

## Is Double Consent For Abdominal Myomectomy Still Necessary?

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### Abstract

**Background:** Myomectomy is one of the most frequently performed Gynaecological surgeries worldwide among gynaecologist with attendant risk of complications including conversion to hysterectomy

**Aim & Objective:** The study aims at determining the rate of conversion to hysterectomy among those with intended abdominal myomectomy, the associated mortality rate and the blood loss pattern

**Material and Method of study:** It was a descriptive, retrospective, five year study of all cases of uterine fibroid admitted primarily for abdominal myomectomy in the gynaecology wards of two tertiary hospitals.

**Results:** One hundred and forty one clients scheduled for myomectomies were retrieved in the 2 within the study period. Socio-demographic characteristics revealed that the modal age at presentation was 36-40years and the majority 65.2% (92/141) were nulliparous patients with 44.5% (45/101) been overweight. Most of the clients presented with 16-20 weeks uterine size mass (49.6%, 70/141) and post operative myoma weight of less than 1kg in 72.8% (75/103) and most of the surgeries were completed in 2-3hours. A little over half, 58.6% (82/140) of the surgeries were done by Specialist (Gynaecologist) and the rest by Senior Registrars and the blood loss estimation was comparable in the 2 cadres (p value 0.782 The blood loss was less than 500mL in 76.3% of the cases, the mean blood loss was 491ml (SD 439.6ml) and the mean pint of blood transfused was 0.54 (less than a unit). About two third (91/122) of the cases did not require blood transfusion. There was no mortality in the series and there was zero conversion to hysterectomy

**Conclusion:** There was no case of conversion to hysterectomy in this study which could be as a result of increasing surgical skills and good haemostatic control. Taking double consent for cases going for myomectomy may therefore not be necessary and should not be a norm.

**Keywords:** abdominal myomectomies, conversion surgery, double consent

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### I. Introduction

Myomectomy is one of the most frequently performed Gynaecological surgeries worldwide among gynaecologist. It is often said that the gynecologist operation list is not complete without a myomectomy. There are many approaches to the removal of fibroids and this largely depends on the available expertise and equipment. In Nigeria with a high incidence of uterine fibroids, most myomectomies are done through abdominal route though in few centers, endoscopic removal either by laparoscopy or hysteroscopy are done depending on the location of the uterine fibroid. Uterine artery embolisation and Magnetic resonance guided high intensity focused Ultrasound are still alien in this clime but are recognized treatment modalities with resounding success<sup>1,2,3</sup>. A factor that have not favoured the endoscopic removal of uterine myomas is the multiple nature; fibroids in blacks are characterised by early onset; large size due to late presentation and faster growth rate<sup>2,4</sup>. Other factors include high cost of surgery and the fact that the health care system in Nigeria is fee for service with less than 10% of the population on National health insurance scheme.<sup>5</sup>

Uterine fibroids are slow growing tumours that affect more blacks than Caucasians<sup>2,4</sup>. It is said to occur in 50-70% of women by the age 50years with majority of them been asymptomatic<sup>6,7</sup>. The high prevalence has made some authors to consider it a disservice to call leiomyomata a pathological entity but better a public health issue<sup>2,4</sup>. The cure for a uterine fibroid is total removal of the uterus<sup>6</sup> because of the high risk of recurrence which ranges from 2 -53% in 5 years with higher rates of recurrence following laparoscopic myomectomy<sup>8,9,10</sup>. For a surgery that is therefore common, it's also expected that complications should be very common. Complications apart from anaesthetic complications include haemorrhage, damage to the adjoining structures like ovary, tubes, bladder, ureter and the rectum though the complication rates are comparable to hysterectomies if not less<sup>13</sup>. Over the years modifications and improvements in abdominal myomectomy techniques has made blood loss very minimal and have improved on the safety records of abdominal myomectomies. Methods like use of tourniquet, vasopressin, misoprostol, gonadotrophin releasing analogues have drastically reduced the blood loss<sup>2,13</sup>. Over the years, double consent for myomectomy has been the norm with inappropriate justifications. The reasons are more of historical or myths than scientific. In the early days of myomectomies since 1845 and up to early part of 20th century, mortality was as high as 40% compared to 9% in Hysterectomy<sup>13</sup>. However with improvement in skills, anaesthesia, blood transfusion and appropriate pre operative evaluations and preparations, good haemostasis, and better surgical techniques, mortality following

surgery has decreased to the barest minimum and with mild complications<sup>14,15,16</sup>. Previous studies have shown a risk of conversion to hysterectomy hence need for double consent. The conversion was necessitated by inability to reconstruct the myoma beds after removal and due to excessive blood loss. This was found in less than 2 percents [0.9% (1/128)-1.94%(2/103)] in studies done over 2 decades ago<sup>1,17,18</sup> The study aims at determining the rate of conversion to hysterectomy among those with intended abdominal myomectomy, the associated mortality rate and the blood loss pattern.

## II. Methodology

This was a two-centre study involving data from Olabisi Onabanjo University Teaching Hospital Sagamu and Federal Medical centre Abeokuta all in Ogun state, Nigeria. The two institutions are tertiary levels and are involved in training of Post graduate Resident Doctors for the West African Postgraduate college. It was a descriptive, retrospective study of all cases of uterine fibroid admitted for myomectomy in the gynaecology wards of the hospitals from 2011 January to 2015 December (5 years). Cases were identified from information obtained from the wards, operating theatre and the health Information management offices. Data extracted include the parity of the patients, age, size of fibroid in weeks, indication for removal, method of removal, duration of surgery, weight of the fibroid, level of personnel that did the surgery, blood loss estimation, packed cell volume, co-morbidities with the uterine fibroid, amount of blood transfused, weight of the woman, height, Body Mass Index, conversion to hysterectomy and mortality. Data was collected by resident Doctors from the Obstetrics and Gynaecology department of the 2 institutions and the data obtained were analysed using SPSS version 20 and Frequency tables were used to present the descriptive statistics, variables were crosstabulated and associations between the relevant variables were tested with Chi square statistic. Independent T test and paired T test were used for the comparison of data. Level of significance was taken as  $p < 0.05$

## III. Results

Records of One hundred and forty one clients scheduled for myomectomies were retrieved in the 2 hospitals within the study period with 56.7% from FMC. The 2 groups were compared for symmetry using independent t-test for nominal variables like age, BMI, blood loss and found to be similar. Socio-demographic characteristics revealed that the modal age at presentation was 36-40years and the majority 65.2% (92/141) were nulliparous patients with 44.5% (45/101) been overweight (Table 1). Most of the clients presented with 16-20 weeks size mass (49.6%, 70/141) and post operative myoma weight of less than 1kg in 72.8% (75/103) and most of the surgeries were completed in 2-3hours (Table 2). A little over half, 58.6% (82/140) of the surgeries were done by Specialist (Gynaecologist) and the rest by Senior Registrars and the blood loss estimation was comparable in the 2 cadres ( $p$  value 0.782). In the same vein, the estimated blood loss was not affected by the Body Mass Index or the size of the fibroid ( $P > 0.05$ ) and the average BMI was 26.2kg/m<sup>2</sup>.

Table 3 shows that the blood loss was less than 500mL in 76.3% of the cases, the mean blood loss was 491ml (SD 439.6ml) and the mean pint of blood transfused was 0.54 (less than a unit). The average pre and post operative PCV was 32.3% (SD±3.3) and 29.3% (±3.9) respectively and using the paired T test, the mean difference between the pre and post operative PCV was 3.000 and this was statistically significant ( $P=0.000$ )

The pints of blood transfused ranged between 0-5 though 64.5% (91/122) of the cases did not require blood transfusion. Menorrhagia was the major presenting symptom in 73.8% (104/141) of the cases. Spinal anaesthesia was used in 90% of the cases. There was no mortality in the series and there was zero conversion to hysterectomy in the 141 cases operated.

**Table 1: Socio-Demographic Characteristics Of The Respondents**

AGE (years)	FREQUENCY	PERCENTAGE
20-25	2	1.4
26-30	21	14.9
31-35	41	29.1
36-40	48	34.0
41-45	22	15.6
>45	7	5.0
	141	100
<b>PARITY</b>		
0	92	65.2
1	28	19.9
2	8	5.7
3	10	7.1
4	3	2.1
	141	100
<b>BMI (kg/m<sup>2</sup>)</b>		
<19.9	15	14.9
20-24.9	23	22.8
25-29.5	45	44.5
30-34.5	14	13.9
>35	4	3.9
Total	101	100

40 of the respondents had no complete data for BMI

**Table 2: Characteristics Of The Fibroid**

size of fibroid (weeks)	Frequency	Percentage
(not palpable)	4	2.8
<15	10	7.1
16-20	70	49.6
21-25	29	20.6
26-30	19	13.5
>30	9	6.4
Total	141	100.0
Weight of the fibroid		
Kg		
<0.5	42	40.8
0.5-1	33	32.0
1.1-1.5	15	14.6
1.6-2.0	3	2.9
2.1-2.5	4	3.9
2.6-3.0	3	2.9
3.1-3.5	2	1.9
3.6-4.0	1	1.0
Total	103	100.0
Duration of surgery		
Hours		
1-2.00	57	40.4
2.01-3.00	67	47.5
3.01-4.00	12	8.5
4.01-5	3	2.1
>5.0	2	1.4
Total	141	100

**TABLE 3: Blood loss by Anaesthetist estimation**

milliliter	FREQUENCY	PERCENTAGE
0-500	103	76.3
501-1000	25	18.5
1001-1500	2	1.5
1501-2000	3	2.2
>2000	2	1.5
	135	100

#### IV. Discussion

Uterine myomas are a common presentation in the Gynaecological outpatient clinics all over the world but more in the tropics where it is said to be a public health issue. Improvements in haemostatic methods and anaesthesia also play an important part in the safety and reduction in mortality and morbidity. Abdominal myomectomies are still predominantly done in the developing world with zero mortalities as was also recorded in this case<sup>19,20,21</sup>. This can also be due to proper case selection without conversion to hysterectomy. There was no conversion to hysterectomy in this study in spite of the size as similarly reported by West et al in their series<sup>23</sup>. This is contrary to what was obtained about 2 decades ago and conversion surgeries can therefore be regarded as a victim of the passage of time.<sup>1,17,18</sup>. Conservatory uterine surgeries for myomas are usually done to preserve fertility and this explains why 85% of the clients were para 0-1 in this study. Sangha et al has reported a pregnancy rate of one in four in a series irrespective of fertility desire pre operatively. This is irrespective of route of removal, either by abdominal myomectomy or robotic method with better result in the younger age group<sup>22</sup>, however some multiparous women opt for conservatory surgery due to remarriage or because of some Myths surrounding dying without a womb but inadvertent removal of the uterus do occur in some instances Fibroid in the blacks are aggressive, multiple and has a high rate of recurrence and Late presentations is a compounding factor<sup>2,4</sup>. The peak incidence was at age 36-40years which is higher to what was obtained in Enugu (Nigeria)(31-35years). Low economic power, increasing educational levels and carrier has been adduced as some of the reason for women having delay in seeking fertility care and is considered a risky behaviour<sup>24,25</sup>. The late presentation in this predominantly low parous (85%), overweight (44%) population is associated with the large size of the uterine fibroid but this factors did not correlate with estimated blood loss which was averagely 515mls. Blood transfusion was therefore not necessary in majority of the cases and mean blood transfused was less than a unit. This findings are similar to what was obtained in other studies<sup>1,18</sup>. Blood loss estimation by anaesthetist have been found to be more accurate than Gynaecologist estimation hence was used in this study<sup>26</sup>. This correlate with average change in PCV of 3%. The use of efficient haemostatic techniques to minimize blood loss, and increasing surgical dexterity with spinal anaesthesia have immense contributions to the reduction in blood loss, lack of conversion to hysterectomy and no mortality. The presence of high level personnel is therefore critical as seen in this study where the surgeries were done by specialist and senior registrars.

## V. Conclusion

There was no case of conversion to hysterectomy in this study which could be as a result of increasing surgical skills and good haemostatic control. Taking double consent for cases going for myomectomy may therefore not be necessary and should not be a norm. The study is limited by the small size and a larger sample with more centers will be needed to validate this assertion. Also the lack of cases of conversion to hysterectomy in this series prevent us from having a population to compare with and making inference.

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