



A DESCRIPTIVE STUDY ON MANAGEMENT OF UTERINE FIBROIDS

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ABSTRACT

Back ground: Uterine fibroids are the commonest benign tumors of the uterus. The risk factors for uterine fibroids are pre-menopausal age, early menarche, nulliparous, less parity, obesity, previous medical history of HTN and diabetes. **Materials and methods:** A total of 160 patients attending gynecology department being treated for uterine fibroids were subjected to Observational study for a period of 3 months of Warangal region. **Results:** Out of 160 women in the study, majority i.e., 54% of patients had undergone TAH type of surgery and 43% of patients had undergone myomectomy. **Conclusion:** The present study demonstrates that uterine fibroids are considered as most common benign tumors in females which leads to hysterectomy. As per the observational study after LSCS hysterectomy is most commonly performed surgery in females. The most commonly affected group are reproductive age group.

KEYWORDS: Uterine fibroids, Hysterectomy, pre and post operative management.

INTRODUCTION UTERINE FIBROIDS

Uterine fibroids (leiomyomas) are benign monoclonal tumors of smooth muscle, taking origin in the myometrium. They are the commonest benign tumors of the uterus, and are typically round well-circumscribed masses. They are usually multiple, and can range in size from a few millimeters to massive growths of 20cm diameter and more. The etiology is largely unknown, but they are estrogen- and progesterone-dependent tumors, very rare before menarche, common in reproductive life, and frequently regress in size after menopause.^[15]

Uterine fibroids occur in 50–60% of women, rising to 70% by the age of 50 (Baird et al., 2003), and, in 30% of cases, cause morbidity due to abnormal uterine bleeding (heavy menstrual bleeding inducing anaemia) and pelvic pressure (urinary symptoms, constipation and tenesmus).^[14]

The prevalence of uterine fibroid all around the world is 4.5-68.6% of which 15-25 million Indian women suffer from fibroids.^[2] The incidence is more among the women of 21-45 years of age. The possible factors for fibroid are nulliparity, obesity and hyper-estrogenic state.^[11]

Treatment Strategies for Uterine Fibroids

The first-line option for UFs is usually reserved to medical therapies because initially symptomatology is usually mild. We must discriminate between etiological and symptomatic treatment depending on whether the effect is directly on the UFs or only on their symptoms.

Classically, nonsteroidal anti-inflammatory drugs (NSAIDs) have been a regular solution for pain, in addition to hormones, either seroprotecting or progestogens, acting on the endometrium.^[10]

The Levonorgestrel-releasing intrauterine system (LNG-IUS)

LNG-IUS causes reduction of the duration and the amount of menstrual bleeding, with minimal side effects due to release of hormones at the targeted organ. LNG-IUS causes a profound suppression of the functional endometrium as well as thickening of the cervical mucousl.^[3]

Gonadotropin-releasing hormone agonist (GnRH agonist)

Native GnRH, a decapeptide, is produced and released in a pulsatile pattern from the hypothalamus. GnRH agonists are synthetic peptides structurally close to the natural GnRH molecule, but they are more potent and have a longer half-life than native GnRH [9,10]. When administered, they increase follicle-stimulating hormone (FSH) and luteinizing hormone (LH) secretion initially, known as the flare effect. After that, they subsequently cause receptor down-regulation, followed 1–3 weeks later by a hypogonadotropic hypogonadal state, often termed—“pseudo menopause”.^[6]

Oral contraceptives

As uterine fibroid growth is stimulated by both oestrogens and progestins, Combination oral

contraceptives (COCs) were considered a risk factor for fibroid growth, in the past. In the short-term, COCs can be used to improve heavy menstrual bleeding associated with fibroids, primarily through their suppressive effects on endometrial proliferation, but overall, they have no effect on decreasing uterine fibroid volume or uterine size.^[5]

Selective progesterone receptor modulators (SPRMs)

Abnormal progesterone responses are implicated in a wide spectrum of benign human reproductive disorders, including abnormal uterine bleeding (AUB; including heavy menstrual bleeding [HMB]), fibroids (leiomyomas) and endometriosis. Progesterone acting via its cognate receptors (PR-A, PR-B) plays a central role in regulation of uterine function making PR an attractive therapeutic target.^[7]

Aromatase inhibitors (AIs)

The mechanism underlying the gonadotropin-independent expression of aromatase in uterine fibroid tissue is not completely understood. Two third-generation agents, letrozole (2.5 mg daily) and anastrozole (1 mg daily), have been studied for the treatment of symptomatic uterine fibroids.^[7]

Surgical management

Surgical interventions still represent the main strategies for UF management, with hysterectomy, laparoscopic myomectomy, and hysteroscopic myomectomy being the most widely used.

Hysteroscopic myomectomy

Hysteroscopy is the elective method to remove submucous UFs by using minimally invasive surgical procedures. Currently, the use of new devices (measure, trochlear, and so on) to perform hysteroscopic procedures in the outpatient setting has completely changed the clinical approach. But it is important to balance the expectation of success and the length of surgery, and if it is not adequate, we should perform a classic surgical intervention with resectoscope. Moreover, we should always try to enucleate the UFs of their pseudo capsules before their fragmentation and elimination. This method could give us better fertility results after surgery, reaching rates of 45% and reducing complications.^[8]

Laparoscopic myomectomy

Laparoscopic myomectomy has long been the minimally invasive therapy of choice for symptomatic uterine fibroids, before the introduction of UAE and other minimally invasive therapies. It is still widely used for symptomatic subserosa fibroids and can even be used for intramural fibroids, depending on the position of the fibroid and the skills of the surgeon.^[13]

Hysterectomy

Hysterectomy has many positive attributes as a treatment for fibroids. Because the entire uterus is removed, the

possibility of new fibroids growing back is eliminated. Menstrual bleeding is stopped permanently and recurrent menorrhagia cannot occur. The risks of cervical, uterine, endometrial, and if combined with bilateral salpingo-oophorectomy, ovarian cancer is eliminated.^[11]

Until 1989, the only surgical approaches for hysterectomy were vaginal and abdominal hysterectomy; then in the early 1990s, three laparoscopic techniques were developed:

- Total laparoscopic hysterectomy (TLH)
- Laparoscopically assisted vaginal hysterectomy (LAVH)
- Laparoscopic supracervical hysterectomy (LASH).^[4]

Uterine artery embolization (UAE) as an alternative to hysterectomy

Uterine artery embolization (UAE) is an alternative to surgical treatment options in women wishing to pre-serve their uterus. Lower rate of minor complications has been reported, although the probability of the need for a new surgical procedure to be done in 2–5 years is increased compared to surgical procedures including myomectomy and hysterectomy. Besides, the fact that ovarian reserve and healthy myometrium may be compromised still discourages its use prior to pregnancy.⁴¹ From our point of view, UAE is indicated for patients wishing to preserve their uterus, because in our experience, the results are similar to surgery in terms of discomfort and pain, and much worse than hysterectomy according to the rate of reinterventions in the long term.^[12]

I. METHODOLOGY

Study Site

- This study was conducted at LAXMI NARASIMHA HOSPITAL, Hanamkonda, Warangal District, Telangana and at KALYANI HOSPITAL, Hanamkonda, Warangal District, Telangana.

Study design

- Observational Prospective Cross Sessional Study

Study period

- January 2021 to April 2021 (3 months).

Study criteria Inclusion criteria

- Women who came to hospital with uterine fibroids and comorbid conditions.
- Women with reproductive age, premenopausal and postmenopausal age.
- Women with Fibroid complicating Infertility.

Exclusion criteria

- Women diagnosed with various types of chronic cancer.
- Women with gestation.

Source of data

- Direct communication with patients and their care takers and review of case sheets and laboratory data.

Parameters to be considered

- Demographic data of patients
- Investigational data of every visit
- History of patient from old records
- Type of surgery Indication for management
- Post and pre-operative management
- And non-surgical management

Data collection

- The data collection from was filed with requires data taken from in-patient case sheet and from discharge card and subjects were consulted as and when required.
- The demographic details data collection forms contained the following details.
- Age, chief complaints.
- Age at menarche.
- Parity.
- Weight (Obesity).
- Comorbid conditions.
- Premenopausal or postmenopausal.
- Type of surgery Indication.
- Pre surgical and post-surgical management.

Methodology

A study protocol was submitted and significance of the study was explained to the superintendent of the hospital. A written consent was taken from the hospital authorities. The data was collected on daily basis from cases sheets, by interacting with patients, followed by

ward rounds with the concerned doctor and from in patient case sheet form. An approval for study was also taken from IEC.

RESULTLS**Table 1: Distribution of Data Based on Age.**

Age (Years)	No. of Patients	Percentage (%)
20-24	6	4
25-29	24	15
30-34	17	11
35-39	34	21
40-44	28	18
45-49	31	19
50-54	19	12
65-70	1	1

Table 2: Distribution of Data Based on Weight (Kgs).

Weight (Kgs)	No. of Patients	Percentage (%)
40-44	1	1
45-49	3	2
50-54	14	9
55-59	15	9
60-64	14	9
65-69	21	13
70-74	27	17
75-79	15	9
80-84	27	17
85-89	6	4
90-94	16	10
95-99	1	1

Table 3: Distribution of Data Based on Chief Complaints.

Complaint	No. of Patients	Percentage (%)
Abdominal Pain	57	36
Abdominal Pain, AUB	24	15
Abdominal Pain, HMB	24	15
Abdominal Pain, Haematuria	10	6
Abdominal Pain, Pedal edema	10	6
Abdominal Pain, Vomiting	8	5
Abdominal Pain, White discharge	16	10
Primary Infertility	3	2
Secondary Infertility	8	5

Table 4: Distribution of Data Based on Co-Morbidities.

Co-morbid condition	No. of Patients	Percentage (%)
Anemia	38	24
DM	27	17
HTN	32	20
Hypothyroid	33	21
Leukemia	1	1
Anemia + Hypothyroid	3	2
Anaemia + Hyperthyroid	1	1
DM + HTN + Hypothyroid	2	1
HTN + Anaemia	2	1
HTN + Hypothyroid	1	1

Table 5: Distribution of Data Based on Age At Menarch.

Age in years	No. of Patients	Percentage (%)
12	81	51
13	49	31
14	19	12
15	10	6
16	1	1

Table 6: Distribution of Data Based on Parity.

Parity	No. of Patients	Percentage (%)
P2L2	48	30
P3L3	41	26
P4L4	19	12
P1L1	22	14
P4L3D1	11	7
P3L2D1	12	8
P5L4D1	4	3
P2L1D1	2	1
P1L0D1	1	1

Table 7: Distribution of Data Based on Pre/Post Menopause.

Menstrual Stage	No. of Patients	Percentage (%)
Menopause	39	24
Not attained menopause even after age 50	1	1
Pre-Menopause	120	75

Table 8: Distribution of Data Based on USg Report.

USG	No. of Patients	Percentage (%)
Bulky fibroids	17	11
Cervical fibroids	7	4
Endometrial fibroids	11	7
Intramural fibroids	28	11
Multiple fibroids	29	18
Myometrial fibroids	11	7
Submucosal fibroids	27	17
Subserosal fibroids	29	18

Table 9: Distribution of Data Based on Blood Transfusion.

Blood Transfusion	No. of Patients	Percentage (%) of Anemic patients
Not Transfused	19	45
Transfused	23	55

Table 10: Distribution Of Data Based on Type of Surgery.

Type of Surgery	No. of Patients	Percentage (%)
Myomectomy	68	43
Polypectomy	5	3
TAH	87	54

Table 11: Distribution Of Data Based On Pre-Operative Medication.

S. No	Category	Subjects	Percentage	Drugs prescribed	Dose
1	Cephalosporinantibiotic	20	12	<i>Ceftriaxone</i>	1gm
2	Cephalosporinantibiotic	35	21	<i>Cefixime</i>	1gm
3	Cephalosporinantibiotic	29	18	<i>Cefperazone+Salbactum</i>	1.5gm
4	Nitroimidazoleantibiotic	15	9	<i>Metronidazole</i>	400mg
5	Tetracyclineantibiotic	5	0.3	<i>Doxycycline</i>	100mg
7	Antacids	90	56	<i>Ranitidine</i>	150mg
8	Antacids	14	8	<i>Pantoprazole</i>	40mg

9	Analgesic	10	6	<i>Diclofenac sodium</i>	75/50mg
10	Antiemetics	65	40	<i>Ondansetron</i>	4mg
11	Antiemetics	16	1	<i>Metoclopramide</i>	
12	Antihemorrhagic	25	15	<i>Etamsylate</i>	500/250mg
13	Supplements	140	85	<i>Folic acid</i>	
14	Supplements	50	32	<i>B-Complex+Ca+VitC</i>	QS
15	Hormone	9	1	<i>Norethindrone</i>	5mg
16	Hormone	35	22	<i>Thyroxine</i>	
17	Beta-blocker Antihypertensive	18	11	<i>Labetalol</i>	100mg
18	ARB Antihypertensive	12	8	<i>Telmisartan</i>	20/40mg
19	Oral hypoglycemic	25	15	<i>Metformin</i>	250/500mg

Table 12: Distribution of data based on post-operativemedication.

S. No	Category	Subjects	Percentage	Drugs prescribed	Dose
1	Cephalosporinantibiotic	73	45	<i>Ceftriaxone</i>	1gm
2	Cephalosporinantibiotic	16	1	<i>Cefixime</i>	1gm
3	Cephalosporinantibiotic	20	1.2	<i>Cefperazone+Salbactum</i>	1.5gm
4	Nitroimidazoleantibiotic	74	46	<i>Metronidazole</i>	400mg
5	Aminoglycosideantibiotic	31	19	<i>Gentamycin</i>	100mg
7	Antacids	112	70	<i>Ranitidine</i>	150mg
8	Antacids	11	5	<i>Pantoprazole</i>	40mg
9	Analgesic	130	81	<i>Diclofenac sodium</i>	75/50mg
10	Antiemetics	45	30	<i>Ondansetron</i>	4mg
11	Antiemetics	10	1	<i>Metoclopramide</i>	15mg
12	Antihemorrhagic	40	25	<i>Etamsylate</i>	500/250mg
13	Supplements	130	80	<i>Folic acid</i>	QS
14	Supplements	110	68	<i>Vit-B Complex + Ca + VitC</i>	QS
15	Hormone	10	2	<i>Norethindrone</i>	5mg
16	Beta-blocker Antihypertensive	18	11	<i>Labetalol</i>	100mg
17	ARB Antihypertensive	12	8	<i>Telmisartan</i>	20/40mg
18	Oral hypoglycemic	25	15	<i>Metformin</i>	250/500mg
19	Hormone	35	22	<i>Thyroxine</i>	50/75/100/125 mcg

DISCUSSION

AGE

In the present study out of 160 patients 21 % of patients were in age group of 35 to 39 years, 19% patients were in age group of 45 to 49 years, 18% patients were in age group of 40 to 45 years, 15% patients were in age group of 40 to 44 years, 12% patients were in age group of 50 to 54 years, 11% patients were in age group of 30 to 34 years, 4% patients were in age group of 20 to 24 years, 1% patients were in age group of 65 to 70 years. A study conducted by Navaneetha Krishnan subramaniyam, Vanaja kandluri, Ajay chadevi at 2020. Stated that the age group affected by Uterine fibroids. A total of 137 patients was studied, the majority of subjects were below the age group of 36 to 50 years (63.5%) followed by 21 to 35 years (24.08%) and 51 to 65 years (12.4%). The average age of the participants was 42+/- 8.89 years.

WEIGHT

In the present study out of 160 patients 17% patients were in the weight 70-74 kgs and 80-84kgs respectively followed by 21 patients i.e., 13% where in the weight of

65-69 kgs, 10% patients were in the weight 90- 94 kgs, 9% patients were in the weight of 50- 69 kgs, 4% patients were in the weight of 80- 85 kgs, 2% patients were in the weight of 45-49 kgs, 1% patients were in the weight of 40-44 kgs and other 1% patients were in the weight of 95- 99% respectively. A study conducted by Eric Kwasi Ofori, Matilda Asante, William K. Antwi, Jerry Coleman, at 2012. Stated that out of 216 patients 37.0% and 45.4% were overweight and obese respectively.

CHIEF COMPLAINTS

Out of 160 57 (36%) patients complained about abdominal pain and about 24 (15%) patients complained about abdominal pain and abnormal uterine bleeding (AUB), 24 (15%) patients complained about abdominal pain and heavy menstrual bleeding (HMB), while about 16 (10%) patients had complaints of white discharge and abdominal pain, 10 (6%) patients complained about abdominal pain and hematuria, 10 (6%) patients complained about abdominal pain and hematuria, 8 (5%) patients complained about abdominal

pain and vomiting. A study conducted by Mahesh J Fuldeore and Ahmed M Soliman, at 2017, stated that, among uterine fibroid patients with these typical uterine fibroid-related symptoms, 56.4%, 32.3%, 26.4%, 25.8%, and 20.4% reported heavy menstrual bleeding, passage of clots, spotting/bleeding between periods, constipation/bloating/diarrhoea, and pelvic pressure, respectively, as extremely bothersome.

COMORBIDITIES

Out of 160 women in the study, majority i.e., 38 (24%) patients had anemia followed by 33 (21%) patients hypothyroidism, 32 (20%) patients had Hypertension, 27(17%) patients had had Diabetes mellitus (DM), 3 (2%) patients had anemia + hypothyroidism, 1(1%) patients had leukaemia patients had anemia + hyperthyroidism, 2 (1%) patients had DM + Hypertension + hypothyroidism, 2(1%) patients had Hypertension + anemia, 1(1%) patients had Hypertension + Hypothyroidism. A study conducted by, H. Charles, at 2013, In a sample of 368 patients, recorded co-morbid medical conditions include: obesity, 22.54%; anemia, 20.92%; transfusion-dependent anemia, 3.26%; hypertension, 14.95%; psychiatric disorder, 8.97%; hypercholesterolemia, 7.33%; hypothyroid, 5.43%; uterine polyps, 3.53%; diabetes mellitus, 2.99%; endometriosis.17%.

AGE AT MENARCH

Out of 160 women in the study majority, i.e., 81 (51%) patients attained menarche at age of 12 years followed by 49 (31%) patients attained menarche at age of 13 years, 19 (12%) attained menarche at the age of 14 years, 10 (6%) patients attained menarche at the age of 15 years, 1 (1%) patient attained menarche at the age of 16 years. A study conducted by Muhammad Fidel Ganis Siregar, stated that, from 249 uterine fibroid patients in this study, 177 patients (35.5%) had menarche at >10 years old, whereas the majority of patients with other benign tumor had menarche at >10 years old with 214 patients (43.0%). The association between menarche age and uterine fibroid incidence. A p-value < 0.0001 can be identified, signifying an association between menarche age and uterine fibroid incidence. An odds ratio of 2.487 (CI 1.585-3.902) denotes women with menarche at <10 years old have a 2.487 times higher chance of having uterine fibroid. Confidence interval of 1.585-3.902

PARITY

Out of 160 women in the study, majority i.e., 48 (30%) patients had 2 parities with 2 live children, followed by 41 (20%) patients had 3 parities with 3 live children, 19 (12%) patients had 4 parities with 4 live children, 22 (14%) women had 1 parity with 1 live child, 12 (8%) patients had 3 parities with 2 live children, 11 (7%) patients had 4 parities with 3 live children, 4 (3%) patients had 5 parities with 5 live children, 2 (1%) patients had 2 parities with one livechild, 1 (1%) patients had one parity with zero live children. A study conducted by. A study conducted by Amruta C., Annappa Shetty, at

2020, The association between parity and fibroids, out of 100 women studies 63 were nulliparous and 37 were multiparous. There is a relation between fibroids and women being nulliparous. The incidence of fibroids is inverselyproportional to parity.

PREMENOPAUSAL AND POSTMENOPAUSAL

Out of 160 women in the study, majority i.e., 120(75%) patients were in the pre-menopause stage and followed by 39 (24%) patients were in the post-menopause while 1 did not attain menopause even after age of 50 years. A study conducted by, EA Stewart, at 14 march 2017, the risk factor with the greatest magnitude was age, which was found to increase the risk of UFs by up to approximately tenfold. In a retrospective, single-centre study of the ultrasound records of women in Israel experiencing UF symptoms, those aged 41–50 or 51–60 years were 10 times more likely to have UFs than those aged 21–30 years. However, in a postmenopausal age group, i.e., over 60 years old, UF risk declined. Premenopausal women were at an approximately three–five times higher risk of symptomatic UFs than postmenopausal women in two registry studies. Furthermore, in an Italian single-centre case–control study, premenopausal women showed a tenfold increase in UF risk compared with postmenopausal women.

USG REPORTS

Out of 160 women in the study, majority i.e., 28 (18%) patients were diagnosed with intramural fibroids, 29 (18%) patient were diagnosed with subserosal fibroids, 29 (18%) patient were diagnosed with multiple fibroids, followed by 27 (17%) patients were diagnosed with submucosal fibroids, 17 (11%) patients were diagnosed with bulky fibroids, 11 (7%) patients were diagnosed with endometrial fibroids, 11(7%) patients were diagnosed with myometrial fibroids, 7 (4%) patients were diagnosed with cervical fibroids. A study conducted by MalanaMoshesh*, Shyamal D. Peddada, at 2014, There were a total of 178 fibroids; 174 were distinct, 4 fibroids were “questionable” and not used in the analysis. Age distribution and number of fibroids per woman. Most women had only one fibroid detected (61.5% n= 59). Type, location, and size of the fibroids. Most fibroids were small (under 2cm in diameter n= 136, 78%). Most fibroids were intramural (n= 137, 79%). Only 4.0% (n=7) were submucosal. Approximately half of all fibroids were in the fundus (51%) and about another half in the uterine corpus (47%). Only 4 fibroids were detected in the cervix/lower uterine segment.

BLOOD TRANSFUSION

Out of 160 women in the study, majority i.e., 6 (12%) of total anemic patients had blood transfusion while 37 (88%) patients required no blood transfusion. A study conducted by Mohanambal M. Munusamy, Wills G. Sheelaa, at 2017 Out of 136 women 92 were (68%) anaemic, 48 women (38%) needed preoperative blood transfusion. 32 (23%) needed more than one blood transfusion.

TYPE OF SURGERY

Out of 160 women in the study, majority i.e., 87 (54%) of patients had undergone TAH type of surgery and 68 (43%) of patients had undergone Myomectomy type of surgery. A study conducted by Abiodun Omole-Ohonsi and Francis Belga, at 2012, During the study period, surgical operations for uterine fibroids were carried out in 115 cases out of 465 major gynecological operations that were performed, giving a period prevalence of 24.7% of major gynecological operations for uterine fibroids. Only 105 case notes were retrieved from the Medical Records Department giving a retrieval rate of 91.3%. Abdominal hysterectomy was performed in 58.1% of the cases, while 41.9% had abdominal myomectomy, the odd of using abdominal hysterectomy was about twice that of myomectomy.

PRE-OPERATIVE MEDICATION

Out of 160 women in the study, 51% of patients were given cephalosporin's of which 20 (12%) were given Ceftriaxone, 35 (21%) were given cefixime, 29 (18%) were given cefoperazone + sulbactam, followed by 15 (9%) patients were given metronidazole, 5(0.3%) patients were given doxycycline. A study conducted by Saba Zia Butta, Mobasher Ahmad, at 2019, In both arms other lactams (pre-I 63.5%, post-I 52.8%), and other antibiotics (pre-I 63.5%, post-I 52.8%) were the most frequently used antibiotic classes, with almost equal usage of cefoperazone/sulbactam (pre-I; 52.9%, post-; 49.3%) and amikacin (pre-I; 46.2%, post-I; 42.2%) After the intervention, in the other – lactams and other surgery category, significant reductions were observed only in the utilization of co-amoxiclav (pre-I; 10.2%, post-I; 3.1%) and metronidazole (pre-I; 26.2%, post-I; 16%). While cefazoline (pre-I; 63.5%, post-I 52.8%), the first-generation cephalosporin, exhibited increased utilization in the post-intervention arm.

POST-OPERATIVE MEDICATION

Out of 160 women in the study, 47.2% patients were given cephalosporins of which 73 (45%) patients were given Ceftriaxone, 16 (1%) patients were given cefixime, 20 (1.2%) patients were given cefoperazone with sulbactam, followed by 74 (46%) patients were given metronidazole, 31 (19%) patients were given gentamicin. A study conducted by Saba Zia Butta, Mobasher Ahmad, at 2019, In both arms other lactams (pre-I 63.5%, post-I 52.8%), and other antibiotics (pre-I 63.5%, post-I 52.8%) were the most frequently used antibiotic classes, with almost equal usage of cefoperazone/sulbactam (pre-I; 52.9%, post-; 49.3%) and amikacin (pre-I; 46.2%, post-I; 42.2%) After the intervention, in the other – lactams and other surgery category, significant reductions were observed only in the utilization of co-amoxiclav (pre-I; 10.2%, post-I; 3.1%) and metronidazole (pre-I; 26.2%, post-I; 16%). While cefazoline (pre-I; 63.5%, post-I 52.8%), the first-generation cephalosporin, exhibited increased utilization in the post-intervention arm.

CONCLUSION

The present study demonstrate that Uterine fibroids are considered as most common benign tumors in females which leads to hysterectomy, as per the Observational study after LCSC hysterectomy is most commonly performed surgery in females. The most effected are reproductive age group females. The risk factors for uterine fibroids are pre- and post- menopausal age, early menarche, Nulliparous, less parity, obesity, previous medical history of HTN, DM, Complications associated with uterine fibroids are heavy menstrual bleeding, abdominal pain, infertility, anemia.

This is a Descriptive study hospital based conducted for 3 months in Warangal district, Survey results further suggest that there needs improved awareness and education. Although majority aware of uterine fibroids many in our population showed some misconceptions about uterine fibroids.

Out of 160 study populations patient were divided into various groups according to various parameters. Highest prevalence of uterine fibroids was observed in age group between 35- 39(34%), 45-49(31%) years Here is the need of clinical pharmacist where he/she place a role in patient education, counseling about the disease, need for modifying their lifestyle opting for health dietary habits, detecting in early stage, raising the awareness among people.

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