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http://www.banglajol.info/index.php/JCAMR
Journal of Current and Advance Medical Research pISSN 2313-447X
July 2016, Vol. 3, No. 2, pp. 47-50

Original Article

Major Gynaecological Operation Performed at Medical University of Bangladesh: Experience of 140 Cases

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[**Reviewed:** 30 January 2016; **Accepted on:** 1 March 2016; **Published on:** 1 July 2016]

Abstract

Background: Major gynaecological operations are frequently performed for the treatment of different surgical causes. **Objectives:** The purpose of the present study was to see the surgical outcomes of different major gynaecological operation performed at medical university of Bangladesh. **Methodology:** This descriptive type of cross-sectional study was conducted in the Department of Obstetrics and Gynaecology at Bangabandhu Sheikh Mujib Medical University, Dhaka from August 2002 to January 2003 for a period of six (6) months. All the women who were undergone major gynaecological operation at any were selected as study population. Minor gynaecological operation cases were excluded from this study. The data were collected by face to face interview. The age, weight, socio-economic condition, nutritional status and anaemia were recorded. **Result:** A total number of 140 patients were undergone major gynaecological surgeries of which majority were abdominal hysterectomy (57.1%), vaginal hysterectomy (24.3%), salpingo-oophorectomy or ovarian cystectomy (9.3%). The mean age with SD of the study population was 43.91± 9.45 years. Majority were presented with mild anaemia (51.4%). Majority were free of wound infection (92.8%). **Conclusion:** In conclusion abdominal hysterectomy is the most common major gynaecological operation performed with few wound infection rate. [*Journal of Current and Advance Medical Research, July 2016;3(2):47-50*]

Keywords: Major gynaecological operation; abdominal hysterectomy; vaginal hysterectomy

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Cite this article as: Khatun M, Banu DS, Sultana R, Millat MA, Mondal DR, Mahmud S. Major Gynaecological Operation Performed at Medical University of Bangladesh: Experience of 140 Cases. J Curr Adv Med Res 2016;3(2):47-50
Conflict of Interest: All the authors have declared that there was no conflict of interest.
Contributions to authors: MK, DSB, RS & DRM have contributed in protocol preparation up to surgical procedures as well as the report writing; furthermore, MAM & SM have written the manuscript and have revised the manuscript.

Introduction

Major gynaecological operation has been performed in different hospital settings of Bangladesh[1]. The better outcome after a major surgical procedure mainly depends on prevention of infection, maintenance of strict asepsis during operation, postoperative care and correction of anaemia[2]. The prevention of infection in surgical patients undergoing an operation is major challenges. In hospital there is more chance of cross-infection due to overcrowding and the patients who are undergone major operations with poor nutritional status[3].

It has been found that proper aseptic technique alone could reduce but not completely eliminate the bacterial contamination of the surgical field[4]. Therefore, the need for antibiotic as supplement of aseptic technique became more widely accepted specially in a situation like overcrowded hospital. Therefore, this present study was undertaken to see

the surgical outcomes of different major gynaecological operation performed at medical university of Bangladesh.

Methodology

This descriptive type of cross-sectional study was carried out in the Department of Obstetrics and Gynaecology at Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh from the during of August 2002 to January 2003 for a period of six (6) months. Bangabandhu Sheikh Mujib Medical University, Dhaka is only medical university of Bangladesh. This is a referral tertiary care hospital. All the women who were undergone major gynaecological operation at any were selected as study population. Minor gynaecological operation cases were excluded from this study. The data were collected by face to face interview. The points taken into consideration were age, weight, socioeconomic condition, anaemic status, duration of operation, wound infection and length of postoperative hospital stay. The results were presented in detail in tabulated form.

Result

A total number of 140 major gynaecological operations were performed during the study period. Among 140 cases majority were abdominal hysterectomy which was 80(57.1%) cases followed by vaginal hysterectomy, salpingo-oophorectomy or ovarian cystectomy and others operations which were 34(24.3%) cases, 13(9.3%) cases and 13(9.3%) cases respectively (Table 1).

Table 1: Distribution of Major Gynaecological Operation at BSMMU (n=140)

Type of operation	Frequency	Percentage
Abdominal hysterectomy	80	57.1
Vaginal hysterectomy	34	24.3
SO or Ova. Cyst.	13	9.3
Others	13	9.3
Total	**140**	**100.0**

Salpingo-oophorectomy=SO; ovarian cystectomy= Ova. Cyst.

Among 140 patients majority were in the age group of 36 to 45 years which was 54(38.6%) cases followed by age group of 46 to 55 years and 26 to 35 years which was 51(36.4%) cases and 19(13.6%) cases respectively. Less than 25 years of age group and more than 55 years were in 8(5.7%) cases in each group. The mean age with SD of the study population was 43.91± 9.45 (Table 2).

Table 2: Age distribution of the Study population undergone Major Gynaecological Operation (n=140)

Age Group	Frequency	Percentage
Less than 25 Years	8	5.7
26 to 35 Years	19	13.6
36 to 45 Years	54	38.6
46 to 55 Years	51	36.4
More than 55 Years	8	5.7
Total	**140**	**100.0**
Mean±SD	43.91± 9.45	

The mean weight of the study population was 54.65±9.41 Kg with the range of 32 to 77 Kg (Table 3).

Table 3: Mean Weight of the Study Population (n=140)

Weight (Kg)	Mean±SD
Mean±SD	54.65±9.41
Range	32.0 to 77.0

Among 140 cases majority were in the low socioeconomic condition group which was 113(80.7%) cases followed by middle socioeconomic condition group 27(19.3%) cases (Table 4).

Table 4: Distribution of the Study Population according to Socioeconomic Condition (n=140)

S-E Condition	Frequency	Percentage
Low	113	80.7
Middle	27	19.3
High	0	0.0
Total	**140**	**100.0**

*S-E Condition=Socioeconomic Condition

Among 140 patients majority were presented with mild anaemia which was 72(51.4%) cases followed by moderate and severe which were 64(45.7%) cases and 4(2.9%) cases respectively (Table 5).

Table 5: Distribution of the Study Population According to Anaemia (n=140)

Anaemia	Frequency	Percentage
Mild	72	51.4
Moderate	64	45.7
Severe	4	2.9
Total	**140**	**100.0**

*S-E Condition=Socioeconomic Condition

Among 140 cases majority were free of wound infection which was 130 (92.8%) cases and the rest 10(7.2%) cases were infected (Table 6).

Table 6: Rate of Wound Infection among the Study Population (n=140)

Wound Condition	Frequency	Percentage
Healthy	130	92.8
Infection	10	7.2
Total	**140**	**100.0**

Discussion

Gynaecological disorders are a common cause of morbidity among women of reproductive age worldwide[2]. In developing countries, major gynaecological operations cause enormous challenges to the weak health infrastructure in these settings. Whereas reports indicate that approximately 1.4 million gynaecological emergency visits to emergency department are recorded in the USA accounting for 24.3 visits per 1000 women of reproductive age which is 15 to 44 years[5]; however, equivalent data for developing countries are not readily available. Surgical interventions in acute gynaecological conditions are important causes of morbidity and mortality in these countries and constitute significant public health problems[6].

In this study a total number of 140 major gynaecological operations were performed during the study period. Among 140 cases majority were abdominal hysterectomy which was 80(57.1%) cases followed by vaginal hysterectomy, Salpingo-oophorectomy or ovarian cystectomy and others operations which were 34(24.3%) cases, 13(9.3%) cases and 13(9.3%) cases respectively. There are several major gynaecological procedures have been performed. In a study[7] it has been reported that vaginal procedures including dilation and currettage, hysteroscopy, cervical excision procedures and benign trachelectomy are consisted of 5% of the total procedures analyzed and had a composite morbidity of 3.3% which is very similar to the composite morbidity of 3.7% of all gynecologic procedures.

In this study majority were in the age group of 36 to 45 years which was 54(38.6%) cases followed by age group of 46 to 55 years and 26 to 35 years which was 51(36.4%) cases and 19(13.6%) cases respectively. Less than 25 years of age group and more than 55 years were in 8(5.7%) cases in each group. From this result it has been clear those middle age groups are more commonly operated in the major operations.

Considering age during major gynaecological operation is very important as because the occurrence of postoperative complications after gynecologic procedures is important. Older women aged 65 years or older undergo major surgical procedures more frequently than their younger counterparts which is contradict with the present study[8-12]. When examining the prevalence of postoperative complications and mortality in women in the oldest age group (≥80 years) in the gynecology literature, low occurrences of postoperative mortality has been described. Parker et al[7] reported on 77 patients undergoing benign gynecologic procedures in women age ≥ 80 years with a prevalence of postoperative complications of 14.3% and no mortalities. Stepp et al[8] examined the charts of 267 women ≥75 years undergoing gynecologic procedures for pelvic floor disorders with a prevalence of postoperative complications of 24% and a one year mortality of 1.1%.

The mean weight of the study population was 54.65±9.41 kg with the range of 32 to 77 Kg. The weight is one the important factor for successful major surgical outcomes. The co-morbidities related with the obesity is the main issues related with the good outcomes of the major gynecological operations. Furthermore, operative time, peripheral vascular disease, and known coronary artery disease were identified by Stepp et al[8] as predictors of postoperative complications.

Again, the prevalence of major postoperative infection was lower than Stepp et al. because we did not include urinary tract infections and superficial wound infections. However, the findings of postoperative mortality of 1.3% in women ≥ 80 year old undergoing benign procedures are consistent[13]. In a large study of medical billing data from the National Inpatient Sample reviewing gynecologic procedures for pelvic floor disorders, Sung et al[9] reported overall in-patient mortality risk of 0.04% for women ≥ 80 years old. However despite this low absolute mortality risk, women in ≥80 years old have increased mortality compared to women of <60 years though this result is contradict with the present study result.

Among 140 cases majority were in the low socioeconomic condition group which was 113(80.7%) cases followed by middle socioeconomic condition group 27(19.3%) cases. Low-socioeconoimic condition people are more commonly admitted to the public hospital for treatment. The large population of this group may be due to this reason. In addition to age and medical co-morbidities, socio-economic status is related with postoperative complications and mortality after gynecologic surgery.

Polanczyk et al[10] demonstrated a correlation of functional status with postoperative complications and in-hospital mortality in patients >50 years old undergoing major noncardiac surgery. In patients >65 years old undergoing major surgery, markers of frailty were demonstrated to be predictive of both 6-month postoperative mortality and discharge to skilled nursing facilities[14]. These markers of frailty

included decreased cognition, poor nutrition measure by lower serum albumin and hematocrit levels, unexplained falls, and dependent functional status for activities of daily living.

In this study majority were presented with mild anaemia which was 72(51.4%) cases followed by moderate and severe which were 64(45.7%) cases and 4(2.9%) cases respectively. There are some factors which are related with the level of RBC of the patients. This is related with the healing of the surgical wound. However, it has been established that both laparotomies and procedures for gynecologic cancer had higher complications than vaginal procedures; furthermore vaginal procedures were not without complications[15].

Majority was free of wound infection which was 130 (92.8%) cases and the rest 10(7.2%) cases were infected. The rate of infection is very low. The reason may be due to taking full aseptic precaution during the surgical procedure. Erekson et al[2] have reported that all major gynecologic procedures including laparotomies, vaginal procedures, and procedures for gynecologic cancer are related with the overall complications following gynecologic surgery. Overall, it has been found that postoperative complications are rare.

Conclusion

In conclusion abdominal hysterectomy is the most common major gynaecological operation performed; however, a large number of vaginal hysterectomy, salpingo-oophorectomy or ovarian cystectomy is also done. Most of the patients are from low socio-economic status. The wound infection rate is minimum. A large scale study should be performed to get the real scenario of the study population.

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