

Study of Polyps in Female Reproductive Tract in a Tertiary Care Centre**Manorama Kumari¹, Deepshikha², Lata Shukla Dwivedy³**¹Senior Resident, Department of Obstetrics and Gynaecology, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar²Senior Resident, Department of Obstetrics and Gynaecology, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar³Professor, Department of Obstetrics and Gynaecology, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar

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Abstract:

Background: About 7.8 to 50% of women have polyps in their female reproductive system. Endometrial polyps frequently develop in the fundal or tubocornual area. Due to the continuous inflammation, they mechanically impact female fertility and interfere with proper cellular function. Endometrial curettage is frequently advised to rule for malignancy or subclinical endometrial hyperplasia. Pregnancy or mucorrhoea can cause cervical polyps to expand. The purpose of this study is to understand the clinical presentation, treatment options for polyps in the female reproductive system, and the relationship between histopathological and ultrasonographic results.

Methods: This prospective hospital based observational study was conducted in Department of Obstetrics and Gynaecology, ANMMCH, Gaya, Bihar from January 2022 to December 2023. Total 50 cases included in this study period to their symptoms, age, desire for fertility and type of polyp.

Results: The age range of 31 to 40 years (42%) and parous women had the highest rates of polyps. Heavy menstrual bleeding (82% of cases) were the most frequent presenting ailment. Leiomyomatous polyps were shown to be the most prevalent kind of polyp based on USG and HPE. 44% of women with heavy menstrual bleeding had severe anemia that necessitated blood transfusions to treat. Malignancy-related cases were not found.

Conclusion: The main cause of AUB is polyps. It might result in severe anaemia that requires blood transfusions and copious menstrual bleeding, which can be morbid. Histopathological diagnosis is consistent with the results of clinical examination and ultrasonography. The location and type of the polyp can be determined using a clinical examination and ultrasound, and a further course of treatment can then be taken.

Keywords: Polyps, Mucorrhoea, Parous, Leiomyomatous, Anaemia.

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Introduction

The Greek term "polypus" (which means "many feet") is where the modern word "polyp" originates. Gynaecological polyps are divided into groups according to their nature, location, and whether or not they have a stalk. [1] A uterine polyp, also known as an endometrial polyp, is an abnormal growth that arises from the endometrium, the lining of the uterus, and fills places as small as the uterine cavity or as large as it can. It has blood vessels, glands, and stroma. Both the reproductive and postmenopausal phases of life have them. About 50% of cases of irregular uterine bleeding and 35% of infertility have been linked to endometrial polyps. [2]

Endometrial polyps have clinical significance since they increase the risk of endometrial atypia and cancer as well as irregular uterine bleeding and

infertility. [3] The lining of a healthy polyp is the same as the endometrium around it. A white protuberance covered with branching surface vessels represents the non-functioning polyp. The depths of the polyps typically contain thick-walled capillaries. [4] The fibroid polyp may arise from the body of the uterus or from the cervix.

In almost all cases, a submucous fibroid that has protruded into the uterine cavity is the cause of a fibroids polyp. The uterus contracts during this to push the polyp out, and as a result, the polyp may be pushed out through the cervix to lie even in the vagina. It then reaches a pedicle, which is frequently broad. The polyp is often a solitary, variable-sized entity. Particularly at the tip, there may be signs of necrosis, infection, and hemorrhage. There is a wide pedicle. Other types of

fibroids may also be present in the uterus. [5] The posterior lip of the ectocervix is where the cervical fibroid polyp usually develops. It is often single and could be modest. Occasionally, it might be so large that it enlarges the vagina or even protrudes from the introitus, confounding the diagnosis of uterine inversion. [5] The term "pseudo cervical fibroid" refers to a fibroid polyp that develops from the uterine body and occupies and enlarges the cervical canal. [5] Cervical polyps, which can appear as smooth, reddish protrusions, are benign tumors that develop from the endocervical epithelium. They can cause vaginal discharge, intermenstrual bleeding, and post-coital bleeding. They are typically asymptomatic and are discovered by chance during a normal cervical smear. [6] Mucous polyps typically grow in women during their reproductive years, although they can also appear in menopausal women and sometimes in women who have passed menopause. Due to their tendency to bleed quickly, mucous polyps increase vaginal discharge, and patients may have irregular or postcoital bleeding. [7]

The three basic diagnostic techniques for evaluating endometrial polyps are hysteroscopy, saline infusion sonography, and transvaginal scan with applied color Doppler. Endometrial biopsy has a lower diagnostic sensitivity but can still detect polyps. It is advisable to perform a transvaginal scan on premenopausal women before day 10 of the cycle to reduce the possibility of false-positive and false-negative results. An endometrial polyp may show up on a transvaginal scan as a diffuse thickening of the endometrium or as a round or elongated hyperechoic focal mass inside the uterine cavity. [8] Some polyps have sonolucent cystic areas that correlate to dilated endometrial glands. Color or power Doppler can be used to enhance

transvaginal scans. In contrast to submucous leiomyomas, which frequently received blood flow from numerous vessels emerging from the inner myometrium, endometrial polyps normally have just one arterial feeding channel.

Materials and Methods

This prospective hospital based observational study was conducted in Department of Obstetrics and Gynaecology, Anugrah Narayan Magadh Medical College and Hospital, Gaya, Bihar from January 2022 to December 2023.

Total 50 cases included in this study period to their symptoms, age, desire for fertility and type of polyp. The treatment included conservative procedure like polypectomy to radical treatment like hysterectomy in women who did not wish to conserve uterus and who had associated multiple fibroids.

Results

In this study, the age range of 31 to 40 years (n=21) had the highest prevalence of polyps (42%), followed by the range of 43 to 50 years (32%, n=16).

In this study, only 10% of women (n=5) had reached menopause. Parous women P1 (8%, n=4), P2 (52%, n=26), P3 (16%, n=8), P4 (16%, n=8), and nulliparous (8%, n=4) had more polyps than other women.

Women who gave birth naturally (82%, n=42) had more polyps than those who underwent caesarean sections (10%, n=5). When compared to women who were not tubectomized (24%, n=12), polyps were more prevalent in tubectomy patients (68%, n=34).

Table 1: Age distribution of women with polyp

Age groups in Years	No. of cases	Percentage
20-30	7	14%
31-40	21	42%
41-50	16	32%
>50	6	12%
Total	50	100%

Women most frequently reported abnormal menstrual bleeding when it came to the presenting concerns.

Women (82%, n=41) showed up bleeding heavily. The average time from the onset of symptoms and when they were brought for treatment at the

medical facility was one to six months. White discharge per vagina (WDPV) (16%, n=32) was the next frequently occurring presenting complaint.

Before going to the hospital, ladies had symptoms for one to twelve months. Mass pre vagina was the least frequent presenting symptom (12%, n=6).

Table 2: Complaints of heavy menstrual bleeding

Months	No. of cases	Percentage
<1	3	6%
1-3	17	34%
4-6	15	30%

7-12	5	10%
>12	1	2%
NOHMB	9	18%
Total	50	100%

In 98% of cases (n=49) during clinical examination, the uterus was not palpable during abdominal examination. In 88% of instances (n=42) during speculum inspection, a tumor or polyp was seen. Bimanual examination revealed that the uterus was bulky in 60% of the cases (n=30), normal in 34% of the cases (n=17), and enlarged >12 weeks in 6% of the cases (n=3).

In 54% of the cases (n=27), the origin of the polyp was the endometrial cavity, and in 38% of the cases

(n=19), it was the cervical canal. In cases (8%, n=4) that just had bleeding present, there were no polyps to be seen.

The clinical results were confirmed by ultrasound. The most prevalent form of polyp (58%, n=29) was fibroid. There were cervical fibroid polyps in 28% (n=14) of the cases. 30% of the cases (n=15) had uterine fibroid polyps. 14% of cases (n=7) had endometrial polyps. In 28% of the cases (n=14), a cervical polyp was found.

Table 3: Ultrasound diagnosis of type of polyp

Type	No. of cases	Percentage
Cervicalpolyp	14	28%
Cervicalfibroidpolyp	14	28%
Endometrialpolyp	7	14%
Fibroidpolyp	15	30%
Total	50	100%

60% of patients (n=30) underwent hysterectomy as their primary treatment. In 20% of the cases (n=10), polypectomy was performed.

In 18% of the cases (n=9), polypectomy with D and C was performed. In 2% of instances (n=1), open myomectomy was combined with a polypectomy. The origin of the polyp was established intraoperatively. In 32% of cases (n=16), the cervical canal served as the origin, in 38% of cases (n=19), the myometrium served as the origin in 30% of cases (n=15). In 94% of cases (n=47), the postoperative period was uneventful.

During the polypectomy with D and C procedure, wound infection was observed in 4% of the instances (n=2) and uterine perforation in 2% of the cases (n=1). Based on pre-operative Hb%, 44% of the sample (n=22) had severe anemia, 34% had moderate anemia, 6% had light anemia (n=3), and 16% had no anemia (n=8). Women who needed blood transfusions either before surgery or afterward made up 66% of the population (n=33), while 34% of the population (n=17) did not.

Depending on the severity of the anemia, 1 to more than 5 units was transfused.

Table 4: Treatment done

Type	No. of cases	Percentage
Polypectomy	10	20%
Polypectomy with d+c	9	18%
TAH	7	14%
TAH+BSO	19	38%
VH with Poltpectomy	1	2%
TAH+ULO+BS	3	6%
POLYPECTOMY + open myomectomy	1	2%
Total	50	100%

The clinical findings were supported by histopathology. 48% of the polyps were of the fibroid/leiomyomatous variety (n=24). 32% of the cases (n=16) had endometrial polyps. Twenty percent of cases (n=10) had endocervical polyps. Malignancy-related cases were not found.

Table 5: Histopathology findings

Type	No. of cases	Percentage
Endocervical polyp	10	20%
Endometrial polyp	16	32%
Leiomyomatouspolyp	24	48%
Total	50	100%

Discussion

Polyps are widespread, with an estimated 8% prevalence in the general population (Dreisler, 2009a).

Additionally, rates for people with AUB range from 10 to 30 percent (Bakour, 2000; Goldstein, 1997). [8]

During the reproductive years, endometrial polyp incidence rises with age. In the current study, age groups 31 to 40 years (42%, n=21) and 43 to 50 years (32%, n=16) had the highest proportions of polyps. [9]

The most common symptom of a symptomatic fibroid is menorrhagia (30%). 82% of the women (n=41) in this research who presented with significant bleeding did so.

In research using sonohysterography, 33% of premenopausal women with symptoms older than 29 years old who were having irregular bleeding had polyps. [10]

In 54% of the instances (n=27), the clinical examination revealed that the origin of the polyp was the endometrial cavity, and in 38% of the cases (n=19), it was the cervical canal. In 8% of the individuals (n=4), no polyp was seen since they merely had bleeding. In 44% of cases (n=22), ultrasonography revealed that the polyp originated in the endometrial cavity, and in 56% of cases (n=28), it did so in the cervical canal. Saline infusion sonography and vaginal sonography are often used diagnostic techniques for polyps. [8]

Based on the patient's age and relationship with numerous fibroids, hysterectomy was the most prevalent treatment strategy in 60% (n=30) of the cases. When a polyp was isolated, there was no concomitant uterine pathology, and the ladies wanted to preserve their uterus, polypectomy was performed in 20% of the instances (n=10). To rule out endometrial hyperplasia or malignancy, polypectomy with D and C was performed in 18% (n=9) of cases when there was associated endometrial thickness. When she intended to get pregnant, polypectomy with open myomectomy was performed in 2% (n=1) of the cases. Based on pre-operative Hb%, it was determined that 44% of the population (n=22) had severe anemia, 34% had moderate anemia, 6% had mild anemia (n=3), and 16% had no anemia (n=8), showing the severity of the hemorrhage and related morbidity.

The clinical findings were supported by histopathology. 48% of cases (n=24) had fibroid polyps/leiomyomatous polyps, while 32% (n=16) had endometrial polyps. Twenty percent of the cases (n=10) had endocervical polyps. Malignancy-related cases were not found. The type of polyp identified by the diagnostic results was the same as what the USG had found. Intracavitary and

intramural leiomyomas, which were detected in 13% and 58%, respectively, of symptomatic women with bleeding, were also linked to polyps in a research. [10]

According to an examination of the pathology of resected polyps, the likelihood of malignancy is less than 5% and roughly 0.5%. [11] Atypia or cancer in an endometrial polyp from a premenopausal woman was infrequent in one extensive series. [7] In this investigation, there were no histopathological cases of cancer.

Conclusion

AUB is frequently brought on by polyps. Heavy menstrual flow as a result can result in severe anemia that necessitates blood transfusions and morbidity. Histopathological diagnosis is correlated with clinical examination and ultrasonography diagnosis. One can determine the location and type of polyp using a clinical examination and ultrasound, and then decide on further care.

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