

General surgery encounter following obstetrics and gynaecological surgeries: A 10 – year review at a university teaching Harcourt

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Abstract

Background: All surgical procedures have potential risk of complications of which obstetrics and gynaecological surgeries are no exception. However, the prognosis of such encounters depends on prompt diagnosis and timely interventions in this scenario by the general surgeons.

Aim: To determine the general surgical encounters following obstetrics and gynaecological surgeries at the University of Port Harcourt Teaching Hospital (UPTH): a 10 – year review.

Method: This was a 10 –year retrospective review of all the encounters involving the general surgeon following obstetrics and gynaecological surgeries at the University of Port Harcourt Teaching Hospital (UPTH). The information was obtained from the patients case notes. Permission for the study was granted by the ethical committee of the hospital. Data obtained was analysed using SPSS version 25.

Results: There were 92 surgical encounters for the period under review. The mean age was 33 ± 2 years. The age range was 20 to 48 years. The modal parity was 2. The marital status of subjects, 60 (65.3%) were married, 26 (28.3%) were single, 4 (4.3%) were divorced and 2 (2.1%) were widowed. The commonest obstetrics and gynaecological surgery was emergency caesarean section 24 (63%) while the most common surgical encounter was incisional hernia 42 (76%). The preferred incision made to repair encounters was mid-line incision 46 (67.4%). Majority of the cadre of surgeons that repaired surgical encounters were consultants 55 (60.9%).

Conclusion: The commonest surgical encounter following obstetrics and gynaecological surgery was emergency caesarean section. Incisional hernia was the most common surgical encounter. Prompt diagnosis and intervention by the combined team of the general surgeons and the obstetrician/gynaecologist resulted in favourable outcome. Collaboration between obstetrician and gynaecologist and other surgical specialties cannot be overemphasized for better prognosis in cases of adverse intra-operative encounters.

Keywords: Surgical; Encounters; Obstetrics; Gynaecology

1. Introduction

All surgical procedures have potential risk of complications of which obstetrics and gynaecological surgeries are no exception. However, the prognosis of such encounters depends on prompt diagnosis and timely interventions in this scenario by the general surgeons.¹ Obstetrics and gynaecological conditions requiring general surgery intervention are

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occasionally encountered. Prompt diagnosis and appropriate management guarantees better prognosis.² This becomes particularly important in cases of surgeons working in collaboration with obstetricians and gynaecologist where timely decision and management can save the life of patients.¹

Some of the surgical encounters following obstetrics and gynaecological surgeries are incisional hernia, enterocutaneous fistula, intestinal obstruction, intra – abdominal abscess and pelvic abscess.²⁻⁸

Incisional hernia is a common and costly complication following abdominal surgery.⁶ there is paucity of data of incisional hernia after gynaecological surgery. Benok et al reviewed 39, 312 women who underwent open gynaecological surgeries.⁶ Over a 5 years period. The study revealed a commulative incidence of incisional hernias as 2.0%.⁶ The study revealed that Pfannenstiel incision results in fewer incisional hernias and should be considered whenever possible.⁵⁻⁶

The frequency of surgical encounters following obstetric s and gynaecological surgeries varies from one facility to another. Thus the reason for this research work.

Aim

To determine the general surgical encounters following obstetrics and gynaecological surgeries at the University of Port Harcourt Teaching Hospital (UPTH) a 10 – years review.

2. Material and methods

This was a 10 –year retrospective review of all the encounters involving the general surgeon following obstetrics and gynaecological surgeries at the University of Port Harcourt Teaching Hospital (UPTH). The information was obtained from the patients case notes. Permission for the study was granted by the Head of Department of General Surgery department of UPTH. Data obtained was analysed using SPSS version 25.

This study was conducted in the University of Port Harcourt Teaching Hospital. It is a 800 bed hospital located at Alakahia in Obio-Akpor Local Government Area of Rivers State, South-South Nigeria, about 15 kilometres from Port Harcourt city along the Port Harcourt axis of the East-West Road. It is a tertiary health institution that provides all levels of health care services to Rivers, Bayelsa, Delta, Imo, Abia and Akwa-Ibom States. The Surgery and Obstetrics /Gynaecology department are major clinical departments of the hospital.

3. Results

There were 92 surgical encounters for the period under review. The mean age was 33 ± 2 years. The age range was 20 to 48 years. The modal parity was 2. The marital status of subjects, 60 (65.3%) were married, 26 (28.3%) were single, 4 (4.3%) were divorced and 2 (2.1%) were widowed. The commonest obstetrics and gynaecological surgery was emergency Caesarean 24 (63%) while the most common surgical encounter was incisional hernia 42 (76%). The preferred incision made to repair encounters was mid-line incision 46 (67.4%). Majority of the cadre of surgeons that repaired surgical encounters were consultants 55 (60.9%).

Table 1 Age Distribution of Obstetrics & Gynaecological Patients with Surgical Encounters

Age(yrs)	Number	%
20	2	2.2
21 -25	8	8.7
26 - 30	20	21.7
31 - 35	30	32.6
36 - 40	15	16.3
41 - 45	11	12.0
>45	6	6.5
	92	100%

The modal age was 33 + 2 years

Table 2 Distribution of parity of Obstetrics patients with surgical encounters

Parity	No	%
0	12	13.0
1	14	15.2
2	40	43.5
3	9	9.8
4	7	7.6
>5	10	10.9
	92	100%

Table 3 Marital Status of Obstetrics and Gynaecological patients with surgical encounters

Marital Status	no	%
Married	60	65.3
Single	26	28.3
Divorced	1	4.3
Widowed	2	2.1
	92	100

Table 4 The most common Surgery, commonest complication and the most common of incision made to repair the encounter/complication and the designation of surgeon that repaired majority of the complication

	Number	Percentage
Commonest Surgery- Emergency CS	24	26.1
The most common complication/challenge was Incision hernia	42	45.7
Commonest Incision made for repair of the challenge - Midline sub umbilical	46	50
Cadre of surgeon that repaired majority of the challenge -Consultant	55	59.8

Table 5 Distribution of first 5 Surgical encounters following Obstetrics and Gynaecological surgeries

Encounters	Number (N)	Percentage (%)
Incisional hernia	42	45.7
Entero cutaneous fistula	12	13
Intestinal Obstruction	4	4.3
Intra-abdominal abscess	2	2.1
Pelvic abscess	2	2.1

Table 6 Distribution of Primary Incisions Prior To Surgical Encounters

Incision	Frequency	Percentage (%)
Longitudinal	16	17.4
Mid-line sub-umbilical	46	50.0
Pfannensteil	30	32.6
	92	100

Table 7 Rank of Doctors who attended Prior to Primary Encounters

Rank	Number (n)	Percentage (%)
Senior Registrar	4	4.4
Registrar	16	17.4
General Practitioner	16	17.4
Missing	1	1.1

4. Discussion

General Surgery encounters following obstetrics and gynaecological surgeries appears to be infrequent.¹ However, timely intervention is necessary for better outcome.¹⁻² There were 92 surgical encounter for the period under review. The mean age was 33 + 2 years.

This was higher than for the study by Javed et al. However in both studies majority of the patients were middle aged group.¹ Majority of our subjects were in the age group of 31 – 35 yeears (32.6%) (table 1) compared to study by Javed et al in which majority of them were in the age group of 25 – 34 years.

Our study revealed that 65% of the subjects were married while 28.3% were single (table 3). This was contrary to the study by Javed et al that showed that 80% subjects were married which was higher than that of our study.¹ In addition, our study revealed that more of our subjects were multiparous accounting for 43.5% of the subjects compared to the mulliparous subjects which were 13.0% (table 2). This was also in agreement with the study by Javed et al and from other centres.¹⁻⁶

The result from our study revealed that incisional herma was the most common surgical encounter represented by 67.4% of the subjects following obstetrics and gynaecological surgeries (table 4). This was not in agreement with the study by Javed et al which revealed that ileal perforation was the most common surgical encounter.¹ However in the study by Ulna et al, they showed that gut adhesions was the most common surgicall encounter causing acute surgical abdomen.⁵

Some of the surgical encounters following obstetrics and gynaecological surgeries are incisional hernia, enterocutaneus fistula, intestinal obstruction, intra – abdominal abscess and pelvic abscess.²⁻⁸ Encounter of incision hernia following obstetrics and gynaecological surgery was 45.7%. This was higher than that of Beck et al which was 2.0%.⁶ The reason was that Beck et al analysed a total of over 39,000 women that had open gynaecological surgeries that had incisional hernia as against our direct analysis of 92 cases of subjects that had incisional hernia. This was a fraction of those that had surgical encounters.

Our study revealed the primary incision used prior to the surgical encounter as mid-line sub-umbilical 50% followed by pfannensteil 32.6%, the least common incision used was 17.4% see table 6. Alazzam et in their study revealed that transverse-vertical incision is associated with less intra or post-operative complications which is in agreement with our study.⁴ Their study went further to explain that the success of abdomino-pelvic surgeries is dependent on a variety of

factors such as the type of incision, site of incision, adequacy of exposure, and optimal closures this was supported by various studies done elsewhere in the world.^{4,5,6-10}

5. Conclusion

Surgical encounters following obstetric and gynaecological surgeries can often be due to challenging primary surgeries. In order to manage such cases an inter – disciplinary approach is necessary with collaboration between the surgical and gynaecological departments working in the emergency unit. For this reason post-graduate trainees working in surgical and gynaecological emergencies should be trained to deal with such encounters so as guarantee a favourable outcome.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest.

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