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Short Communication

Cesarean section in Babylon Province

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ABSTRACT

Caesarean section (C-section) is a surgical procedure in which one or more incisions are made through a mother's abdomen to deliver one or more babies. It is usually performed when a vaginal delivery would put the baby's or mother's life at risk. A descriptive study was done in five maternity hospitals (Mahaweel General Hospital, AL-Zahrah Maternity Hospital, Eskandria General Hospital, Hashymia General Hospital, and Babylon Maternity and Children Teaching Hospital). The study was conducted on 15525 deliveries during first 6 months of 2013. The information was obtained from medical records and patient charts of these hospitals manually to record C-section percentage and their indications. The results show that percentage of C-sections was 34.4% of total deliveries. High percentage of C-sections (46.0%) was done in Babylon Maternity and Children Teaching Hospital in Hilla city. While less percentage of C-sections (23.4%) were done in Eskandria Hospital. About 42.2% of indications of C-section were not registered in case sheath of patients in some hospitals. In conclusion, the percentage of C-section in five hospitals of Babylon province to total deliveries was high in comparison to Word Health Organization (WHO).

Keywords: C-section, natural delivery, surgical procedure, incisions.

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INTRODUCTION

A C-section is usually performed when the baby's or mother's life at risk. In recent times it has also been performed upon request for childbirths that could have been natural deliveries (Finger, 2003). Cesarean delivery rates in the United States were 32.9 % of all births performed in 2009. The rate of C-section has increased significantly in United States, from 21% in 1996 to 33% of all birth in 2011 (Backes et al., 2013). Across Europe, there are significant differences between countries: in Italy the caesarean section rate is 40%, while in the Nordic countries is only 14% (Pai, 2000). One fifth of deliveries in England and Wales are undertaken by caesarean section (Simm and Mathew, 2008). Brady et al. (2012) stated that, the rate has increased significantly in the United States to 33% of all births in 2012 (Hamilton et al., 2012).

From studies of United States, women that married white rich men giving birth in private hospitals are more likely to have a C-section than poorer women, although they are less likely to have complications due to a C-section being required. The indication for cesarean section in these studies is more likely to be partly due to considerations of pain and vaginal tone (Hildingsson et al., 2002). The National Institutes of Health, U.S. Department of Health and Human Services, and American College of Obstetrics and Gynecology (ACOG) all released statements in support of increasing Vaginal birth after Caesarean (VBAC) (Zweifler et al., 2006).

The main hazards of cesarean section are:

1. Post traumatic stress disorder (Olde et al., 2006).
2. Post operative adhesion and wound infection: As with all types of abdominal surgeries, a Caesarean section is associated with risks of postoperative adhesions, incisional hernias (which may require surgical correction) and wound infections (Pai, 2000).
3. Hysterectomy (Liu et al., 2007).
4. Postpartum depression (Olde et al., 2006).
5. Severe blood loss (which may require a blood transfusion) (Pai, 2000).

Aim of study

This study was comparative study carried out to determine:

1. The percentage of C-section to total deliveries in Babylon Province (five hospitals) in comparison to WHO.
2. The percentage of C-section to total deliveries in each hospital in Babylon Province.
3. The registration regarding the indication of cesarean section in each hospital.

MATERIALS AND METHODS

The study was done in five hospitals (Mahaweel General Hospital, AL-Zahrah Maternity Hospital, Eskanderia General Hospital, Hashymia General Hospital, and Babylon Maternity and Children Teaching Hospital) from 1-1-2013 to 1-7-2013. The study was conducted on 15269 deliveries (C-section and vaginal deliveries) during first 6 months of 2013. The information was analyzed through medical recorders and patient charts of these hospitals manually to record C-section percentage and their indications.

Statistical analysis

The data were recorded as number and percentage. The percentages were compared using the Chi-square test to determine significant difference between of C-section and vaginal delivery at same time. $P \leq 0.05$ was considered significant. (Daniel, 2009).

RESULTS

The percentage of C-sections in five hospitals of Babylon Province was 34.4% of total deliveries in first six months of 2013.

The C-section operations (number 5336) are significantly ($P \leq 0.01$) different from vaginal delivery (number 10189) at first six months of Babylon Province in 2013.

High percentage of C-sections (46.0%) was done in Babylon Maternity and Children Teaching Hospital in Hilla city. While less percentage of C-sections (23.4%) were done in Eskandria Hospital as shown in Table 1.

The percentage of indicated C-sections registered and name of hospitals in Babylon Province were shown in Table 2.

Table 1. Data of hospital studied.

Name of hospital	Total no.	Type of deliveries				Total (%)
		C-section	%	Normal delivery	%	
Babylon H.	5214	2401	46	2813	54	100
AL-Zahrah H.	2974	1081	36.3	1893	63.7	100
Al-Hashymia H.	2799	683	38.9	2116	61.1	100
Eskandria H.	2630	616	23.4	2014	76.6	100
Mahaweel H.	555	555	29.1	1353	70.9	100

Table 2. Indication of C-sections registered in case sheath of patients in hospitals studied.

No.	Name of hospital	Registered indications of C-section in patients chart (%)	Rate of cesarean section (%)
1	Babylon Hospital of Maternity and Children	0	46
2	Mahaweel Hospital	91.6	29.1
3	Hashymia Hospital	97.2	38.9
4	Eska Eskandria Hospital	0	23
5	Al-Zahrah Hospital	100	36.3

DISCUSSION

In this study, the percentage of C-sections was 34.4% of total birth in Babylon Province. This value was high in comparison with WHO.

WHO holds that cesarean rates should not exceed 15%. Because beyond 15%, maternal and neonatal morbidity rises in parallel with further increase C-sections (Stapleton et al., 2013).

The causes of high cesarean section percentages may be due to:

1. Hope of doctors to get more money.
2. Fear from the pain during labor in a normal delivery.
3. A caesarean is easier for an obstetrician than a vaginal birth.
4. Some women choose C-section to give birth on the day to bring luck.
5. Many people believe that this procedure is less risky for the mother.
6. Hospital factors may explain some increasing C-section such as hospital size, teaching hospital, rural hospital, shorter length of hospital stay.

7. Believe of people that cesarean delivery at 40 weeks of gestation reduces fetal mortality. While planned vaginal delivery could occur at up to 42 weeks of gestation.

This study showed that the C-sections percentage were increased in February, March and April and decreased in other months in 2013 as shown in Table 2. The cause may be due to weather. The day in first 3 month of year is short, cold and rainy. This may a role in the mode of delivery.

The present study showed high percentage of C-section (46%) in Babylon Maternity and Children Teaching Hospital in Hilla city; while less percentage of C-sections (23.4%) in Eskandria Hospital as shown in Table 1. There are many reasons. First one was that Babylon hospital may receive many emergency complicated cases from other hospitals need really C-sections or call specialist did not wait pregnant women to deliver vaginally. Second cause may be related to medical workers in this hospital or the relative of the patient.

The present study showed that 42.2% of C-sections were not registered in case sheath of patients in some hospitals as shown in Table 2. The reasons may be due to a quick caesarean is more convenient for an obstetrician than a lengthy vaginal birth or no time for rotator physician to write notes in case sheath of patient, depending on paper of referred doctors. Any operation without cause was negative factor for doctor who performed it.

The result of this study does not agree with Tamim et al. (2007) which mentioned that C-section rate as high as 26.4% was reported from nine hospitals in Beirut Lebanon. Also, it does not agree with Khawaja et al. (2004) which found that Cesarean section rate in Egypt 1987 to 1988 (13.9%) increase to 22% in 1999 to 2000. The result agrees with Barber et al. (2011), who mentioned that the cesarean delivery rate increased from 26% to 36% between 2003 and 2009.

Conclusion

The percentage of C-section in Babylon Province (34.4%) to total deliveries was high in comparison to World Health Organization (WHO) (15%) with poor registration.

RECOMMENDATIONS

1. In the absence of maternal or fetal indications for cesarean delivery, a plan for vaginal delivery is safe and appropriate and should be recommended.
2. Cesarean delivery on maternal request should not be performed before a gestational age of 39 weeks.
3. Cesarean delivery on maternal request should be not recommended for women desiring several children.
4. Registration should be observed by the ministry of health and certain regulations are mandatory.

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