International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2021; 5(1): 420-423
Received: 16-11-2020
Accepted: 18-12-2020

Dr. Sushma S
Senior Resident, Department of OBG, Akash Institute of Medical Sciences and Research Centre, Bangalore, Karnataka, India

Dr. Harini R
Assistant Professor, Department of OBG, Akash Institute of Medical Sciences and Research Centre, Bangalore, Karnataka, India

Corresponding Author:
Dr. Harini R
Assistant Professor, Department of OBG, Akash Institute of Medical Sciences and Research Centre, Bangalore, Karnataka, India

Clinical profile of patients with benign gynecological disease subjected for hysterectomy

Dr. Sushma S and Dr. Harini R

DOI: https://doi.org/10.33545/gynae.2021.v5.i1g.848

Abstract
More than 70% of hysterectomies are performed for benign surgical indications, including fibroids (33%), uterine prolapse (28%), menorrhagia (21%), and pelvic pain (3%). The first total laparoscopic hysterectomy was reported in 1989; this procedure has been associated with shorter hospital stay, faster recovery, and fewer postoperative infections compared with abdominal hysterectomy. All the patients attending Gynecology outpatient department with symptoms were assessed with history and clinical examination by the Consultant Gynecologist and investigated. Those requiring hysterectomy were analyzed by the Consultants for the approach depending on the indication for the surgery, nature of the disease and patient characteristics. In TAH group, 32 patients had previous history of surgery whereas in TLH group, 27 patients had history of surgery. There was no much difference in h/o LSCS between two groups. History of tubal ligation was more in group TAH (32%) compared to TLH (20%. In TAH group, patients with para1 were 28%, patients with para2 were 62%, patients with para3 were4% and nulliparous women were 6%. In TLH group, patients with para1 were 34%, patients with para2 were 52%, patients with para3 were4% and nulliparous women were 10%.

Keywords: clinical profile, benign gynecological disease, hysterectomy

Introduction
Hysterectomy is one of the most frequently performed major surgical procedures in women worldwide. The highest rate of Hysterectomy is between the age group of 40-49 years with an average age of 46.1 years. Uterine Leiomyomas are consistently the leading indication for Hysterectomy. More than 70% of hysterectomies are performed for benign surgical indications, including menorrhagia, fibroids, pelvic pain and prolapsed uterus. Traditionally this has been done via abdominal or vaginal routes. Increasingly hysterectomies are undertaken using minimal access techniques.

Routes for hysterectomy include abdominal, vaginal, laparoscopic, or combined approaches. Traditional abdominal hysterectomy (AH) is one of the most common gynaecological surgical procedures in the treatment of benign gynaecological diseases. However, AH as the most invasive procedure, is associated with some limitations such as abdominal trauma, intraoperative and postoperative complications, and slow postoperative recovery [1]. Compared with traditional open gynaecological surgeries, minimally invasive gynaecological surgery provides less postoperative pain, more rapid recovery, and shorter hospital stay [2]. Vaginal hysterectomy (VH) is the method of choice for removal of the uterus.

Laparoscopic hysterectomy was first introduced by Reich in 1989 [3]. Compared to laparotomy regarding equal outcomes and lower perioperative morbidity, improvement of quality of life, shorter hospital stay and faster return to activity were seen after laparoscopic hysterectomy [4, 5]. However, the percentage of laparoscopic hysterectomies is still very low, since abdominal hysterectomy remains the most common approach among the Obstetricians and Gynaecologists [6]. An unfavourable learning curve [7, 8] and extensive training of surgeons and the whole surgical team are often cited as reasons. Beside these factors, laparoscopic hysterectomy cannot be successfully accomplished in a substantial number of patients, in whom con-version to an open surgery is required. As a result, a number of relative contraindications, such as morbid obesity, large fibroids and a history of abdominal surgery, have been proposed to help determine whether a patient is a suitable candidate for laparoscopic hysterectomy [9, 10].

More than 70% of hysterectomies are performed for benign surgical indications, including fibroids (33%), uterine prolapse (28%), menorrhagia (21%), and pelvic pain (3%) [11].

The first total laparoscopic hysterectomy was reported in 1989; this procedure has been associated with shorter hospital stay, faster recovery, and fewer postoperative infections compared with abdominal hysterectomy [12]. Advanced laparoscopic procedures are increasingly being utilized in gynaecologic surgery [13]; however, the abdominal hysterectomy technique is still performed in over 80% of operations [14].

Methodology

Study Population: Women admitted in Apollo Hospital for hysterectomy for benign gynecological disease satisfying inclusion criteria and willing to participate in the study.

Study Design: A prospective observational cross-sectional study.

Sample Size: Sample size was based on level of precision; precision consists of significance level of 5% and allowable error of 20%. Hence total sample size was 50 cases in each group.

Method of sampling: Non Probability Purposive random sampling technique.

Inclusion criteria

- Women with benign gynecological disease opting for hysterectomy
- Perimenopausal age group between 40-49 years
- Uterus size </= 16 weeks of pregnant size
- Written & informed consent and willing to take part in the study

Exclusion criteria

- Inability to undergo an operation due to high surgical or anesthetic risk
- Precancerous lesions or malignancy
- Uterine prolapse
- Uterus >16 weeks of pregnant size
- Conversion to Laparotomy

All the patients attending Gynecology outpatient department with symptoms were assessed with history and clinical examination by the Consultant Gynecologist and investigated. Those requiring hysterectomy were analyzed by the Consultants for the approach depending on the indication for the surgery, nature of the disease and patient characteristics.

Results

Table 1: Age distribution of study subjects

Age	Surgery		Total
	TAH	TLH	
40 years	9 (18%)	2 (04%)	11
41 years	3 (06%)	4 (08%)	07
42 years	5 (10%	6 (12%)	11
43 years	4 (08%)	1 (02%)	05
44 years	6 (12%)	5 (10%)	11
45 years	3 (06%)	6 (12%)	09
46 years	5 (10%)	10(20%)	15
47 years	3 (06%)	6 (12%)	09
48 years	6 (06%)	6 (12%)	12
49 years	6 (06%)	4 (08%)	10
Total	50 (100%)	50 (100%)	100

Chi square value- 10.64 df- 9 p value-0.30

- Among 100 study subjects, 50 underwent Total Abdominal Hysterectomy (TAH) and other 50 underwent Total Laparoscopy Hysterectomy (TLH).
- In TAH group, highest proportion of patients were aged 40 years (18%) followed by 42 years (10%), 46 years (10%).
- In TLH group, highest proportion of patients were aged 46 years (20%) followed by 47 years (12%), 48 years (12%).
- It was observed that the distribution of age between two groups were different but this difference was not statistically significant.

Table 2: Distribution of study subjects based on BMI

BMI	Surgery		Total
	TAH	TLH	
19 - 24	12 (24%)	13 (26%)	25
25 - 29	31 (62%)	31 (62%)	62
30 and above	7 (14%)	6 (12%)	13
Total	50 (100%)	50 (100%)	100

Chi square value- 0.117 df-2 p value-0.94

- In TAH group, highest proportion of patients had BMI range 25 – 29 (62%) followed by
- 19 – 24 (24%) and 30 and above (14%)
- In TLH group, highest proportion of patients had BMI range 25 – 29 (62%) followed by
- 19 – 24 (26%) and 30 and above (12%)
- There was no much difference in BMI distribution between two groups and also not statistically significant

Table 3: Distribution of study subjects based on symptoms

Symptoms	Surgery		Total
	TAH	TLH	
Dysmenorrhoea	13 (26%)	14 (28%)	27
Irregular cycles	4 (08%)	0	04
Abdominal pain	5 (10%)	7 (14%)	12
Menorrhagia	23 (46%)	19 (38%)	42
Polymenorrhoea	11 (22%)	13 (26%)	24

Chi square value-4.83 df- 4 p value-0.30

- The most common presenting feature in TAH group was menorrhagia (46%) followed by dysmenorrhea (26%), abdominal pain (10%) and irregular cycles (8%).
- The most common presenting feature in TLH group was menorrhagia (38%) followed by dysmenorrhea (28%), abdominal pain (14%) and no irregular cycles.
- This difference was not statistically significant

Table 4: Distribution of study subjects based on comorbidities

Co morbidities	Surgery		Total
	TAH	TLH	
Diabetes	8 (16%)	10 (20%)	18
Hypertension	10 (20%)	15 (30%)	25
Hypothyroidism	10 (20%)	6 (12%)	16
Others	0	1 (02%)	01

Chi square value- 2.96 df-3 p value-0.39

- Maximum numbers of diabetics were in group TLH (20%) compared to TAH group (16%).
- Maximum numbers of hypertensives were in group TLH (30%) compared to TAH group (20%).
- Maximum numbers of hypothyroidism was in group TAH (20%) compared to TLH group (12%).
- This difference in distribution of co morbidities between two groups was not statistically significant.

Table 5: Distribution of study subjects based on past surgery

Past surgery	Surgery		Total
	TAH	TLH	
LSCS	13 (26%)	14 (28%)	27
Lap. cholecystectomy	1 (02%)	1 (02%)	02
Lap. cystectomy	1 (02%)	1 (02%)	02
Appendicectomy	1 (02%)	1 (02%)	02
Tubal ligation	16 (32%)	10 (20%)	26

Chi square value- 1.00 df- 4 p value-0.90

- In TAH group,32 patients had previous history of surgery whereas in TLH group, 27 patients had history of surgery
- There was no much difference in h/o LSCS between two groups
- History of tubal ligation was more in group TAH (32%) compared to TLH (20%)
- No statistically significant difference was found in relation to h/o past surgery between two groups

Table 6: Distribution of study subjects based on parity

Parity	Surgery		Total
	TAH	TLH	
One	14 (28%)	17 (34%)	31
Two	31 (62%)	26 (52%)	57
Three	2 (04%)	2 (04%)	04
Nulli Para	3 (06%)	5 (10%)	08
Total	50 (100%)	50 (100%)	100

Chi square value- 1.22 df-3 p value-0.74

- In TAH group, patients with para1 were 28%, patients with para2 were 62%, patients with para3 were4% and nulliparous women were 6%.
- In TLH group, patients with para1 were 34%, patients with para2 were 52%, patients with para3 were4% and nulliparous women were 10%.
- There was no statistically significant difference between two groups.

Discussion

The laparoscopic approach is an acceptable treatment modality in the current gynecologic practice. Jahan *et al*. Performed a prospective comparative study on the efficiency and outcome of LAVH, TAH, and vaginal hysterectomy on 750 patients. Their results showed that LAVH and vaginal hysterectomy were more beneficial to patients because of less estimated blood loss, less analgesia use, less intraoperative and postoperative complication rates, less postoperative pain, more rapid recovery, and shorter hospital stays [15]. In the current study, we observed significantly longer operative time in TLH compared with TAH group. The requirement of operative time was more in TLH group compared to TAH group and this difference was found to be statistically significant. The range in TAH group was 30 – 120 mins whereas in TLH group was 60-180 mins.

A similar result was earlier reported. However, Malur *et al*., in a randomized population, demonstrated comparable operative time between LAVH and TAH [16, 17]. All previous studies showed significantly shorter hospitalization with laparoscopy compared with laparotomy. Similar results were demonstrated in other European studies. However, the duration of hospitalization in North American studies is usually shorter compared with Euro-pean, may be because of the different health insurance status [18, 19]. According to previous study it has been reported that intraoperative and perioperative blood loss is lesser in the LAVH group compared to the abdominal surgery [20]. In agreement with this study we found that intraoperative blood loss in the TLH group same as in the TAH group. The relatively lower rate of complications encountered in the present study was due to the small number of patients. Some studies have demonstrated that a low complication rate can be achieved by extensive training in laparoscopy and optimizing of the technique [21, 22]. Johnson *et al*. published a meta-analysis of prospective randomized trials and stated that the rate of urinary complications was higher with laparoscopy. The complication rate for TLH has gradually been decreased with increased surgical experience at our institute, thus, less experienced gynecologic surgeons may experience higher complications when attempting TLH. Regarding a previous study, there is no clear evidence on the superiority of the hysterectomy methods one to another.

The major limitation of our study was relatively small number of patients. Further research is required with full report-ing of all relevant outcomes, in particular important long-term outcomes, in large randomized controlled trials to minimize the possibility of a reporting bias. In conclusion, though operating time in TLH is longer, it is more beneficial than the traditional TAH for decreasing the length of postoperative hospital stays and intraoperative blood loss with no difference in operative complications.

Because hysterectomy is a frequent surgical procedure in gynecology, gynaecologists continuously research improved alternative techniques, and advanced laparoscopic techniques have been increasingly used in gynecologic surgery over the past 20 years.

Conclusion

- In TAH group, highest proportion of patients were aged 40 years (18%) followed by 42 years (10%), 46 years (10%)
- In TLH group, highest proportion of patients were aged 46 years (20%) followed by 47 years (12%), 48 years (12%)
- In TAH group, highest proportion of patients had BMI range 25 – 29 (62%) followed by 19 – 24 (24%) and 30 and above (14%).
- In TLH group, highest proportion of patients had BMI range 25 – 29 (62%) followed by 19 – 24 (26%) and 30 and above (12%).
- The most common presenting feature in TAH group was menorrhagia (46%) followed by dysmenorrhea (26%), abdominal pain (10%) and irregular cycles (8%).

References

1. Brummer THI, Jalkanen J, Fraser J. National Prospective 1-Year Survey of 5279 Hysterectomies. Hum Reprod. 2009;10:2515-2522.
2. Reich H, De Caprio J, Mc Glynn F. Laparoscopic Hysterectomy. J Gynecol Surgery 1989;5:213-216.
3. Falcone T, Paraiso MF, Mascha E. Prospective randomized clinical trial of laparoscopically assisted vaginal hysterectomy versus total abdominal hysterectomy. Am J Obstet Gynecol 1999;180(4):955-62.
4. Candiani M, Izzo S. Laparoscopic versus vaginal hysterectomy for benign pathology. Curr Opin Obstet Gynecol 2010;22(4):304-8.
5. Reips, Funke F. Interval level measurement with visual analogue scales in Internet-based research: VAS Generator 2008. doi:10.3758/BRM.40.3.699.
6. Baskett TF. Hysterectomy: evolution and trends. Best Pract Res Clin Obstet Gynaecol 2005;19:295-305.
7. Clayton RD. Hysterectomy. Best Pract Res Clin Obstet

Gynaecol 2006;20:73-87.
8. Sutton C. Past, Present and Future of Hysterectomy. J Minim Invasive Gynecol 2010;17(4):421-35.
9. Hrkki-Sirén P. Laparoscopic hysterectomy. Outcome and complications in Finland. [Doctoral thesis]. Helsinki: Medical Faculty University of Helsinki 1999.
10. Sutton C. Hysterectomy: a historical perspective. Baillieres Clin Obstet Gynaecol 1997;11:1-22.
11. Toledo-Pereyra LH. Ephraim McDowell. Father of Abdominal Surgery. J Invest Surg 2004;17:237-8.
12. Othersen HB Jr. Ephraim McDowell: the qualities of a good surgeon. Ann Surg 2004;239:648-50.
13. Holland CM, Shafi MI. Radical hysterectomy. Best Pract Res Clin Obstet Gynaecol 2005;19:387-401.
14. Shepherd JH, Milken DA. Conservative surgery for carcinoma of the cervix. Clin Oncol 2008;20:395-400.
15. Jahan S, Das TR, Mahmud N, Mondol SK, Habib SH, Saha S. A comparative study among laparoscopically assisted vaginal hysterectomy, vaginal hysterec-tomy and abdominal hysterectomy: experience in a tertiary care hospital in Bangladesh. J Obstet Gynaecol 2011;31(3):254-7.
16. Gemignani ML, Curtin JP, Zelmanovich J, Patel DA, Venkatraman E, Barakat RR. Laparoscopic assisted vaginal hysterectomy for endometrial cancer: clinical outcomes and hospital charges. Gynecol Oncol 1999;73(1):5-11.
17. Malur S, Possover M, Michels W, Schneider A. Laparoscopic-assisted vaginal versus abdominal surgery in patients with endometrial cancer: A prospective randomized trial. Gynecol Oncol 2001;80(2):239-44.
18. Obermair A, Manolitsas TP, Leung Y, Hammond IG, McCartney AJ. Total laparo-scopic hysterectomy for endometrial cancer: patterns of recurrence and survival. Gynecol Oncol 2004;92(3):789-93.
19. Magrina JF, Mutone NF, Weaver AL, Magtibay PM, Fowler RS, Cornella JL. Laparoscopic lymphadenectomy and vaginal or laparoscopic hysterectomy with bilateral salpingo- oophorectomy for endometrial cancer: morbidity and survival. Am J Obstet Gynecol 1999;181(2):376-81.
20. Kongwattanakul K, Khampitak K. Comparison of Laparoscopically Assisted Vaginal Hysterectomy and Abdominal Hysterectomy: A Randomized Controlled Trial. J of Min Inv Gyn 2012;19(1):89-94.
21. Mäkinen J, Johansson J, Tomás C, Tomás E, Heinonen PK, Laatikainen T *et al*. Morbidity of 10 110 hysterectomies by type of approach. Hum Reprod 2001;16(7):1473-8.
22. Malzoni M, Perniola G, Perniola F, Imperato F. Optimizing the total laparo-scopic hysterectomy procedure for benign uterine pathology. J Am Assoc Gynecol Laparosc 2004;11(2):211-8.