



The Rate of Peripartum Hysterectomy on G.O.C. Pristine During 2014

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Abstract

The primary objective of this study was to determine rate of peripartum hysterectomy during 2014 in Gynecology and Obstetrics Clinic/University Clinical Center of Kosovo. Also, were explored and other components such as: maternal age, causes of peripartum hysterectomy, method of birth, type of hysterectomy etc. We conducted a retrospective analysis of all cases of peripartum hysterectomy performed at Obstetrics and Gynecology Clinic/University Clinical Center of Kosovo, between January 1, 2014, and December 31, 2014. The population studied comprised of women aged 25-49 years who had a hysterectomy during 2014. Maternal characteristics such as age, parity (multiparous, primiparous women), previous cesarean delivery, history of antepartum bleeding, and mode of delivery were recorded. Are also recorded and: the indication for surgery, type of hysterectomy, by type of incision etc. Statistical analysis was performed using the computer programs for statistics. Sum tests were used to compare differences in categoric variables. Number of all women who had births with caesarean section was used to compute rates for this study. Coefficient correlation was used to detect trends how number women that had birth with repeat cesarean section (that in itself is a predisposing factor for placenta accreta), had a increasing trends of peripartum hysterectomy.

The results of this study shows that during 2014 in Obstetrics and Gynecology Clinic in Pristine had 3375 births by caesarean section, where 11 women lost their uterus because of uncontrolled hemorrhage, which does not respond to conservative measures.

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The rate of peripartum hysterectomy for year 2014 in G.O.C- Pristine was 3.2 per 1000 deliveries. (dF= 10, 95% CI for mean = 3.77 to 8.22), with Significance level (P < 0.0001). Age:11 women that makes peripartum hysterectomy, participant in study, was ranked according to age: 25, 29,33,34,35,37,38,40,40,42 and 49. (minimum age was 25 years old and it maximum 49 years old). Mean age was 36,54 years old, var:42.27, (SD=6.50 years old). From 11 women that makes peripartum hysterectomy, 10 (90%) women were born with cesarean sections, while 1 (10%) with vaginal deliveries. From 10 women that born with cesarean section 7 (70%) of them I had repeated cesarean section several times (from 2 to 4 times), and all these women (n=7) had abnormal placenta insertion (placenta praevia/accrete). When we did a statistical analysis about these two phenomena: number of peripartum hysterectomy and number women that had birth with repeat cesarean section, result in a positive coefficient correlation (r=0.9515). This value is an indicator that expressing, a tendency in increase of the number caesarean hysterectomy, as a result of an increased frequency of births by caesarean section of repeat, that in itself is a predisposing factor for placenta accreta. In this study a year old on obstetric gynecological clinic in Pristina, were made 11 peripartum hysterectomy, where 36.4% were made due to placenta accreta, while 27.3% had as main indication of uterine atony. (see table, indication for peripartum hysterectomy). Other causes that blamed for the loss of the uterus were: placenta percreta 18.1% as and Hemorrhage 18.1%. From 11 women that makes peripartum hysterectomy, 64% (n=7) had two or more births with caesarean section. Most of peripartum hysterectomy are performed emergency procedures for the control of bleeding, when conservative measures have failed. From 11 women that makes peripartum hysterectomy in total: 81.8% had total abdominal hysterectomy, while 18.2% were Subtotal hysterectomy (supracervical H.). By type of incision: 54.6 % makes abdominal hysterectomy with transversal incision (mainly Pfannenstiel), while 45.4% with vertical incision.

From this study results; the rate of peripartum hysterectomy for year 2014 in G.O.C- Pristine was 3.2 per 1000 deliveries. Women who made peripartum hysterectomy had, mean age was 36,54 years old, minimum age was 25 years old and it maximum 49 years old. 90% of women were born with cesarean sections, while 10% with vaginal deliveries. They remark that 70% of women that makes peripartum hysterectomy of they had repeated cesarean section several times (from 2 to 4 times), and all these women had abnormal placenta insertion (placenta praevia /accrete). The most frequent causes that woman makes peripartum hysterectomy were: placenta accreta, uterine atony, hemorrhage and placenta percreta. From 11 women that makes peripartum hysterectomy in total, 81.8% had total abdominal hysterectomy, while 18.2% were Subtotal hysterectomy (supracervical H.), where 54.6 % makes abdominal hysterectomy with transversal incision (mainly Pfannenstiel), while 45.4% with vertical incision.

Keywords: peripartum hysterectomy; rate; repeated cesarean section.

1. Introduction

Hysterectomy following cesarean section or vaginal deliveries is a major surgical intervention and emergency, that consisting in removal uterus. A peripartum hysterectomy involving cesarean hysterectomy may be Subtotal (supracervikale) or total, depending on clinical conditions.

In most of the planned procedures, performed a total hysterectomy, while a hysterectomy subtotals may be preferred in cases where urgent intervention is needed for the treatment of life-threatening bleeding and removal of the cervix can be difficult.

Subtotal hysterectomy is a quick procedure and recommended to patients of clinically unstable.

The most common indications for emergency caesarean hysterectomy are: placenta accreta, uterine atony, hemorrhage and placenta percreta.

The primary objective of this study was to determine rate of peripartum hysterectomy during 2014 in Gynecology and Obstetrics Clinic/University Clinical Center of Kosovo. Also, were explored and other components such as: maternal age, causes of peripartum hysterectomy, method of birth, type of hysterectomy etc.

2. Materials and Methods

We conducted a retrospective analysis of all cases of peripartum hysterectomy performed at Obstetrics and Gynecology Clinic/University Clinical Center of Kosovo, between January 1, 2014, and December 31, 2014. The population studied comprised of women aged 25-49 years who had a hysterectomy during 2014. Maternal characteristics such as age, parity (multiparous, primiparous women), previous cesarean delivery, history of antepartum bleeding, and mode of delivery were recorded. Are also recorded and: the indication for surgery, type of hysterectomy, by type of incision etc.

Statistical analysis was performed using the computer programs for statistics. Sum tests were used to compare differences in categoric variables. Number of all women who had births with caesarean section was used to compute rates for this study.

Coefficient correlation was used to detect trends how number women that had birth with repeat cesarean section (that in itself is a predisposing factor for placenta accreta), had a increasing trends of peripartum hysterectomy.

3. Results

During 2014 in Obstetrics and Gynecology Clinic in Pristine had 3375 births with caesarean section, where 11 women lost their uterus because of uncontrolled hemorrhage, which does not respond to conservative measures.

The rate of peripartum hysterectomy for year 2014 in G.O.C- Pristine was 3.2 per 1000 deliveries. (dF= 10, 95% CI for mean = 3.77 to 8.22), with Significance level ($P < 0.0001$).

AGE:11 women that makes peripartum hysterectomy, participant in study, was ranked according to age: 25, 29,33,34,35,37,38,40,40,42 and 49. (minimum age was 25 years old and it maximum 49 years old). Mean age was 36,54 years old, var:42.27, (SD=6.50 years old).

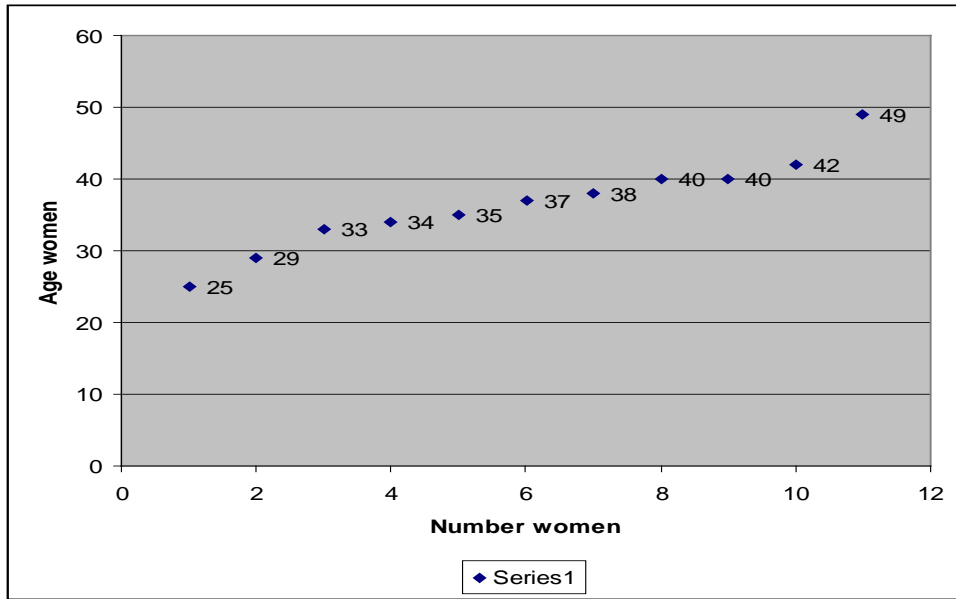


Figure 1: Age and number women that makes peripartum hysterectomy.

From 11 women that makes peripartum hysterectomy, 10 (90%) women were born with cesarean sections, while 1 (10%) with vaginal deliveries. From 10 women that born with cesarean section 7 (70%) of them I had repeated cesarean section several times (from 2 to 4 times), and all these women (n=7) had abnormal placenta insertion (placenta praevia/accrete).

When we did a statistical analysis about these two phenomena: number of peripartum hysterectomy and number women that had birth with repeat cesarean section, result in a positive coefficient correlation ($r=0.9515$).

This value is an indicator that expressing, a tendency in increase of the number caesarean hysterectomy, as a result of an increased frequency of births by caesarean section of repeat, that in itself is a predisposing factor for placenta accreta.

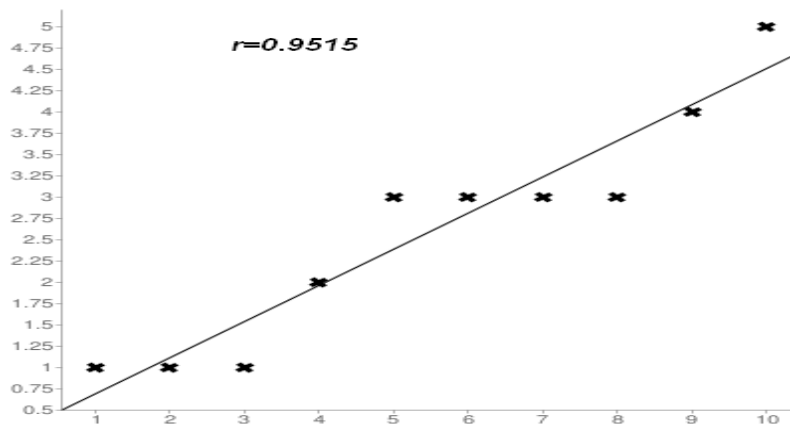


Figure 2: Linear regression - Statistical analysis about these two phenomena: number of peripartum hysterectomy and number women that had birth with repeat cesarean section

In this study a year old on obstetric gynecological clinic in Pristina, were made 11 peripartum hysterectomy, where 36.4% were made due to placenta accreta, while 27.3% had as main indication of uterine atony. (see table, indication for peripartum hysterectomy).

Table 1: Indication for peripartum hysterectomy on G.O.C.-Pristine during year 2014.

Causes	Frequency	Percentage	Significance level
Placenta accreta	4	36.4%	P < 0.0001 95% CI of observed proportion 2.58 to 87.16
Uterine atony	3	27.3%	P < 0.0001 95% CI of observed proportion 0.33 to 87.91
Placenta percreta	2	18.1%	P < 0.0001 95% CI of observed proportion 0.00 to 91.78
Hemorrhage	2	18.1%	P < 0.0001 95% CI of observed proportion 0.00 to 91.78

Other causes that blamed for the loss of the uterus were: placenta percreta 18.1% as and Hemorrhage 18.1% . From 11 women that makes peripartum hysterectomy, 64% (n=7) had two or more births with caesarean section. Most of peripartum hysterectomy are performed emergency procedures for the control of bleeding, when conservative measures have failed.

From 11 women that makes peripartum hysterectomy in total: 81.8% had total abdominal hysterectomy, while 18.2% were Subtotal hysterectomy (supracervical H.).

By type of incision: 54.6 % makes abdominal hysterectomy with transversal incision (mainly Pfannenstiel) while 45.4% with vertical incision.

4. Discussions

During 2014 in Obstetrics and Gynecology Clinic in Pristine had 3375 births with caesarean section, where 11 women lost their uterus because of uncontrolled hemorrhage, which does not respond to conservative measures. [1]

The rate of peripartum hysterectomy for year 2014 in G.O.C- Pristine was 3.2 per 1000 deliveries. In study our at G.O.C.-Pristine, we found placenta accreta (36.4%) to be the most common indication for an peripartum hysterectomy, succeed from uterine atony (27.3%), Hemorrhage (18.1%), placenta percreta (18.1%).

While, other authors for this subject report: Miller et al 7 reported that incidence of placenta accreta was 38% in women with two or more cesarean deliveries and complete placenta previa. [2]

Clark SL, et al. recommend hypogastric ligation only for the hemodynamically stable patient of low parity. [3]

Clark et al 2 reported uterine atony (43%) to be the most common cause of emergency peripartum hysterectomy followed by placenta accrete (30%) from 1978 to 1982. [4]

Stanco, However et al 3 studied the same population from 1985 to 1990 and found that placenta accreta (50%) had become the most frequent cause with uterine atony accounting for 21% of cases. [5]

Similarly, Zelop et al 4 found placenta accreta (64%) and uterine atony (20%) the most common reasons for emergency peripartum hysterectomy. [6]

Why has placenta accreta become the most common cause for an emergency peripartum hysterectomy? Firstly, it may be attributed to the increase in cesarean births and uterine curettages. If the combination of risk factors and imaging findings is highly suggestive of placenta accreta, then, a cesarean hysterectomy should be planned, as there is reduced maternal morbidity and mortality when done electively.

Clark et al 2 and Stanco et al 3 reported 53% of their hysterectomies as subtotal. [7]

From 11 women that makes peripartum hysterectomy in Kosovo during 2014: 81.8% had total abdominal hysterectomy, while 18.2% were Subtotal hysterectomy (supracervical). Subtotal hysterectomy should be a reasonable alternative to total abdominal hysterectomy when an peripartum hysterectomy is being performed.

5. Conclusions

From this study result that: the rate of peripartum hysterectomy for year 2014 in G.O.C- Pristine was 3.2 per 1000 deliveries. Women who made peripartum hysterectomy had, mean age was 36,54 years old, minimum age was 25 years old and it maximum 49 years old. 90% of women were born with cesarean sections, while 10% with vaginal deliveries. They remark that 70% of women that makes peripartum hysterectomy of they had repeated cesarean section several times (from 2 to 4 times), and all these women had abnormal placenta insertion (placenta praevia /accrete).

Between number of peripartum hysterectomy and number women that had birth with repeat cesarean section, in result a positive coefficient correlation, this shows a tendency in increase of the number caesarean hysterectomy, as a result of an increased frequency of births by caesarean section of repeat, that in itself is a predisposing factor for placenta accreta.

The most frequent causes that woman makes peripartum hysterectomy were: placenta accreta, uterine atony, hemorrhage and placenta percreta. Also result that 64% of women that makes peripartum hysterectomy, had two or more births with caesarean section. From 11 women that makes peripartum hysterectomy in total, 81.8% had

total abdominal hysterectomy, while 18.2% were Subtotal hysterectomy (supracervical H.), where 54.6 % makes abdominal hysterectomy with transversal incision (mainly Pfannenstiel),while 45.4% with vertical incision.

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