± 5.3 (range: 17-40) weeks.

Table 2: the relationship between age and women's parity

Age	Parity						Total %
	0	1	2	3	4	> 4	
<20	1						1 (2.1)
20-25	2	2	1	2	1		8 (16.7)
26-30	2	2	2	1	2	1	10 (20.8)
31-35			3	4	3	1	11 (22.9)
36-40		1	2	2	5	5	15 (31.3)
> 40				1	1	1	3 (6,3)
Total %	5 (10.4)	5 (10.4)	8 (16.7)	10 (20.8)	12 (25.0)	8 (16.7)	48

Source: author's projection

Although a slight decrease in parity> 4 is observed, the significant linear relationship between the incidence rates of peripartumhysterectomy and the increasing parity is highlighted in Table 3 , so we can assert with certainty that the decrease is due to the population at the sample> 40 years, significantly lower than the other age ranges.

Table 3: HPU incidence rate and parity

parity	HPU of the total population	Incidence rate and P value
0	5/1385	0.36
1	5/1078	0.46
2	8/730	1.10
3	10/479	2.09
4	12/238	5.04
> 4	8/125	6.40
Total	48/4035	1.19
P for trend		<0.0001

Source: author's projection

The indication of hysterectomy was the result of uncontrolled postpartum hemorrhage as follows:

- 39 (81.25%) of cases - as a result of cesarean delivery;
- 9 (18.75%) cases - after vaginal births.

Of the 48 patients, 41 (88.45%) had a history of caesarean births and their average was 2.12 with a 1-4 interval.

Our results confirm a series of literature studies (Sole-Ojeme Do et al, 2005; Knight et al, 2008; Saeed et al, 2010) that identified an association of peripartum hysterectomy with previous cesarean births.

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