An audit of hysterectomies at Aswan University hospital in upper Egypt

Abstract

Introduction: Hysterectomy is the removal of uterus and it is the commonest major surgical procedure performed in gynaecology. It is the 2nd most common operative procedure performed on women in world after lower segment caesarean section (LSCS). Its incidence varies between 6.1 to 8.6 per 1000 women of all ages.

Like all other major surgical procedures it is not free of complications. There may be intra or post-operative complications. Rates of various complications vary from 0.05% to 43%.

Methods: This study involved all women who underwent hysterectomy at Department of Obstetrics and Gynaecology, Aswan University, Aswan, Egypt. This was a retrospective study and included all cases of hysterectomy from 1st Jan 2017 to 31st Dec 2017. Records from register and case sheets of patients were collected.

Results: A total of hysterectomies 53 were performed in the study period. Out of these 7 (13.2%) were obstetrical and 46 (86.79%) were gynaecological. Out of 46 gynaecological hysterectomies were 5 (10.86%) were vaginal hysterectomy and 41 (89.13%) were abdominal hysterectomy. Rupture uterus was most common cause represents 5 cases (71.42%) followed by abnormal placentation 2 cases (28.57%) indications for abdominal hysterectomy were 27 cases (65.85%) underwent hysterectomy as a consequence of abnormal uterine bleeding (AUB), and among them the most common was leiomyoma (fibroid uterus) 18 (66.6%). and postmenopausal bleeding represents 14 cases (34.14%).

Conclusion: Hysterectomy is a major surgery and it may be associated with complications during and after surgery. Therefore, the indication for hysterectomy should be carefully evaluated. Hence reporting of all hysterectomies should be made mandatory so that the audit results can be used for improvement in the quality of health services.

INTRODUCTION

Hysterectomy is the removal of uterus and it is the commonest major surgical procedure performed in gynaecology. (1)

Hysterectomy can be done by abdominal or vaginal route and with help of laparoscopy. Hysterectomy is the effective treatment option for many conditions like fibroid, abnormal uterine bleeding (AUB), endometriosis, adenomyosis, uterine prolapse (UP), pelvic inflammatory disease (PID) and in some cases of malignancies of genital tract (2)
It is the 2nd most common operative procedure performed on women in world after lower segment caesarean section (LSCS). Its incidence varies between 6.1 to 8.6 per 1000 women. (3)

In obstetrics it becomes a lifesaving procedure when all other methods fail to control post-partum haemorrhage (PPH). (4)

Like all other major surgical procedures it is not free of complications. There may be intra or post-operative complications. Rates of various complications vary from 0.05% to 43%. (5)

The complications may include risk of iatrogenic premature menopause, surgical and anaesthetic complications. (6)

The aim of this audit is to evaluate the various types, indications and routes associated with all hysterectomies performed at tertiary care centre in upper Egypt at Aswan University hospital.

**METHODS**

This study involved all women who underwent hysterectomy at Department of Obstetrics and Gynaecology Aswan University, Aswan, Egypt.

This was a retrospective study and included all cases of hysterectomy from 1st Jan 2017 to 31st Dec 2017. Records from register and case sheets of patients were collected.

Case records were collected from medical records department. Patients were identified by medical record tracking.

There were no exclusion criteria. Patients were identified by medical record tracking. Data collected regarding age, parity, socioeconomic status, clinical profile, chief complaints, major medical history, any previous operative history, indications, routes of hysterectomy, duration of hospital stay.

Baseline investigations including complete blood count, blood sugar, urine complete examination, ECG, X-ray chest, ultrasonogram, viral markers were noted.

All cases of abdominal hysterectomies (AH) and vaginal hysterectomies (VH) were included.

- (AH) included total abdominal hysterectomy (TAH), total abdominal hysterectomy with unilateral salpingo-oophorectomy (TAH, USO), total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH, BSO) and hysterectomy done as a part of staging laparotomy.
- (VH) included vaginal hysterectomy with pelvic floor repair (VH with PFR) for uterovaginal prolapse.
- Vaginal hysterectomy without pelvic floor repair (VH) and non-descent (VD) done for indication other than uterovaginal prolapse (NDVH).
- Caesarean hysterectomy (CSH).

After collecting data various indications were reviewed. Special emphasis was given on indication of hysterectomy < 35 years of age. Maximum patients were discharged between 3rd and 7th post-operative day. The data was analyzed using percentages.

**RESULTS**

A total of hysterectomies 53 were performed in the study period. Out of these 7 (13.2%) were obstetrical and 46 (86.79%) were gynaecological. Out of 46 gynaecologically hysterectomies were 5 (10.86%) were vaginal hysterectomy and 41 (89.13%) were abdominal hysterectomy.

About Caesarean hysterectomy subjects were between age 25-34 years. As regard indications for Caesarean hysterectomy, rupture uterus was most common cause represents 5 cases (71.42%) followed by abnormal placentation 2 cases (28.57%).

As regard gynaecologically hysterectomy subjects were between age 42-70 years and the most common type of hysterectomy is abdominal hysterectomy and the indications for abdominal hysterectomy were 27 cases (65.85%) underwent hysterectomy as a consequence of abnormal uterine bleeding (AUB), and among them the most common was leiomyoma (fibroid uterus) 18 (66.6%) and postmenopausal bleeding represents 14 cases (34.14%).

About the type of operation of abdominal hysterectomy, the most common were total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH, BSO) 35 cases (85.36%) then total abdominal hysterectomy with unilateral salpingooophorectomy (TAH, USO) 6 cases (14.63%), and vaginal hysterectomy included vaginal hysterectomy with pelvic floor repair (VH with PFR) for
uterovaginal prolapse 5 Cases of total number of hysterectomies (10.86%).

Table 1: showing different types of hysterectomies.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caesarean hysterectomy</td>
<td>7</td>
<td>13.2% of total number of hysterectomy</td>
</tr>
<tr>
<td>Vaginal hysterectomy</td>
<td>5</td>
<td>10.86%</td>
</tr>
<tr>
<td>Abdominal hysterectomy</td>
<td>41</td>
<td>89.13%</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: showing age wise distribution of subjects who had Obstetrical hysterectomy.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-29</td>
<td>3</td>
<td>42.85%</td>
</tr>
<tr>
<td>30-34</td>
<td>4</td>
<td>57.14%</td>
</tr>
</tbody>
</table>

Table 3: showing indications of Obstetrical hysterectomy.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rupture uterus</td>
<td>5</td>
<td>71.42%</td>
</tr>
<tr>
<td>Abnormal placentaion</td>
<td>2</td>
<td>28.57%</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4: showing indications of abdominal hysterectomy.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal uterine bleeding</td>
<td>27</td>
<td>65.85%</td>
</tr>
<tr>
<td>Fibroid uterus</td>
<td>18</td>
<td>66.6% of cases of AUB</td>
</tr>
<tr>
<td>Postmenopausal bleeding</td>
<td>14</td>
<td>34.14%</td>
</tr>
</tbody>
</table>

Table 5: showing types of abdominal hysterectomy.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAH, BSO</td>
<td>35</td>
<td>85.36%</td>
</tr>
<tr>
<td>TAH, USO</td>
<td>6</td>
<td>14.63%</td>
</tr>
</tbody>
</table>

DISCUSSION.
Hysterectomy is the surgical removal of uterus. Hysterectomy is the most common operation performed by the gynecologist, and it is the 2nd most common major surgical procedure after (CS) (7) (8).
Hysterectomy can be done using any of a variety of techniques and approaches, including abdominal, vaginal, laparoscopic or robotic surgery (9).
Factors that may influence the route of hysterectomy for benign causes include the size of the vagina, the size and shape of the uterus; accessibility to the uterus; extent of extra uterine disease; the need for concurrent procedures; surgeon training and experience; available hospital technology, devices and support; emergency or scheduled cases; and preference of the patient (9).
There are various indications of hysterectomy but when it comes to obstetrics it becomes a lifesaving procedure. In our study at Aswan university hospital 7 Obstetric hysterectomies were done in a span of 1 year. Age group was 25-34 years. This is in different with Vandanaetal(10) who found that the patient age group was 26-30 years. 35(33.3%) were P3, 31(29.6%) were P2 and one patient (0.9%) was P1.

In our study most common indication for obstetric hysterectomies was rupture uterus(71.42%) followed by abnormal placentaion (28.57%) patients were referred to our hospital as it’s a tertiary care hospital. Placenta accrete and percreta led to obstetric hysterectomy in (28.57%) patients because of uncontrolled haemorrhage, this is in agree with Vandanaetal(10) who found that Most common indication was rupture uterus (40%) followed by abnormal placentaion (38.1%).

In our study, morbidly adherent placenta was the second most common indication for EOH (Emergency Obstetric Hysterectomy). This was also the case in Turkey and the UK contributing to 40% and 38% of cases, respectively(10).

In this study 46 gynaecological hysterectomies were done during the study period of one year. Age of the patient studied in this particular study ranged from 42 years to 70 years. This is in comparison with Vanithamanietal(6) who found in his study 198 hysterectomies were done during the study period of one year. Age of the patient studied ranged from 32 years to 75 years. Most common age group was 41-50 years. Similar age group was observed in other studies conducted by Saravana A et al (2), Perveen S et al (11), Medhi P et al(12), DomblaeV et al (13), Patil H et al(14), Sharma C et al(15).

In this study Most common type of hysterectomy done was total abdominal hysterectomy with bilateral salpingooophorectomy

This is in agree with Vanithamanietal(6) who found in his study most common type of hysterectomy done was total abdominal hysterectomy with bilateral salpingooophorectomy. Similar observation was made in studies conducted by Verma D et al (1), Patil H et al(14), Sharma C et al(15).

In this study most common indication was abnormal uterine bleeding, next common indication was leiomyoma. This is in agree with Vanithamanietal(6) This is comparable to studies conducted by Perveen S et al(11) and Sharma C et al(15).

**CONCLUSION**

In primip patient indicationof (CS) should be very clear and justified to avoid further LSCS and development of placenta accrete and percreta and reduces the number of obstetric hysterectomies. We should sensitize the general population regarding the long-term complications of Caesarean Delivery on Maternal Request to reduce the number of LSCS.

Hysterectomy is a major surgery and it may be associated with complications during and after surgery. Therefore, the indication for hysterectomy should be carefully evaluated. Hence reporting of all hysterectomies should be mandatory so that the audit results can be used for improvement in the quality of health services.
REFERENCES


