

Hysterectomies: Indications, Approaches and Prognosis in the Gynaecology and Obstetrics Department of the Hôpital National Ignace Deen, University Hospital Centre of Conakry, Guinea

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Abstract: Introduction: The aim of the study was to determine the indications, the different approaches and the prognosis of hysterectomies in the Gynaecology and Obstetrics Department of the Ignace Deen National Hospital, University Hospital Centre of Conakry. Methodology: This was a 5-year (January 2017 - December 2021) retrospective, longitudinal, descriptive study of all complete records of patients who had undergone a hysterectomy of patients who underwent hysterectomy in the department. The study variables were quantitative and qualitative, divided into sociodemographic, clinical, therapeutic and prognostic modalities. Results: The frequency of hysterectomies was 1.2% (n=208) of all surgical procedures (n=17456) and 20.2% of all gynaecological procedures (n=1028). The mean age of the patients was 49.8 ± 11.3 years, with extremes of 18 and 75 years. The 40 to 49 age group was the most represented (37.5%). These women were married (77.4%), not in education (68.3%), employed (63.5%) and referred (56.3%). Large multiparous women (37.5%) and non-menopausal women (57.2%) were most concerned. The indication for hysterectomy was dominated by uterine fibromyoma (45.67%), followed by genital prolapse (14.9%), endometrial cancer (13.9%) and cervical cancer (10.1%). The abdominal route was the most commonly used (85.09%). Total hysterectomy (91.82%) was the most common type of operation, combined with adnexectomy (37.02%). Morbidity was dominated by anaemia (13.94%) and we recorded 3 deaths (1.44%). Conclusion: Hysterectomy is a fairly frequent surgical procedure in our department and its indications are dominated by uterine fibromyoma, genital prolapse, endometrial cancer and cervical cancer. Improving the technical platform and mastering the various surgical techniques will considerably reduce the morbidity and mortality associated with this surgical procedure in our context.

Keywords: Hysterectomy, Indication, Approach, Prognosis, Ignace Deen, Conakry, Guinea

1. Introduction

Hysterectomy is a surgical procedure involving the removal of the uterus, taking either the body (subtotal hysterectomy), or in addition to the body, the neck of the organ (total hysterectomy). It may sometimes be combined with removal of neighbouring organs such as the fallopian tubes and ovaries (total hysterectomy with uni or bilateral adnexectomy), or the vaginal neck (colpohysterectomy) with lymphadenectomy [1].

The indications are gynaecological or obstetrical. Obstetric hysterectomy is often performed as an emergency procedure for haemostasis reasons. In gynaecology, the indications are dominated by benign or malignant tumours of the uterus [2, 3]. Hysterectomy remains the most frequently performed procedure in gynaecological surgery, whatever the cause, with over 45,000 operations per year worldwide. It can be performed abdominally (laparotomy, laparoscopy) or vaginally [4, 5]. It is often associated with an increased risk of

haemorrhage, thromboembolism, abdominal adhesions and urinary sequelae [6-8].

The aim of this study was to examine the practice of hysterectomy and determine the indications, approach and prognosis in our department.

2. Material and Methods

This was a longitudinal retrospective descriptive study over 5 years (January 2017 to December 2021) carried out in the Gynaecology and Obstetrics Department of the Ignace Deen National Hospital. All complete records of patients who underwent hysterectomy during the study period were included.

The study variables were quantitative and qualitative, broken down into sociodemographic, clinical, therapeutic and prognostic aspects.

Data were entered and analysed using Epi-info software (version 21). Quantitative variables were expressed as averages, while qualitative variables were expressed as proportions and percentages. Verbal informed consent was obtained from the participants, and confidentiality and anonymity were respected in data processing.

3. Results

During the 5 years, we collected 208 cases of hysterectomy representing 1.2% of all surgical procedures (n=17456) and 20.2% of gynaecological procedures (n=1028).

The mean age of the patients was 49.8 ± 11.3 years, with extremes of 18 and 75 years. The 40 to 49 age group was the most represented (37.5%). These women were married (77.4%), grand multiparous (37.5%), non-menopausal (57.2%), uneducated (68.3%) and referred (56.3%). Tables 1 and 2 summarise the characteristics of the population and the indications for hysterectomy, respectively.

The approach was abdominal in 85.1% of cases compared with 14.9% for the vaginal route. Table 3 shows the different types of hysterectomy performed.

Morbidity was dominated by anaemia (13.94%) and we recorded 3 deaths (1.44%) (Table 4). Haemorrhage was the main cause of death.

Table 1. Characteristics of the population.

Characteristics	Number (N=208)	Percentage
Management		
Nulligest	13	6.3
Primigeste	17	8.2
Paucigest	45	21.6
Multigeste	48	23.1
Large multigeste	85	40.9
Mean = 4.9 ± 2.9	Extremes: 0 et 12	
Parity		
Nulliparous	17	8.2
Primiparous	18	8.7
Pauparous	44	21.2
Multiparous	51	24.5
Large multiparous	78	37.5

Characteristics	Number (N=208)	Percentage
Mean = 4.7 ± 2.9	Extremes: 0 et 12	
Women in menopause		
No	119	57.2
Yes	89	42.8

Table 2. Breakdown of patients by indication.

Indication	Number	Percentage
Uterine fibromyoma	95	45,67
Genital prolapse	31	14,90
Endometrial cancer	29	13,94
Cervical cancer	21	10,10
Ovarian tumour	15	7,21
Polype accouché par le col	9	4,32
Rupture uterine	8	3,84
Total	208	100

Table 3. Different Types Of hysterectomy.

Type of hysterectomy	Number	Percentage
Total hysterectomy	191	92
Colpohysterectomy	12	6
Sub-total hysterectomy	5	2
Total	208	100

Table 4. Breakdown of post-operative care.

Operating sequences	Number	Percentage
Simple	138	66.34
Anaemia	29	13.94
Haemorrhage	28	13.46
Surgical site infection	6	2.88
Deaths	3	1.44
Intestinal fistulas	2	0.96
Eventration	2	0.96
Total	208	100

4. Discussion

The main difficulties and limitations in our study concerned the poor completion and archiving of certain medical records, the unavailability of histological examination results and the absence of data on medium- and long-term follow-up.

During the study period, out of a total of 17,456 procedures (gynaecological and obstetric), 208 hysterectomies were performed, representing a frequency of 1.2%. Our hysterectomy rate is higher than that reported by Baldé IS et al and Keita M. et al [8, 5] who found 4.4% and 2.5% respectively. This difference could be explained by the non-compliance of the samples studied.

The 40-49 age group was the most represented, with an average age of 49.8 ± 11.3 years and extremes of 18 and 75 years. This mean age is similar to that found by Belley PE et al [9] in Cameroon in 2009, i. e. 47 ± 6.7 years.

This result may be justified by the fact that the 40-49 age group is included in the pre-menopause and is the period most affected by hysterectomies, with high frequencies of uterine fibroids, prolapses and menometrorrhagia.

In this study, married women predominated with a frequency of 77.4%; the same observation was made by Baldé IS et al [8] in Conakry from 2011 to 2013, who reported 75.7%

married women. This is in line with the results of the 2018 Guinea Demographic and Health Survey (DHS) [10].

It emerges from this study that women without schooling were the most represented with a frequency of 68.3%. This result corroborates that of Sy T *et al* [11]. This result could be justified by the low school enrolment rate of women in Guinea [10].

In the series, housewives were the most numerous. This rate is superposable with that of Sy T *et al* [11] in their study of obstetric hysterectomy at the Donka maternity hospital in Conakry from 2013 to 2016, who had noted a predominance of housewives. They were often referred from other health facilities. In Madagascar, Randriambelomana JA *et al* [12] noted that out of 26 patients, 17 were evacuated. This could be justified by the fact that our department is the last resort in the health pyramid.

This study showed that the average parity was 4.7 ± 2.9 with extremes of 0 and 12, whereas Hounkpatin BIB *et al* [13] reported an average parity of 5.5 with extremes of 1 and 10 in their study at the Hospital de la Mère et de l'Enfant Lagune de Cotonou (HOMEL) in Benin, from 2005 to 2009. This could be explained by the fragility and laxity of the uterine muscle, making conservative measures impossible in multiparous women.

Uterine fibromyoma was the most common indication for surgery in this study (45.7%) followed by genital prolapse (14.9%). This result is similar to that found by Baldé IS *et al* [9] in Conakry in 2014, who reported respective frequencies of 39.6 and 22.2%.

This high rate of fibromyoma could be explained by the high frequency of uterine fibromyoma in black women.

The abdominal route was the most commonly used (85.1%), in contrast to the data from Pithr S *et al* in Gabon, who noted a rate of 61% of hysterectomies via the vaginal route in a study carried out from 2006 to 2010 [14]. The low rate of vaginal hysterectomy in our series could be explained by the inadequacy of the technical facilities, but also by the small number of surgeons qualified to perform this type of operation. In almost all cases, we performed a total hysterectomy (91.8%). This rate compares favourably with data from Baldé IS *et al* [9] in Conakry from 2011 to 2013, who found a rate of 95%.

Morbidity was dominated by anaemia (13.94%) followed by haemorrhage (13.46%). In Mali, Keita M *et al* [5] in their study on the prevalence and consequences of hysterectomies reported that complications were dominated by haemorrhage (6.11%) followed by anaemia (7.5%) and Fané Seydou *et al* declare that the postsurgery complications were also dominated by haemorrhage (76.8%) followed by cardiac attack (0.5%), anaemia (59.6%), infection (4.4%) and 1% of thromboembolic disease [15]. Mortality nevertheless remained low in our series with (1.44%).

5. Conclusion

Hysterectomy remains a widely performed operation and uterine fibromyoma is its main indication in our context. The

abdominal route was the most commonly used. Anaemia due to haemorrhage is the major complication.

Improvement of the technical platform through the introduction and training of surgeons in minimally invasive hysterectomy techniques is necessary for a better prognosis.

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