A STUDY OF PREVALENCE AND FACTORS ASSOCIATED WITH CAESAREAN HYSTERECTOMY IN HOSPITAL UNIVERSITI SAINS MALAYSIA

BY

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ABBREVIATIONS

CS	Caesarean section
CH	Caesarean Hysterectomy
DIVC	Disseminated intravascular Coagulation
ERPOC	Evacuation of retained product of conception
FSB	Fresh still birth
Hrs	Hour
HUSM	Hospital University Sains Malaysia
KM	Kilometre
KG	Kilogram
LSCS	Lower segment caesarean section
Mins	Minutes
Ml	Millilitre
P	Parity
G	Gravida
PP	Placenta previa
PPH	Post partum haemorrhage
UTI	Urinary tract infection
%	Percentage
SPSS	Statistics Programme for Social Sciences
SVD	Spontaneous vaginal delivery
WHO	World Health Organisation

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DEFINITIONS

Peripartum Hysterectomy

Peripartum hysterectomy is referred to surgical removal of the pregnant or recently pregnant uterus. It is also known as obstetric hysterectomy. It can be divided into caesarean hysterectomy and postpartum hysterectomy

Caesarean Hysterectomy

Hysterectomy done after caesarean section or following uterine rupture (Forna et al 2004)

Postpartum hysterectomy

Hysterectomy done after vaginal delivery either spontaneous vaginal delivery or following instrumental delivery (Forna et al 2004)

Febrile illness

Febrile illness is defined as temperature of 38°C for more than 24 hours excluding the first 24 hours or temperature 38°C or more on two occasions, 24 hours apart excluding the first 24 hours (Lobmeyr et al 1999).

Maternal mortality

World Health Organisation (1997) defined the maternal mortality as death of women while pregnant and within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental.

Perinatal mortality

Perinatal mortality is defined as early neonatal death within 7 days of life and fetal death prior to the complete expulsion from its mother of a product of conception weighing at least 500 gram or at least 22 weeks duration of pregnancy (WHO 2005).

ABSTRACT:

MALAY VERSION

ENGLISH VERSION

(Versi Bahasa Melayu)

Latar belakang : Histrektomi peripartum adalah langkah terakhir yang dilakukan untuk menyelamatkan nyawa pesakit jika berlaku pendarahan selepas bersalin atau semasa melakukan pembedahan caesarean. Ia juga dilakukan secara elektif sekiranya pesakit telah didiagnosakan mengalami kanser servik.

Menurut Wan Abu Bakar (1993) peratusan pesakit yang menjalani pembedahan histrektomi caesarean ialah 0.3 dalam 1000 kelahiran iaitu pada nisbah 1: 1926 jumlah kelahiran. Sepanjang tempoh kajian itu sebanyak 24 kes telah dilapurkan dan sebanyak 18 pesakit menjalani pembedahan histerektomi total dan 6 pesakit menjalani pembedahan histerektomi subtotal. Selain daripada itu, kajian itu menunjukkan penyebab utama yang membawa kepada peripartum histrektomi ialah kerana pendarahan selepas bersalin ('PPH') disebabkan oleh kegagalan pengecutan rahim dan diikuti oleh 'placenta accreta'.

Objektif : Objektif kajian ini adalah untuk memastikan peratusan pesakit yang telah menjalani pembedahan histrektomi caesarean di HUSM dan mengetahui factor-factor peyebab yang membawa kepada pembedahan histrektomi caesarean. Kajian ini juga menilai, komplikasi-komplikasi daripada pembedahan yang dijalankan.

Kaedah kajian : Kajian ini telah dilakukan di Hospital Universiti Sains Malaysia bermula daripada bulan Januari 1996 sehingga bulan Disember 2005. Semua pesakit yang telah menjalani pembedahan histrektomi caeserean sepanjang tempoh kajian telah dimasukkan ke dalam kajian ini termasuk yang disebabkan oleh koyakan dinding rahim. Histerektomi. Caeserean di lakukan bagi mengawal pendarahan yang tidak terkawal oleh kaedah-kaedah lain semasa melakukan pembedahan caesarean. Rekod pesakit telah diperolehi melalui pejabat rekod. Surat kebenaran untuk mendapatkan rekod pesakit telah diluluskan oleh Pegarah Hospital Universiti Sains Malaysia.

KEPUTUSAN : Terdapat 65 pesakit telah menjalani pembedahan histrektomi caesarean daripada 70 842 jumlah kelahiran (1 : 1090 jumlah kelahiran). Factor penyebab yang paling utama ialah 'placenta accreta' (46.2% , 30 daripada 65), kegagalan pengecutan rahim (33.8%, 22 daripada 65), koyakan dinding rahim (16.9% , 11 daripada 65), dan satu kes adalah disebabkan oleh kanser servik (1.5%, 1 daripada 65).

Daripada kajian ini menunjukkan 44.6% (29 daripada 65) mempunyai sejarah pembedahan caesarean dan 33.8% (22 daripada 65) pernah melakukan 'ERPOC'. 53 (81.5 %) daripada jumlah histerektomi yang dilakukan adalah histerektomi total dan 12 (18.5 %) adalah histerektomi subtotal. Dalam kajian ini juga 18.5% (12 daripada 65) pesakit mengalami masalah pencairan darah, 16.9% (11 daripada 65) mengalami komplikasi demam, 9.2% (6 daripada 65) mengalami kecederaan pada pundi kencing dan seorang pesakit mengalami komplikasi emboli air amnion.

KESIMPULAN : kadar peratusan histerektomi caesarean adalah dalam nisbah 0.9 : 1000 jumlah kelahiran. kes adalah berpadanan dengan kajian-kajian di tempat lain. Kajian ini menunjukkan bahawa 'placenta accreta' menyumbang kepada indikasi utama kepada histerektomi caesarean. Komplikasi paling kerap berlaku ialah kecairan darah (16.9%) dan komplikasi demam (9.2%).

Perkara yang membataskan kelancaran kajian ini ialah dokumentasi mengenai kes yang tidak lenngkap dan juga kehilangan rekod-rekod pesakit.

ABSTRACT

(English version)

Background : Obstetric hysterectomy is done to safe patient's life in case of uncontrolled bleeding during caesarean section. It is also done as elective for case of cervical cancer. Caesarean hysterectomy was defined as one performed for the haemorrhage unresponsive to other treatment following caesarean section including for uterine rupture. Wan Abu Bakar (1993) showed the percentage of caesarean hysterectomy was 0.3% (1 : 1926 total of delivery). During that study period, 24 cases of caesarean hysterectomy was reported in which 18 patients had underwent total hysterectomy and 6 patients underwent total hysterectomy. The study also showed the major indication for the operation was uterine atony.

Objectives: To determine the prevalence and the associated factors for caesarean hysterectomy. The complications of the operation also were identified.

Methodology : This study was conducted at Hospital Universiti Sains Malaysia from January 1996 till December 2005. All patients who underwent caesarean hysterectomy in the study period were included in the sample size, included patients with uterine rupture. The patient who underwent postpartum hysterectomy were also recorded as to compare with caesarean hysterectomy. Patient's information were obtained from the record office. The permission was obtained from Pengarah Hospital Universiti Sains Malaysia. The study was ethically approved from the HUSM ethical committee (Number 170.4(5)).

Results : There were 65 cases of caesarean hysterectomy was done through out the study period where the total number of deliveries were 70 842 deliveries. Therefore the caesarean hysterectomy rate is 0.9 : 1000. Most frequent indications were placenta accreta (46.2 % , 30 out of 65), uterine atony (33.8 %, 22 out of 65), uterine rupture (16.9 % , 11 out of 65) , carcinoma of cervix (1.5 % , 1 out of 65). From this study 44.6% (29 out of 65) had history of previous caesarean section and 33.8% (22 out of 65) had undergone uterine curettage. The number of caesarean deliveries and ERPOC were increasing trend and increased the risk of placenta accreta proportionally. Fifty three (81.5%) of the hysterectomy cases were total hysterectomy and twelve (18.5 %) of the cases were subtotal hysterectomy. In this study, 18.5% (12 out of 65) of the patients complicated by coagulopathy and 16.9% (11 out of 65) had febrile illness. 9.2% (6 out of 65) had bladder injury and one patient developed complicated by amniotic fluid embolism.

Conclusion : The prevalence of caesarean hysterectomy was 0.92 per 1000 deliveries. The rate of the caesarean hysterectomy is comparable with other studies. Placenta accrete was the most common indication for caesarean hysterectomy. The most common complication of the operations were and coagulopathy (16.9%) and febrile illness (9.2%). The limitation of the study was improper documentation of the cases in the patient's folder and some of the informations were missing.

GENERAL INTRODUCTION AND LITERATURE REVIEW

THE STATE OF KELANTAN AND KELANTAN HEALTH SERVICES

The state of Kelantan, one of the thirteen states within Malaysia is tucked away in the northeastern corner of peninsular Malaysia facing the South China Sea. The neighbouring states are Terengganu, Pahang, Perak and Thailand country. Country of Thailand is separated by Golok River at Pekan Rantau Panjang which is one of the famous shopping centres in Kelantan. The word Kelantan is derived from a Malay word Kilantan which means lightning – which translates as the land of light. It was given the title ' Darul Naim' which means the peaceful state in July 1916, by Sultan Mohamed IV.

Various names was given to Kelantan by the Chinese; 'Ho-lo-tan in the 5th century, 'Chih-tu' in the 6th century and 'Tan-tan in 7th century. From the 16th and 18th century up to the first decade of the 20th century, Kelantan was under the Thailand influences. Then, the protection was under Britain influence whereby the state was ruled by the Sultan as under British advice. During World War II December 1941, Japan started landing at Pantai Sabak about 10 km from Kota Bharu before marching to Singapore. On 31st August 1957, Kelantan gained independence after joining the Federation of Malaya (now Malaysia).

Kelantan has an area of 14929 sq.km. It consists of 10 district namely; Kota Bharu, Bachok, Machang, Pasir Putih, Tanah Merah, Tumpat, Kuala Kerai, Gua Musang and Jeli. The capital of the state is Kota Bharu, which is situated about about 9 km from the Kelantan River.