

(REVIEW ARTICLE)



Audit of all cases of total abdominal hysterectomy (TAH) at a private hospital in Enugu, Nigeria: Indications and post-operative outcomes

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Abstract

Background: Hysterectomy is a major and one of the commonest gynaecological procedures performed by gynaecologists, world over. It is the surgical removal of the uterus either through the vagina or an abdominal incision. Being such a major procedure in gynaecological practice with consequences on reproduction and sexual performance, we undertook this audit in the private hospital to review its prevalence, indication and outcomes.

Aim: The aim of this study was to review the indications and outcomes of all cases of TAH in a private hospital

Methodology: This was a 3-year retrospective study in a private hospital in Enugu, south-east, Nigeria.

Result: From the theatre register and case files of patients, it was found that a total of 58 patients had major gynaecological surgeries in the centre. Out of this total, 20 were TAH giving a prevalence of 34.5% of major gynaecological surgeries. The socio-demographic distribution of the patients shows that 12(60%) were aged between 46 and 55, 10(50%) were civil servants and 10(50%) had tertiary education. Majority of them 8(40%) were para 4, followed by para3 (20%). The major indications were symptomatic uterine fibroid, 9(45%) and abnormal uterine bleeding 8(40%).

Conclusion: Total abdominal hysterectomy was a common gynaecological procedure and the major indications were symptomatic uterine fibroids and abnormal uterine bleeding. Majority of the cases were done with spinal anaesthesia and the only identifiable post-operative morbidity was anaemia.

Keywords: Audit; Total abdominal hysterectomy; Enugu; Indications; Post-operative outcomes

1. Introduction

Hysterectomy is a major and one of the commonest gynaecological procedures performed by gynaecologists, world over. It is the surgical removal of the uterus either through the vagina or an abdominal incision. Sometimes, it can be removed along with the tubes and ovaries. This study is limited to total abdominal hysterectomy (TAH). The prevalence and the indications vary from country to country and even centres within the same country. In a 2018 study done in Benin City, south-south, Nigeria, TAH accounted for 30.4% of all major gynaecological operations and the majority of these women were in their fifties and were grand-multiparous [1]. In Ilorin, north-central, Nigeria, it was 8.5% of all major gynaecological procedures [2], in Nnamdi Azikiwe University Teaching Hospital, Nnewi, the prevalence was found to be 12.92% [3]. The indications for hysterectomy in general, and TAH in particular are numerous ranging from gynaecological to obstetrical reasons. A recent study at Enugu found that there is a significant aversion to hysterectomy [4] among the women in that region but a significant number still undergo the procedure.

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Fibroids account for about 1/3rd of all hysterectomies and 1/5th of all gynaecological visits with a huge financial burden annually [5,6]. Other significant contributors to the prevalence of hysterectomy include endometriosis (20%), uterovaginal prolapse (15%) and genital carcinomas [7,8].

Being such a major procedure in gynaecological practice with consequences on reproduction and sexual performance, we undertook this audit in the private hospital to review its prevalence, indication and outcomes.

Aim

The aim of this study was to review the indications and outcomes of all cases of TAH in a private hospital.

Objectives

Objectives of the study were to determine the

- Prevalence
- Major indications
- Types of anaesthesia
- Post-operative outcomes of all tah done in the hospital over a year period.

1.1. Study area

The study was done in Mercy of God Hospital & Maternity, Enugu, a private specialist hospital that offers gynaecological and obstetric care in the capital of Enugu State, south-east, Nigeria. It has 3 consultant gynaecologists who run clinics and theatre sessions in the hospital weekly and an array of nurses. A laboratory scientist runs the laboratory section which offers microbiological, chemical, haematological and blood banking services. It receives referrals from neighbouring private hospitals and other primary health care centres

2. Methodology

This was a retrospective review of all cases of TAH done in the hospital from December 31, 2022 to January 1, 2020. The case files of all 58 patients who had gynaecological surgeries in the hospital within the period were retrieved and reviewed. Those who had TAH were selected and relevant information such as age, parity, occupation and educational qualification were collected using a proforma. Other details collected were indications for the surgery, type of anaesthesia used and postoperative outcomes.

2.1. Data analysis

Data was analyzed using Statistical Products and Service Solutions (SPSS) version 25.0 and results were represented in tables and percentages where applicable.

3. Result

From the theatre register and case files of patients, it was found that a total of 58 patients had major gynaecological surgeries in the centre. Out of this total, 20 were TAH given a prevalence of 34.5% of major gynaecological surgeries. Table 1 below shows the socio-demographic distribution of the patients. Twelve (60%) were aged between 46 and 55, 10 (50%) were civil servants and 10 (50%) had tertiary education. Majority of them 8 (40%) were para4 followed by para3 (20%).

Table 1 Socio demographic distribution

Variable	Frequency	Percentage
Age group		
35-45	3	15
46-55	12	60
56 and above	5	20

Occupation		
Civil Servant	10	50
Petty Trader	6	30
Unemployed	4	20
Education		
None	2	10
Primary	2	10
Secondary	6	30
Tertiary	10	50
Parity		
0	3	15
1	2	10
2	0	0
3	4	20
4	8	40
5	3	15

Table 2 shows the distribution of the patients in terms of indications for surgery, types of anaesthesia used and the post-operative outcomes. Nine (45%) had symptomatic uterine fibroid, 8(40%) had abnormal uterine bleeding and the rest had 1(5%) case each of adenomyosis, ovarian carcinoma and UV prolapse respectively.

Table 2 Indications, type of anaesthesia and post-operative outcome

Variable	Frequency	Percentage
Indicators for surgery		
Abnormal Vaginal bleeding	8	40
Adenomyosis	1	5
Ovarian CA	1	5
Symptomatic Fibroid	9	45
UV Prolapse	1	5
Types Anaesthesia Used		
Epidural	4	20
Spinal	16	80
Outcome of Surgery		
Normal Recovery	16	80
Post-Op Anaemia	4	20

Table 3 showed the statistical relationship between the age of the patients and the indications for TAH on one hand and post-operative outcome on the other hand. There was no significant association between age and the above parameters considered.

Table 3 Association between age and indication/post-operative outcome

Variable	35-45 years	46-55 years	≥56 years	Total	X ² (p value)
Indications					
Abdominal uterine bleeding	1(33.3)	4(33.3)	3(60)	8(40)	10.37(0.24)
Adenomyosis	0(0)	1(8.3)	0(0)	1(5)	
Ovarian CA	0(0)	0(0)	1(20)	1(5)	
Symptomatic Fibroid	2(66.7)	7(58.3)	0(0)	9(45)	
UV Prolapse	0(0)	0(0)	1(20)	1(5)	
Surgical outcome					
Normal Recovery	2(66.7)	10(83.3)	4(80)	16(80)	0.42(0.81)
Post-Op Anaemia	1(33.3)	2(16.7)	1(20)	4(20)	

4. Discussion

The aim of this study was to review the indications and outcomes of all cases of TAH in a private hospital. From the result, the prevalence of TAH in the centre over the three-year period was 34.5% of all major gynaecological surgeries. This finding is in keeping with the study in Benin-City, south-south Nigeria, where TAH accounted for about 30.4% of all major gynaecological surgeries [1] irrespective of the differences in geopolitical zones and in the population demographics. However, this value is higher than the finding in Nnewi, Anambra State, Nigeria where Obiechina et al [3] found a prevalence of 12.92% and in Ilorin where Oyawoye OA [2] found a prevalence of 8.5%. The variations could be as a result of differences in the study centres; our study was in a small private facility while the 2 studies quoted above were done in tertiary centres. Many times, patients would prefer to have surgeries in a private centre after diagnosis due to the bottlenecks usually encountered in public tertiary facilities. This may also explain the higher prevalence found in our study. In a similar study done in University of Maiduguri Teaching Hospital in 2010, the prevalence of abdominal hysterectomy was 13.8% of all gynaecological surgeries [9]. While this was a study in a tertiary hospital in the North-eastern part of Nigeria, our study was in the small private facility in the south-eastern part of Nigeria with different, culture, religion and population demographics. In a study carried out in India across many hospitals, it was found that 3.3% of women of reproductive age had undergone hysterectomy [10]. Even though this value appeared very low compared with our value of 34.5%, their study was limited to women of child bearing age and was also a multi-centre study while ours was a one centre study involving women of all ages. However, of note in the study was a finding of higher prevalence of 69.6% from private hospitals which agrees with a high value we recorded from our centre, another private hospital, though from a different country of the world. In another Indian cohort study, the incidence of hysterectomy was found to be 11.56 per 1000 woman-years, meaning that if 1000 women were followed up in a year, about 11.5 of them will have hysterectomy [11]. This value suggests that the prevalence of hysterectomy was lower than our own. The difference could be due to the type of studies done. Theirs was a cohort study in India, whereas ours was retrospective study in Nigeria. All these studies show that hysterectomy is a common gynaecological procedure globally, but the prevalence may vary from country to country and even among centres in the same country.

From our study 9(45%) of the patient had TAH on account of symptomatic uterine fibroid followed by abnormal uterine bleeding 8(40%). In another study, the most common indication was uterine fibroid 45(30%) followed by abnormal uterine bleeding (DUB) 42(28%) [12]. There is a common pattern in the indications for hysterectomy in the 2 studies even though there were variations in the actual percentages. These dissimilarities may be explained by the type of study and the study centres. While our study was in a small private setting the other was in a teaching hospital setting. This buttresses the point that the indications for hysterectomy are essentially the same. Another study in Cameroon also showed a hysterectomy prevalence of 14.54% and found that uterine fibroids (58.2%) and heavy vaginal bleeding/DUB (60.6%) were the major indications [13]. This is similar to the findings in our study, which shows that the indications for hysterectomy are essentially the same. In our study, 4(20%) of the women had post-operative anaemia. In another study in Benin-City, the commonest post-operative complication was anaemia (9.5%) [14]. This agrees with our study where the only post-operative complication was anaemia. It shows that in the hands of a skilled surgeon, the procedure is essentially a safe one.

5. Conclusion

Total abdominal hysterectomy was a common gynaecological procedure and the major indications were symptomatic uterine fibroids and abnormal uterine bleeding. Majority of the cases were done with spinal anaesthesia and the only identifiable post-operative morbidity was anaemia.

Recommendations

Counseling on the safety and acceptability of hysterectomy as a treatment option for symptomatic fibroids and abnormal uterine bleeding should be encouraged especially for women who have completed their family size as the procedure is essentially safe.

Compliance with ethical standards

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Disclosure of conflict of interest

There was no conflict of interest in the course of this study

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