# Original Article

## **Indications of Abdominal Hysterectomy**

Objective: To study the indications of abdominal hysterectomy.

Study Design: Retrospective review.

Place and Duration of Study: Community Medicine Department of Wah Medical College and Pakistan Ordnance Factory' Hospital Wah Cantt, for three years and four months, from 1st September 2008 to 9th January 2012.

Materials and Methods: Retrospective study of the record of 498 operated cases for abdominal hysterectomy was done. Data was analyzed with the help of SPSS version 17. All operated cases of abdominal hysterectomy were included and a case of incomplete depiction was excluded.

Results: Out of 497cases of abdominal hysterectomy, 438 (88.13%) undergone the surgery because of Dysfunctional Uterine Bleeding (DUB) and 40 (8.05%) because of Leiomyoma. Other indications were obstetric complications 5(1%), Pelvic Inflammatory Diseases 3 (0.6%). Two cases (0.4%) of each; Mentally retarded, Ovarian Cyst, Ovarian Mass and Malignancy(CA cervix and CA ovary)were also subjected to hysterectomy.

Conclusion: In this study most of the cases were of Dysfunctional Uterine Bleeding (DUB). Next to it was Leiomyoma (8.05%). This large proportion of DUB (88.13%) is much higher than the proportion of this indication in quoted studies. This fact entails into the recommendation of annual audit or review of the indications of abdominal hysterectomy on periodic basis.

Keywords: Abdominal hysterectomy, indications, Dysfunctional Uterine Bleeding.

Aurangzeb\*
Hafsa Islam\*\*
Iram Ishfaq\*\*
Rabia Bibi\*\*
Saima Bashi\*\*
Samra Khan \*\*
Sana Arshad\*\*
Sarah Shabbir\*\*

\* Assistant Professor Community Medicine Wah Medical College, Wah Cantt \*\*Medical Students Wah Medical College, Wah Cantt

#### Address for Correspondence

Lt. Col. (R)Dr. Aurangzeb
Assistant Professor
Community Medicine
Wah Medical College, Wah Cantt.
Email:dr.aurangzaib.godal@gmail.com

## Introduction

Throughout the world hysterectomy is the most common major gynaecological operation. Each year in the USA, more than 550,000 women undergo hysterectomy. Approximately 100,000 hysterectomies are performed in the United Kingdom each year. <sup>1-3</sup>

Historically the first vaginal hysterectomy was performed by Conard Langenback in 1813, and the first subtotal abdominal hysterectomy by Walter Burnham in 1853,the first elective abdominal hysterectomy by Clay and Koebele in 1863,and the first laparoscopic hysterectomy by Harry Reich in 1982. 4-6

For many years women did not have any choice when it comes to the management of leiomyoma, dysfunctional uterine bleeding or other gynaecological problems. Hysterectomy was the treatment of choice, particularly if the woman was not interested in future pregnancies. There are now several surgical and non surgical options available to women besides hysterectomy.<sup>7</sup>

It is performed not only for malignant diseases but also for many benign conditions such as leiomyoma, endometrial hyperplasia, adenomyosis, pelvic inflammatory disease (PID), uterine prolapse, dysfunctional uterine bleeding and cervical intraepithelial neoplasia. Most of the indications are for benign pelvic pathology, which though not life threatening but have a profound effect on the quality of life.<sup>4</sup>

Though menorrhagia is the most common indication, in most common cases it is not due to any organic pelvic pathology and amenable to newer and modern alternative managments, which is responsible for the fall in rate of hysterectomy worldwide. For developing countries it is still the surgery which is performed by most of the cases of benign pelvic pathology. In the last decades, newer indications are constantly added to the list and at the same time there are emergence of newer treatment modalities, techniques and alternatives.

Uterus is not an organ to be discarded lightly, even for the women who doesn't wish to have more children. Uterus is strongly associated with feminity. Some women complain a sense of loss after hysterectomy. For woman who desire children, alternatives to hysterectomy is always appealing. The indications of hysterectomy in any case must therefore be completely and clearly defined and should be one for which more conservative treatment is not likely to be efficacious. Studies have revealed that hysterectomies are often recommended for inappropriate indications. The most recommendations for hysterectomies common adequate considered inappropriate are lack of

diagnostic evaluation and failure to try alternative treatment before hysterectomy. 7-10

Although hysterectomy is the most common gynecologic operation, the best technique for reducing adverse postoperative effects has not been clearly determined. <sup>11</sup> Therefore this present study was planned to find out the most common indications for hysterectomy in our tertiary care hospital. So that it could help in planning the prognosis of the women with various uterine complications to go for hysterectomy or any other alternative treatment.

### **Materials and Methods**

This study was done in the department of Community Medicine of Wah Medical College and Pakistan Ordnance Factory' Hospital, Wah Cantt. Approval of the study was taken from hospital ethical committee. The study period extends from 1<sup>st</sup> September 2008 to 9<sup>th</sup> January 2012. Sampling technique used was convenience sampling. Cases operated for abdominal hysterectomy during the mentioned period were studied retrospectively. An odd case of unclear depiction was excluded. Data collected were first subjected to "Tally method" and then analyzed and presented with the help of SPSS version 17.

### Results

During the study period 497 women were subjected to abdominal hysterectomy and their indications for the surgery were recorded and analyzed. Break down of indications are shown in Table 1. According to the results 438 (88.13%) women out of 497 faced abdominal hysterectomy because of Dysfunctional Uterine Bleeding (DUB), 40 (8.05%) women undergone abdominal hysterectomy because they were having Leiomyoma uterus and 5 (1%) hysterectomies were done because of obstetric problems. These problems were retained placenta, intra-uterine death (IUD), ectopic pregnancy and postpartum haemorrhage (PPH). Three (0.6%) women were subjected to the surgery because they were suffering from Pelvic Inflammatory Disease (PID). Three (0.6%) cases of ovarian cyst / ovarian mass also underwent abdominal hysterectomy. Two (0.4%) abdominal hysterectomies were performed on mentally retarded girls to facilitate them and their parents. Out of 497 cases of abdominal hysterectomies only 2 (0.4%) cases were suffering from malignancies i.e. one from cervical cancer and other from ovarian cancer. Distribution of non malignant & malignant cases is shown in Figure 1.

One case (0.2%) of utero-vaginal prolapse was also subjected to abdominal hysterectomy. One (0.2%) abdominal hysterectomy was carried out to relieve the woman from post-menopausal bleeding. Rest of two abdominal hysterectomies; one each (0.2%) for two

different pathologies of female reproductive organs were carried out, each for Ms Dystrophy, atonic uterus.

Table I: Indications for Hysterectomy (n=497)

S. No	Indication	No	%age
1	Dysfunctional Uterine Bleeding	438	88.0
2	Fibroid	40	8.0
3	Obstetric Complications	5	1
4	Pelvic Inflammatory Diseases	3	0.6
5	Ovarian Cyst /mass	3	0.6
6	Mentally retarded	2	0.4
7	Malignancy ( CA Ovary + Cervix)	2	0.4
8	Others	4	0.8

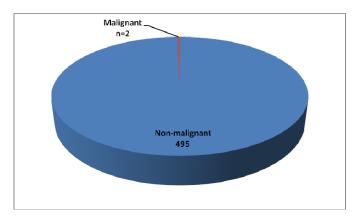


Figure 1: Distribution of malignant and non malignant cases (n=497)

In this study 99% of abdominal hysterectomies were because of gynaecological conditions and only 1% because of obstetrical reasons. 495 (99.6%) abdominal hysterectomies were performed for benign causes and only 2 (0.4%) were because of malignant reasons.

## **Discussion**

It is well known fact that 70-80% of hysterectomies done for benign conditions are through abdominal route. Vaginal hysterectomies are usually performed for prolapse cases. Literature shows that in this study, most common indication for abdominal hysterectomy is fibroid uterus (32%) followed by chronic cervicitis (32%) and DUB (20%). The commonest indication for vaginal hysterectomy in non-descent cases is DUB (48%) followed by fibroid (32%). <sup>12</sup>

In this study the indication for majority (88.13%) cases of abdominal hysterectomy is dysfunctional uterine bleeding. While in a study done in Allied Hospital

Faisalabad<sup>1</sup>, the most common indication for hysterectomy was DUB accounting for 43.3% of patients. It was 5.7% in a study conducted in Singapore <sup>13</sup>, and 42.5% in study <sup>14</sup> conducted in a hospital based study Karachi in 2008, out of which 14.8% also had leiomyoma. It was 12% in study conducted in Muhammad Medical College, Mirpurkhas. <sup>15</sup>

In the study the next common indication for hysterectomy was leiomyoma i.e. 8.05%.However in study carried out in Allied Hospital Faisalabad <sup>1</sup> it was 26.7% <sup>4</sup>and 54.5% in study done in Singapore. <sup>13</sup> Leiomyoma was the commonest (59.2%) indication in study done in Lyari General Hospital Karachi<sup>14</sup>.It was reported 25.8% from Kingdom of Saudi Arabia <sup>16</sup>,78% from United States of America <sup>17</sup> and 48% in Nigeria <sup>18</sup>. However it is same (8%) in Swedan1. <sup>19</sup> It was reported 33 % from Mirpurkhas. <sup>15</sup>

In present study, ovarian cyst/pelvic mass was the indication in 0.4% cases. This percentage is much less than the study done in Allied Hospital Faisalabad in which it stands 5%. It was 11.11%

Indication of PPH is 0.2% in this study while it is 0.6% in a study carried out in Kandang Kerhan Hospital, Singapore. <sup>13</sup> PID stands at 0.6% as indication of abdominal hysterectomy in this study but it was 2.8% in study done in Singapore. <sup>13</sup> Uterine prolapse was indicated in 0.2% of abdominal hysterectomy, the same is(4.0%) in study carried out in Singapore. <sup>13</sup>

In our study indications in 99.6% of cases were benign diseases .It is 93% in study done by Shakira Parveen and Suhhana Tayyah. <sup>12</sup> It is 91.7% in United States of America. <sup>20</sup>

## Conclusion

Proportion of hysterectomies carried out because of DUB in this study is unusually high and this high rate is not having any comparison with any study either quoted from within Pakistan or from other countries. It warrants a serious review of the indications entailing into concrete recommendation such as annual audit or putting forward some other more constructive suggestions.

**CONFLICT OF INTEREST:** It is disclosed here that there is no conflict of interest with this study.

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