TOTAL ABDOMINAL HYSTERECTOMY AT THE CENTRAL HOSPITAL, WARRI: A FIVE YEAR REVIEW.

OKHIONKPAMWONYI O & OKONTA PI

ABSTRACT

Background: Hysterectomy is a common gynaecological surgical procedure which improves womens's quality of life. **Objectives:** To determine the indications and complications of Total abdominal hysterectomy (TAH) at the Central Hospital, Warri (CHW). **Materials and Methods:** This was a retrospective descriptive study of TAH performed at the CHW from 1st January 2007 to 31st December 2011. Medical records of all patients that had TAH were reviewed. **Results**: Two hundred and thirty six patients had TAH. It constituted 11.6 % of all gynaecological surgeries at the CHW. The mean age was 44.78 ± 1.28 years. The mean parity was 3.79 ± 1.08. Uterine fibroids accounted for majority of cases (66.1%). About 54.2% of patients had TAH with bilateral salpingo-oophorectomy (BSO). Fifty patients (21.2%) had complications. Wound sepsis/breakdown, anaemia, prolonged hospital stay, urinary tract infection and pyrexia were the common morbidities. **Conclusion:** The indications for, and surgical outcome following TAH is comparable to that from other public hospitals across the country.

KEYWORDS : TAH, Indication and Complication.

INTRODUCTION

Total abdominal hysterectomy (TAH) is a major gynaecological operation involving the removal of the uterus including the cervix.[1-4] Depending on the patients conditions and risk factors, the ovaries, fallopian tubes, upper portion of vagina and pelvic nodes may also be removed.[5] Hysterectomy is mostly performed for uterine fibroids and menstrual problems. This is the case in both developed and developing countries, although the uterine size is generally larger in the later.[6,7]

Department of Obstetrics and Gynaecology, Delta State University Teaching Hospital, Oghara.

Correspondence to:
OKHIONKPAMWONYI O.,
Department of Obstetrics and Gynaecology, Delta State University Teaching Hospital, Oghara.
eMail:- mudia1412@yahoo.co.uk
Tel:- 234-803 642 9935

The history of hysterectomy is long and varied.[8] The first reported abdominal hysterectomy was attempted by Langerbeck in 1825.[8] However the first TAH in which the entire uterus was removed was performed by Richardson MD in 1929.[9]

Most women are satisfied with hysterectomy as a definitive form of treatment for their menstrual problems on follow up[10]. However in developing countries, most women would reject hysterectomy for the fear of surgery, loss of feminity and sexual rejection by their spouses.[1,7] Some prefer to have regular periods for as long as possible while others believe that when they reincarnate in future they will live without a uterus or suffer primary infertility.[1,7,11]

The indications for TAH include menstrual disorders, uterine fibroids, adenomyosis, chronic pelvic pain, endometriosis, cervical dysplasia, carcinoma in situ amongst others[1,4,8,12-16].

The incidence of TAH varies from country to country. In the United Kingdom, about 20% of the women must have undergone hysterectomy by the age fifty five years mainly for uterine fibroids and menstrual disorder[17,18]. It is estimated that by age 65, one third of women in United State would have had a hysterectomy.[8] Hysterectomy is the second most frequently performed surgical procedure, after caesarean section for women of reproductive age in the United Stated of America.[8,19] Approximately 600,000 hysterectomies are performed annually in the United States of America, and an estimated 20 million United States women have had a hysterectomy.[8,19] In Nigeria, it accounted for between 3.8% to 14% of all major gynaecological operations in University of Benin Teaching Hospital(UBTH), University of Ilorin Teaching Hospital(UITH), University College Hospital(UCH), Federal Medical Center (FMC) Gombe, Jos University Teaching Hospital (JUTH), Central Hospital, Benin, University of Maiduguri Teaching Hospital (UMTH) and University of Nigeria Teaching Hospital (UNTH) Enugu.[12-16,20-22]

The Central Hospital, Warri (CHW) is a secondary health facility in Delta State. It is the largest secondary health facility under the Delta State Hospital Management Board and has three Gynaecologists. It was recently granted accreditation for the post graduate training in Obstetrics and Gynaecology by both West African College of Surgeon and National Postgraduate Medical College of Nigeria. There is no study from the centre on TAH hence the need to review the cases done to find out the incidence, indications and associated morbidities and or mortalities.

MATERIALS AND METHODS

The medical records of patients who had TAH at the CHW over a five year period between 1st January 2007 and 31st December 2011 were reviewed. The gynaecology ward and operating theatre registers were used to identify the total number of gynaecological surgeries performed over the period and the hospital numbers of patients that had TAH. Case notes of patients who had TAH were retrieved from the medical record department and data extracted.

Information on age, parity, level of education, indication for TAH, type of oophorectomy (when done), type of incidental surgery, intra and post-operative complications were extracted from the casenotes into a data collection proforma.

The completed data collection proforma were collated, coded and inputted into the computer using the statistical package for social scientist (SPSS) computer software version 20.0. The data were analyzed using proportions and percentages and the results presented in narrative and tabular forms.

In this study packed cell volume less than 30% was regarded as anaemia and was corrected by blood transfusion or haematinics[23]. Some patients had more than one complications arising from the operation. Pyrexia was defined as fever $\geq 38^0$C on two consecutive occasions 24 hours after surgery.

RESULTS

During the five year period under review, there were 2,132 gynaecological surgeries and 248 of them were TAH, giving a TAH incidence of 11.6%. Twelve case notes could not be retrieved for analysis. Two hundred and thirty-six casenotes with complete information that were retrieved (giving a retrieval rate of 95.2%) formed the basis for further analysis.

Majority (67.0%) of the patients who had TAH were greater than or equal to 45 years. The mean age was however 44.78 ± 1.28 years. Also, majority of the patients who had TAH were grand multipara (47.9%) followed by women of parity 3 – 4(30.9%). Nulliparous women (0.8%) were the least and these were intra-operative decisions following myomectomy for huge uterine fibroid (Table I).

The most common indication for TAH was uterine fibroids which accounted for 66.1%. This was followed by cervical dysplasia (high grade squamous intraepithelial lesion in multipara), cervical neoplasm (invasive carcinoma diagnosed by biopsy), ovarian cysts/malignancy and endometrial hyperplasia/neoplasm in 8.9%, 6.8%, 6.4% and 5.5% respectively (Table II). One hundred and forty-two patients (60.2%) had oophorectomy. Of these, 128 (54.2%) had bilateral salpingo-oophorectomy while 14 (5.9%) had unilateral oophorectomy.

Table III shows the associated morbidities. Anaemia, wound sepsis/breakdown, urinary tract infection, prolonged hospital stay and post-operative pyrexia were the common morbidities.

TABLE I: Socio-Demographic Characteristics of Patients

AGE	**NO (%)**
25 – 29	1 (0.4)
30 – 34	3 (1.4)
35 – 39	18 (7.6)
40 – 44	56 (23.7)
⩾ 45	158 (67.0)
TOTAL	**236 (100)**
PARITY	**NO (%)**
0	2 (0.8)
1 – 2	48 (20.3)
3 – 4	73 (30.9)
5	113 (47.9)
TOTAL	**236 (100)**

TABLE II: Indication for TAH

INDICATIONS	NO (%)
UTERINE FIBROIDS	156 (66.1)
CERVICAL DYSPLASIA	21 (8.9)
CERVICAL NEOPLASM	16 (6.8)
ENDOMETRIAL NEOPLASM / HYPERPLASIA	13 (5.5)
DYSFUNCTIONAL UTERINE BLEEDING	8 (3.4)
OVARIAN CYSTS / MALIGNANCY	15 (6.4)
CHORIOCARCINOMA	2 (0.9)
POSTOPERATIVE HAEMORRHAGE FOLLOWING MYOMECTOMY	2 (0.9)
ADENOMYOSIS	1 (0.4)
OTHERS	2 (0.9)
TOTAL	**236**

TABLE III: Post-Operative Morbidities

COMPLICATION	NO (%)
WOUND SEPSIS / BREAKDOWN	24 (11.0)
URETERIC INJURY	1 (0.4)
ANAEMIA	27 (11.4)
PYREXIA	16 (6.8)
PROLONGED HOSPITAL STAY > 10 DAYS	21 (8.9)
ANAESTHETIC COMPICATION (Post spinal headache)	5(2.1)
URINARY TRACT INFECTION(UTI)	23 (9.8)
BLOOD LOSS (MLS) < 500	173 (73.3)
500 – 1000	45 (19.1)
> 1000	18 (7.6)

*Some patients had more than one morbidity.

DISCUSSION:

TAH accounted for 11.6% of gynaecological surgeries during the 5 year period of study. It is comparable to 10.8% reported by Abe in Central hospital, Benin and 13.8% reported by Ezenwafor in UITH, Ilorin[13,24]. It is however lower than over 30% reported in women 65 years and above in the United States and 20% in the United Kingdom[8,17,18]. The reasons for the higher figures in developed countries are because of their preference for small family size, their higher literacy level coupled with a diminished influence of culture and myths on health decisions[7,18].

The mean age was 44.78 ± 1.28 years and this bears a good relationship with 45.5 ± 6.7 reported by Okafor, 45.7 ± 11.1 by Bukar, 45.7 by Abe, 42.22 ± 8.36 by Omole-Ohonsi and 46.8 by Umeora[1,12,13,25,26]. At this age majority of the women would have completed their family size.

The mean parity in this study was 3.79 and this is lower than 5.5 and 5.84 reported by Bukar and Omole-Ohonsi respectively[12,25]. It is however, higher than reported figures by other researchers in developed countries[8,19,27]. The higher parity recorded in this study compared to that from developed countries is a reflection of the desires of women from developing countries to have a higher total fertility rate.

Two (0.8%) of the patients who had TAH were nulliparas. This is lower than 8% reported by Lambaudie in a developed country[28]. The surgery followed unsuccessful myomectomy due to the huge size of the uterus, distorted architecture and adhesions. The possibility of proceeding to a hysterectomy is a reality therefore, patients should have careful and detailed counseling before the planned myomectomy and double consent always obtained, as was done for these patients. This would reduce the possibility of developing post operative regret, major psychological trauma or major depressive episode and resort to litigation[29,30].

Our finding of uterine fibroid as the commonest indication for TAH is similar to findings by other workers both in developing and developed countries[1,8,12-16,19,22].

Majority of the patients 54.2% had TAH with bilateral salpingo-oophorectomy. This is higher than 13.3% reported by Okafor in a private specialist hospital in Nnewi[1]. While 5.9% had unilateral salpingo-oophorectomy and they were all below the age of 40 years. This was done to prevent premature surgical menopause which can be very distressing especially in developing counties where access to natural conjugated equine oestrogens for hormone replacement therapy is limited[31].

Fifty patients had postoperative complications giving a complication rate of 21.2%. This is lower than 33%, 45%, 26.9% and 44% reported by Daru, Geidam, Omole-Ohonsi and Verol respectively[14,15,24,32]. It was however, higher than 17.7% reported by Anzaku[33]. There was no associated mortality following TAH during the five year period similar to reports by Daru, Anzaku and Omole-Ohonsi[14,25,33]. This could be attributed to safe anaesthethic technique, careful surgical technique including achieving satisfactory haemostasis and inspection of the abdominal cavity after surgery to identify any bowel injury that may lead to fecal peritonitis, which is a major cause of mortality following a TAH.

CONCLUSION

TAH is a common surgery in this hospital, though the incidence is lower than that in developed countries. The indications for the operation are similar to those from other studies both within and outside the country. It is a relatively safe procedure and more women who require the procedure should be encouraged to do so.■

REFERENCES

1. Okafor CI, Nkanwa U, Nwankwo ME, Ezeigwu CO. A Review of Gynaecological Hysterectomies in a Private Specialist Hospital in Nigeria. Orient J. Med.2012; 24(3-4);53-57.
2. Dutta DC. Operative Gynaecology. *In*: DC Dutta's Text Book of Gynaecology. 5th Edition. Konar H. (Ed.) New Central Book Agency (P) Ltd. Chintamoni Das Lane Kolkota 2009; 552-590.
3. Muhammad Z, Ibrahim SA, Agu O. Total Abdominal Hysterectomy for benign Gynaecological tumours in Jos University Teaching Hospital, Jos, Plateau State. Bo Med J 2009.6(2); 11-19.
4. Baskett TF. Hysterectomy: Evolution and trends. Best Pract ResClinObstetGynacol. 2005;19 (3):295-305.
5. Dutta DC. Premalignant lesions. *In*: DC Dutta's Text Book of Gynaecology. 5th Edition. Konar H (Ed.) New Central Book Agency (P) Ltd. Chintamoni Das Lane Kockota 2009;309-320.
6. Onwuhafua PI, Oguntayo A, Adesiyun G, Obinache I, Akuse JT. Audit of Hysterectomies in a group of private Hospitals in Kaduna City, Northern Nigeria. Trop J Obstet Gynecol. 2005;22(1):16-20.
7. Arowojolu AO. Hysterectomy. In: Contemporary Obstetrics and Gynaecology for developing countries. Ed: F Okonofua, K Odunsi. Women's Health and Action Research Centre, Benin-City. 2003; 227-242.
8. Rock JA, Jones HW. Hysterectomy. *In*: Telinde's Operative Gynaecology. 10th Edition. Rock JA, Jones HW. (Eds.)Lippincot Williams and Wilkins 2008; 726-743.
9. Kilkku P, Gronross M. Pre-Operative electrocoagulation of the endocervical mucosa and later carcinoma of the cervical stump. ActaObstetGynaecol Scand. 1982;61:265 – 267
10. Sculpher MJ., Dwyer N, Byford S, Stiratt GM, Randomised trial comparing hysterectomy and transcervical endometrial resection: effect on health related quality of life and costs two years after surgery. Brit J Obstet Gynaecol 1996:103:142 – 149.
11. Okogbenin SA, Gharoro EP, Otoide VO, Okonta PI. Obstetric hysterectomy: Fifteen years' experience in a Nigerian tertiary centre. *J Obstet Gynecol.* 2003; 23(4):356-9.
12. Bukar M, Audu BM, YahayaUR. Hysterectomy for Benign Gynaecological Conditions at Gombe, North East Nigeria. Niger Med J. 2010;51(1):35-38.
13. Abe E, Omo-Aghoja L. A decade of Hysterectomy in a tertiary hospital in Urban Niger-Delta Region of Nigeria. Niger J Clin Pract. 2008;11(4):359-63.
14. Duru PH, Pam IC, Gamba IO, Ekwempu CC, Kigbu JH, Mutihur JT. Indications for abdominal hysterectomy at Jos University Teaching Hospital. Highland Med Research J.2008; 6(1-2):49-51
15. Geidam AD, Audu BM, Bukar M. Morbidity of total hysterectomy at the University of Maiduguri Teaching Hospital, Nigeria. Niger Med J.2010;19(4):467-70.
16 Onah HE, Ezegwui HV. Elective Abdominal Hysterectomy: indications and complications in Enugu, Eastern Nigeria. Global J Med. Sci.2002; 1(1):49-53
17 Jacoby VL, Autry A, Jacbson G. A Nationwide use of Laparoscopic hysterectomy compared with abdominal and vaginal approaches. Obstet. Gynecol. 2009;114(5):1041-1048.
18 Vessey MP, Villard – Mackintosh L, McPherson K, Coulter A, Yeates D. The epidemic of hysterectomy: findings in large cohort study. British J Obstet Gynaecol.1992; 99:402-407.
19 Hysterectomy :Women Reproductive Health; Department of health and human services, CDC.2011
20 Akagbosu FT. Audit of abdominal Hysterectomies at the University of Benin Teaching Hospital. J. Obstet Gynaecol.1996;16:406-408.
21 Oyawoye OA. Elective Hysterectomy at Ilorin, Nigeria- 4 year review. J Obstet Gynaecol.1998;18(1):72-5.
22 Roberts OA, Okunlola MA. Abdominal Hysterectomy for Benign Gynaecological conditions at Ibadan, Nigeria. Trop J. Obstet Gynaecol. 2001;18(1):19-23.

23 WHO. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011

24 Ezenwafor G, Jimoh G. Abdominal Hysterectomy at the University of Ilorin Teaching Hospital. Ilorin-A 5 –year Review. Niger Hosp Pract. 2007;1(2):45--49.

25 Omole-Ohonsi A, Ashimi OA. Non emergency hysterectomy: why aversion. Arch. Gynecol. Obstet. 2009;280(6):953-9.

26 Umeora OUJ, Onoh RC, Eze JN, Igberase GO. Abdominal versus Vaginal hysterectomy: Appraisal of indication and complication in a Nigerian Federal Medical Centre. Nepal J. Obstet Gynecol.2009;4(1):25-29.

27 Nezhat E, Nezhat F, Sitfen SL. Laparoscopic hysterectomy and bilateral salpingoophorectomy using multifire GIA surgical stapler. J. Gynecol surgery.1990; 6: 287 – 288.

28. Lambaudie E, Occeli B, Boukerrow M, Cepin G, Cosson M. Vaginal hysterectomy in nulliparous women: indication and limitation. J Gynecol Obstet Biol Reprod. 2001;30(4):325-30.

29. Saffah JD, Adanu RMK. Hysterectomies for uterine fibroid in nullipara at Korle Bu Teaching, Ghana. Trop. J. Obstet. Gynecol. 2006;22(2):125-8.

30. Samaila MOA, Adesiyun AG, Agunbiade OA, Mohammed-Duro A. Clinico-pathological assessment of hysterectomy in Zaria. Eur. J. Gen. Med. 2009;6(3):150-153

31. Ogedengbe OK. Uterine Fibroids. In: Contemporary Obstetrics and Gynaecology for developing countries. Ed F Okonufua and K Odunsi. Women's Health and Action Research Centre, Benin-City.2003; 202-213

32. Verol N, Healey M, Tang P, *et al*. A ten-year review of hysterectomy morbidity and mortality: can we change direction. Aust. NZ. J Obstet Gynecol.2001;41(3):295-301.

33. Anzaku AS. Total abdominal hysterectomy for benign gynaecological conditions at a University Teaching Hospital in Nigeria. Niger J Med.2012; 21(3):326-30.

Cite this article as: Okhionkpamwonyi O, & Okonta PI**.**
Total Abdominal Hysterectomy at the Central Hospital, Warri: A Five Year Review.
Bo Med J 2015; 12(1): 23 - 29. **Source of Support:** Nil, **Conflict of Interest:** None declared.