

A Retrospective Study of Hysterectomy Cases in a Tertiary Care Center - A Study from Jharkhand Region

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Abstract: ***Introduction:** Hysterectomy is the most commonly performed gynaecological surgery in India and well as in other countries. It is frequently done for definitive management of various common gynaecological diseases like fibroids, abnormal uterine bleeding, prolapse and malignancy of uterus and cervix. **Aim:** To study incidences of different histopathological entities in hysterectomy specimens. **Materials and methods:** This retrospective study was undertaken in our routine histopathological laboratory during the period of one year (Jan 18- Dec 18). A total of 590 hysterectomy specimens were analysed. **Observation:** A total of 590 hysterectomy specimens were reported during the period of one year. Of these 546 cases (92.54%) were abdominal hysterectomies with or without salpingoophrectomy and 44 cases (7.45%) were vaginal hysterectomies. Most common lesion was leiomyoma. **Conclusion:** Hysterectomy is curative and acceptable form of treatment in many common gynaecological problems. All hysterectomy specimens should be sent for histopathological examination.*

Keywords: hysterectomy, histopathology

1. Introduction

The most common major surgical procedure performed in gynaecology department in India and also in the world is hysterectomy.^[1] It is done for definitive treatment of common pathologies like fibroids, uterine prolapse, abnormal uterine bleeding, adenomyosis, endometriosis and malignancy of female reproductive organs^[2]. Other less common indications are endometrial hyperplasia, obstetric complications etc. There are two approaches for hysterectomy- abdominal and vaginal. The general trend in determining the route of hysterectomy has been to challenge the validity of the exclusionary criteria for vaginal hysterectomy, such as nulliparity, larger uterine size, previous caesarean delivery and pelvic laparotomy. These are no longer considered to be strong contraindication to vaginal approach.^[3]

Histopathological analysis of hysterectomy specimen is necessary for diagnostic purpose. The following study was done to study the histopathological incidences of various lesions of uterus and distribution of commonest lesions in relation to age at presentation.

2. Material and Methods

This was a retrospective study on a total of 590 hysterectomy specimen with or without salpingoophrectomy, received in the department of Pathology, RIMS, Ranchi, a tertiary care centre in Jharkhand over a period of one year from Jan'18 to Dec 18.

The following findings were considered unremarkable-physiological changes in the endometrium, mild chronic cervicitis, ovaries with cystic follicle, luteal cysts, follicular cyst, hemorrhagic cyst that did not form indication for surgery and incidental paratubal cysts.

3. Results

The majority of patients were in the age group of 31 to 40 years (223 cases, 37.79%), although the age ranged from 17 to 84 years in our study.

A total of 590 hysterectomies were performed during the period of one year. 546 (92.54%) were abdominal hysterectomies while only 44 (7.46%) were vaginal hysterectomies. Of the 546 AH 326 cases (59.70%) were total abdominal hysterectomy with bilateral salpingoophrectomy. 208 cases (38.09%) were total hysterectomy. Only 7 cases (1.28%) were of total abdominal hysterectomy with unilateral salpingoophrectomy. Radical hysterectomy constituted 6 cases of total (1.09%).

Leiomyoma was the most common pathology encountered (200 cases, 33.89%) followed by adenomyosis (52 cases, 8.81%). Endometrial hyperplasia was found in 30 cases (5.08%), endometrial polyp in 17 cases (2.88%), cervical polyp in 6 cases (1.01%) and cervical dysplasia in 14 cases (2.37%). Leiomyomatous change in the uterus were found in 14 cases (2.37%). There were 4 cases of endometrial carcinoma (0.67%) and 10 cases of cervical carcinoma (1.69%). 7.45% cases (47 cases) of ovarian mass were responsible for the hysterectomy. They were diagnosed as mucinous cystadenoma (17 cases), serous cystadenoma (12 cases), mature cystic teratoma (8 cases) dysgerminoma (3 cases), granulosa cell tumor (2 cases) and one case each of immature teratoma and mixed germ cell tumor.

There were 2 cases each of endometritis and endometriosis (0.33% each) and 3 cases of non specific chronic salpingitis (0.50%). 44 cases were of vaginal prolapse (7.45%). 148 cases (25.08%) were unremarkable.

Table 1: Types of Hysterectomies

Type of Hysterectomy	No. of Cases (n=590)	Percentage (%)
TAH with BSO	326	55.25
TAH without SO	208	35.25
TAH with unilateral SO	7	1.18
Radical hysterectomy	6	1.01
Vaginal hysterectomy	44	7.45

The distribution of types of hysterectomies is shown in table 1.

Table 2: Age Distribution

Age Group (Years)	No. Of Cases (n=590)	Percentage (%)
<20	1	0.16
21-30	38	6.44
31-40	196	33.22
41-50	223	37.79
51-60	90	15.25
61-70	34	5.76
>70	8	1.35

The age distribution is shown in table 2.

Table 3: Histopathological Diagnosis

Histopathological Diagnosis	Frequency (n=590)	Percentage (%)
Leiomyoma	200	33.89
Adenomyosis	52	8.81
Leiomyomatous change	14	2.37
Endometrial hyperplasia	30	5.08
Endometrial polyp	17	2.88
Endometrial carcinoma	4	0.67
Cervical polyp	6	1.01
Cervical dysplasia	14	2.37
Cervical carcinoma	10	1.69
Endometritis	2	0.33
Endometriosis	2	0.33
Salpingitis	3	0.50
Ovarian tumor	44	7.45
Prolapse	44	7.45
Unremarkable	148	25.08

The histopathological diagnosis is shown in table 3.

Table 4: Age Distribution of Leiomyoma

Age	No. of Cases	Percentage (%)
20-30	10	5
32-40	78	39
41-50	92	46
51-60	16	8
61-70	4	2
>70	0	0
TOTAL	200	100

Age distribution of leiomyoma is shown in table 4

4. Discussion

Hysterectomy is the most common major gynaecological surgery performed worldwide. The current study was retrospective in nature and presents the data on histopathological analysis of 590 hysterectomy specimen received in the department of Pathology, RIMS, Ranchi, Jharkhand over a period of one year from January 2018 to December 2018.

In the present study out of 590 cases, 326 cases (59.70%) had undergone TAH with BSO. Rather GR et al(2013) reported TAH with BSO in 67.19%^[4] cases and Mackenzie et al (2004)^[5] have reported TAH with BSO in 50% cases.

In our study the maximum number of patients who had undergone hysterectomy were in the age group of 41-50 years and was same as that reported by Gupta et al (2010)^[6] and Ticku et al(2017)^[7] followed by 31-40 years.

In our study, the most common pathology was leiomyoma (33.89%) which is consistent with other studies done in other countries like Saudi Arabia (25.8%),^[8] Pakistan^[9] and USA.^[10] Adenomyosis was the second commonest uterine pathology in our study (8.81%) as compared to 24.9% found by Vericillini P and 16% found by Raju GC et al.^[11] 5.08% of hysterectomy specimen had endometrial hyperplasia in our study. Study by JaleelR et al(2009) showed it to be 9.6%.

Ovarian tumor were found in 7.45% of hysterectomies as compared to 14.9% found in the study by Jha R et al^[12]. Malignancy of endometrium was found in 0.67% of cases. In other studies it was 1.8% by Ranabhat et al. The cervical carcinoma was reported in 10 cases (1.69%) in our observation while it was 6.5% in study by Jindal et al.^[13]

Majority of the cases in present study revealed no pathology in fallopian tubes. The only significant lesions were 3 cases of non-specific chronic salpingitis and two cases of endometriosis. Bagwan et al (2004)^[14] in their study also found majority of the fallopian tubes to be unremarkable.

5. Conclusion

Hysterectomy is the most commonly performed surgery in gynaecological practice. Histopathological examination correlates well with the pre-operative diagnosis for hysterectomy. All hysterectomy specimen should be submitted for histopathological examination as preoperative diagnosis may not always be possible.

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