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Study of polyps in female reproductive tract in a tertiary care centre

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ABSTRACT

Objective: To study the clinical presentation, management of polyps of female reproductive tract. To know the correlation between ultrasonological finding and Histopathological findings.

Materials and Methods: This was a retrospective hospital based observational study. It was conducted in Cheluvamba hospital, attached to Mysore Medical college and Research Institute, Mysore. Data was collected from hospital registers who underwent surgery for diagnosis of polyp from the year 2018 to 2021 were included in the study. There were 50 cases in the study. They were managed according to their symptoms, age, desire for fertility and type of polyp.

Results: Polyps are most common in the age group 31 to 40 years (42%) and in parous women. The most common presenting complaint was heavy menstrual bleeding (82%). Based on USG and HPE the most common type of polyp was leiomyomatous polyp. Heavy menstrual bleeding caused severe anaemia in 44% of women who required blood transfusion for correction anaemia. No cases of malignancy were diagnosed.

Conclusion: Polyps are an important cause of AUB. The resulting heavy menstrual bleeding can cause severe anaemia requiring blood transfusion, leading to morbidity. Clinical examination and ultrasound diagnosis correlates with histopathological diagnosis. Using clinical examination and ultrasound one can identify the site and type of polyp and decide on further management.

1. Introduction

The word “polyp” arises from the ancient Greek word “polypus” meaning “many feet”. Gynaecological polyps are categorized based on their location, type, and presence/absence of a stalk.[1]

An endometrial polyp or uterine polyp is an abnormal growth containing glands, stroma and blood vessels projecting from the lining of the uterus (endometrium) that occupies spaces small or large enough to fill the uterine cavity. They are found during both reproductive and postmenopausal phases of life. Endometrial polyps have been implicated in about 50% of cases of abnormal uterine bleeding and 35% of infertility.[2] The clinical relevance of endometrial polyps is linked to abnormal uterine bleeding, infertility, and the risk of endometrial atypia and cancer.[3] A functioning polyp has a lining identical to the surrounding endometrium. The non-functioning polyp presents as a white protuberance covered with branching surface vessels. Thick-walled vessels are usually seen within the depths of the polyps.[4]

The fibroid polyp may arise from the body of the uterus or from the cervix.

Fibroid polyp is almost always due to extrusion of a submucous fibroid into the uterine cavity. During this it attains a pedicle which is often broad and the uterus contracts to expel the polyp out and as a result, the polyp may be pushed out through the cervix to lie even in the

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vagina. The polyp is usually single, of varying sizes. There may be evidences of necrosis, infection and haemorrhage specially at the tip. The pedicle is broad. There may be associated other varieties of fibroids in the uterus.[5]

Cervical fibroid polyp usually arises from the ectocervix and from its posterior lip. It may be small and usually single. At times, it is big enough to distend the vagina or even comes out of the introitus confusing the diagnosis of uterine inversion.[5]

A fibroid polyp arising from the uterine body when occupies and distends cervical canal, it is called pseudo cervical fibroid.[5]

Cervical polyps are benign tumours arising from the endocervical epithelium and may be seen as smooth, reddish protrusions. They are usually asymptomatic, being identified incidentally during a routine cervical smear, they can cause vaginal discharge, Intermenstrual bleeding and Post coital bleeding.[6] Mucous polypi usually occur in women during the childbearing period of life, but they develop also in women of menopausal age and are occasionally seen in women past the menopause. Mucous polypi cause an increased vaginal discharge, and as they bleed easily the patient may complain of irregular and postcoital bleed.[7]

The main diagnostic tools or endometrial polyp evaluation include transvaginal scan with applied colour Doppler, Saline infusion sonography, and hysteroscopy. Endometrial biopsy may identify polyps but has less diagnostic sensitivity. In premenopausal women, tranvaginal scan is best performed prior to day 10 of the cycle to lower the risk of false-positive and false-negative findings. With transvaginal scan, an endometrial polyp may appear as a non-specific endometrial thickening or as a round or elongated hyperechoic focal mass within the endometrial cavity.[8]

Sonolucent cystic spaces corresponding to dilated endometrial glands are seen within some polyps. Transvaginal scan can be augmented with color or power Doppler. Endometrial polyps typically have only one arterial feeding vessel, whereas submucous leiomyomas generally received blood flow from several vessels arising from the inner myometrium.

2. Materials and Methods

This was a retrospective hospital based observational study. It was conducted in Cheluvamba hospital attached to, Mysore Medical college and Research Institute. Mysore. Data was collected from hospital registers who underwent surgery for diagnosis of polyp from the year 2018 to 2021 were included in the study. There were 50 cases in the study. They were managed according 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.

3. Results

In this study polyps were most common in the age group 31 to 40 year, 42% (n=21), followed by the age group 43-50 years (32%, n=16). Only 10% (n=5) had attained menopause in this study. Polyps were more common parous women P1 (8%, n=4) P2 (52%,n=26), P3 (16%, n=8), P4 (16%, n=8), Nulliparous (8%, n=4).

Polyps were more common in women who had vaginal deliveries (82%, n=42) than who had caesarean deliveries (10%, n=5). Polyps were more common in women who underwent tubectomy (68%, n=34) when compared to women who were not tubectomised (24%, n=12).

In relation to the presenting complaints women most commonly presented with menstrual bleeding abnormalities. Women (82%, n=41) presented with heavy bleeding. The average duration of symptoms was between 1 to 6 months during which they presented to the health care facility for treatment. The next common presenting complaint was white discharge per vagina (WDPV) (16%, n=32.women had the symptoms between 1 to 12 months duration before presenting to hospital. The least common presenting symptom was mass pre vagina (12%, n=6).

During clinical examination, uterus was not palpable in abdominal examination in (98%, n=49) cases. During speculum examination mass/polyp was visible in (88%, n=42) cases. During bimanual examination the uterus was bulky in (60%, n=30) cases, normal in 34%, n=17) cases, and enlarged >12 weeks in (6%, n=3) cases.

The origin of polyp from endometrial cavity was seen in (54%, n=27) cases, from cervical canal in (38%, n=19) cases. No polyp was seen in (8%, n=4) cases, as they presented only with bleeding.

Ultrasound was used to confirm the clinical findings. The fibroid polyp was the most common type (58%, n=29). Cervical fibroid polyp was seen in 28% (n=14) cases. Uterine fibroid polyp was seen in 30%, (n=15) cases. Endometrial polyp was seen in 14%, (n=7) cases. Cervical polyp was seen in 28%, (n=14) cases.

Most common treatment method was hysterectomy 60%, (n=30) cases. Polypectomy was done in 20%, (n=10) cases. Polypectomy with D and C was done in 18%, (n=9) cases. Polypectomy with open myomectomy was done in 2%, (n=1) cases.

Intraoperative the origin of polyp was confirmed. The origin was endometrial cavity in 32%, (n=16) cases, cervical canal in 38%, (n=19) and myometrium in 30%, (n=15) cases.

The postoperative period was uneventful in 91%, (n=47) cases. Wound infection was seen in 4%, (n=2) cases, uterine perforation was seen in 2%, (n=1) case during polypectomy with D and C procedure.

Based on pre- operative Hb% 44%, (n=22) had severe anaemia, 34%, (n=17) had moderate anaemia, 6%, (n=3) had mild anaemia, 16%, (n=8) had no anaemia.

Women who required blood transfusion either during pre-operative or post- operative period were 66%, (n=33) and women who did not require blood transfusion were 34%, (n=17). The no. of units transfused ranged from 1 to >5 units depending on the degree of anaemia.

Histopathology was used to confirm the clinical findings. The fibroid polyp/ leiomyomatous polyp was the most common type 48%, (n=24). Endometrial polyp was seen in 32%, (n=16) cases. Endocervical polyp was seen in 20% (n=10) cases. No cases of malignancy were diagnosed.

Table 1: Age distribution of women with polyp

Years	Frequency	Percentage
20-30	7	14
31-40	21	42
41-50	16	32
>50	6	12
Total	50	100

Table 2: Complaints of heavy menstrual bleeding

Months	Frequency	Percentage
< 1	3	6
1-3	17	34
4-6	15	30
7-12	5	10
>12	1	2
NO HMB	9	18
Total	50	100

Table 3: Ultrasound diagnosis of type of polyp

Type	Frequency	Percentage
Cervical polyp	14	28
Cervical fibroid polyp	14	28
Endometrial polyp	7	14
Fibroid polyp	15	30
Total	50	100

Table 4: Treatment done

Type	Frequency	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

Table 5: Hitopathology findings

Type	Frequency	Percentage
Endocervical polyp	10	20
Endometrial polyp	16	32
Leiomyomatous polyp	24	48
Total	50	100

4. Discussion

Polyps are common, and their prevalence in the general population approximates 8 percent (Dreisler, 2009a). Moreover, in those with AUB, rates range from 10 to 30 percent (Bakour, 2000; Goldstein, 1997).[8]

The incidence of endometrial polyps increases with age throughout the reproductive years[9] in the present study polyps were most common in the age group 31 to 40 year, 42% (n=21), followed by the age group 43-50 years (32%, n=16).

Menorrhagia (30%) is the classic symptom of symptomatic fibroid.[5] in this study 82%, (n=41) women presented with heavy bleeding.

One study using sonohysterography found polyps in 33% of symptomatic premenopausal women older than the age of 29 years who were experiencing abnormal bleeding.[10]

From the clinical examination the origin of polyp from endometrial cavity was seen in 54%, (n=27) cases, from cervical canal in 38%, (n=19) cases. No polyp was seen in 8%, (n=4) cases, as they presented only with bleeding. From ultrasound the origin of polyp from endometrial cavity was seen in 44%(, n=22) cases, from cervical canal in 56%, (n=28) cases. For polyps, vaginal sonography an Saline infusion sonograghy are common diagnostic tools.[8]

Most common treatment method was hysterectomy 60%, (n=30) cases based on the age of the patient and association with multiple fibroids. Polypectomy was done in 20%, (n=10) cases when the polyp was solitary with no associated uterine pathology and the women desired to conserve uterus. Polypectomy with D and C was done in 18%(, n=9) cases where there was associated endometrial thickening to rule out endometrial hyperplasia or cancer. Polypectomy with open myomectomy was done in 2% (n=1) cases where she wanted to conceive.

Based on pre-operative Hb% 44%, (n=22) had severe anaemia, 34%, (n=17) had moderate anaemia, 6%, (n=3) had mild anaemia, 16%, (n=8) had no anaemia indicating the severity of bleeding and associated morbidity.

Histopathology was used to confirm the clinical findings. The fibroid polyp/ leiomyomatous polyp was the most common type 48%, (n=24), Endometrial polyp was seen in 32%, (n=16) cases. Endocervical polyp was seen in 20%, (n=10) cases. No cases of malignancy were diagnosed. The diagnostic findings were similar to USG findings as to the type of polyp. In a study, polyps also were associated with leiomyomas, both intracavitary and intramural, which

were present in 13% and 58%, respectively, of symptomatic women with bleeding.[10]

A review the pathology of resected polyps suggests that the chance of malignancy is less than 5% and approximates 0.5%.[11] In one large series, it was rare to find atypia or carcinoma in an endometrial polyp from a premenopausal woman.[7] No case of malignancy was found in histopathology in this study.

5. Conclusion

Polyps are an important cause of AUB. The resulting heavy menstrual bleeding can cause severe anaemia requiring blood transfusion, leading to morbidity. Clinical examination and ultrasound diagnosis correlates with histopathological diagnosis. Using clinical examination and ultrasound one can identify the site and type of polyp and decide on further management.

6. Author Contributions

Both authors contributed in designing the article, collection of data, interpretation of results.

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8. Conflict of Interests

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References

1. Tanos V, Berry KE, Seikkula J, Raad EA, Gordts S. The management of polyps in female reproductive organs. *Int J Surg*. 2017;43:7–16.
2. Nijkang NP, Anderson L, Markham R, Manconi F. Endometrial polyps: Pathogenesis, sequelae and treatment. *SAGE Open Med*. 2019;7. doi:10.1177/2050312119848247.
3. Levy RA, Kumarapeli AR, Spencer HJ, Quick CM. Cervical polyps: Is histologic evaluation necessary? *Pathol Res Pract*. 2016;212(9):800–3.
4. Jones HW, Rock JA. Te Linde's Operative Gynecology. 11th ed. United States: Wolters Kluwer; 2014. p. 579.
5. Dutta DC, Konar H. DC Dutta's Textbook of Gynecology. 6th ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2014. p. 273–87.
6. Bickerstaff H, Kenny LC. Gynaecology by 10 teachers. vol. 2017. 20th ed. United States: Taylor & Francis; 2017. p. 250–2.
7. Padubidri VG. Howkins & Bourne Shaw's Textbook of Gynaecology. 16th ed. Elsevier; 2015. p. 187.
8. Hoffman BL, Schorge JO. William's Textbook of Gynecology. 3rd ed. India: McGraw Hill Professional; 2016. p. 215.
9. Ryan GL, Syrop CH, Voorhiss BJV. Role, epidemiology, and natural history of benign uterine mass lesions. *Clin Obstet Gynecol*. 2005;48(2):312–24.
10. Clevenger-Hoeft M, Syrop CH, Stovall DW, Voorhis BJV. Sonohysterography in premenopausal women with and without abnormal bleeding. *Obstet Gynecol*. 1999;94(4):516–20.
11. Savelli L, De Iaco P, Santini D, Rosati F, Ghi T, Pignotti E, et al. Histopathologic features and risk factors for benignity, hyperplasia, and cancer in endometrial polyps. *Am J Obstet Gynecol*. 2003;188(4):927–31.

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