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Hysteroscopic and anatomopathological correspondence of polyps in patients undergoing polypectomy by hysteroscopy

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ABSTRACT

Introduction: The endometrial polyp (EP) is defined as a projection of the mucosa, resulting from focal hyperplasia of the endometrium. The risk of malignant transformation into endometrial adenocarcinoma is possible, and complementary evaluation with hysteroscopy and biopsy is recommended, the gold standard for defining a diagnosis of PE. **Objective:** To correlate hysteroscopic findings with anatomopathological findings in patients undergoing polypectomy. **Method:** Observational, analytical and cross-sectional study, carried out during a postgraduate course at a university hospital, in the city of Belo Horizonte, in women over 18 years old referred by the SUS for propaedeutic extension with hysteroscopy, containing a data collection phase, another for statistical analysis and followed by the interpretation of the collected data. **Results:** There were 579 patients treated at the Hysteroscopy service of the university hospital. Of these, 43.6% had polyps identified on ultrasound, while in 56.4% of them, this was an incidental finding during video hysteroscopy. Regarding polypectomy, 172 underwent the procedure and 70.9% underwent outpatient polypectomy while 26.7% were referred for polypectomy by surgical video hysteroscopy. Approximately 67.6% of polyps identified at hysteroscopy were confirmed by pathology and 5.3% secretory endometrium, 2.3% proliferative endometrium, 5.2% submucosal leiomyoma, 1.7% endometrial adenocarcinoma, 1.2% endocervical polyp, 4.7% endometrium within normal limits and 7% inconclusive. **Conclusion:** PE was the most common endometrial condition among study patients. The correlation between ultrasound, hysteroscopic and anatomopathological diagnosis demonstrated that outpatient hysteroscopy, when combined with endometrial biopsy, is an essential method for diagnosing PEs.

Keywords: Endometrial Hyperplasia; Hysteroscopy; Uterine Bleeding, Malignancy, Pathology

INTRODUCTION

The term endometrial polyp (EP) designates a polypoid formation that totally or partially reproduces the endometrium[1]. It is a common gynecological condition present in both asymptomatic women, in the majority of cases, and symptomatic women. Clinical findings may include abnormal vaginal bleeding (AUB) and/or infertility, and it may also correspond to pre-malignant and malignant conditions, which although rare

can occur in pre and post menopause[2]. Histologically, they are hyperplastic overgrowths of the endometrial glands and stroma surrounding a vascular core that forms a projection sessile or pedunculated surface of the endometrium[2,3].

The most common clinical manifestation of this condition is abnormal uterine bleeding (AUB), which occurs in 64 to 88% of patients with polyps[4,5]. Patients can also arrive at the office undergoing infertility work-up or be asymptomatic and present with PEs as an accidental finding. Endometrial polyps are the main etiologies of abnormal uterine bleeding in both pre-menopausal and post-menopausal patients. However, data on their prevalence vary widely in the literature, likely due to the diversity of populations studied and the high number of asymptomatic women with endometrial polyps. Furthermore, the fact that the definitive diagnosis depends on complementary exams and histological evaluation makes it even more difficult to determine the precise prevalence[2]. Some authors mention that, in the general population, the prevalence can be up to 25%, while it can reach up to 50% in symptomatic patients.

When diagnosing PEs, it is important to take a detailed clinical history, exploring symptoms such as abnormal uterine bleeding (AUB) and infertility. Additionally, investigating risk factors and conducting further examinations, such as transvaginal ultrasound (TVUS), hysteroscopy, and anatomopathological analysis of lesions, is necessary.

USTV provides information reliable for detecting PE and should be the method of choice for initial investigation, with a sensitivity of 91% and specificity of 90%[5]. However, hysteroscopy with guided biopsy of the lesion remains the gold standard for propaedeutics. diagnosis of PEs. The main advantage of hysteroscopy is the ability to visualize and remove polyps simultaneously, in addition to its simplicity, safety and good accuracy. In this perspective, diagnostic hysteroscopy allows a subjective assessment of the size, location and physical properties of the lesion, with a reported sensitivity of 90% and specificity of 93%[5,7].

It is worth mentioning that hysteroscopy by itself is not capable of confirming the diagnosis of PE. Despite the hysteroscopic finding characteristic of a formation sessile or pedicled, which highlights the endometrial surface, solitary or multiple, of dimensions variable (between 2 and 4cm), with the possibility of exteriorization through the cervical ostium, only the result of the biopsy with analysis histological analysis of the specimen may diagnose PE and excluding malignancy[3].

When considering the differential diagnoses of PE, there may be differences between hysteroscopy findings suggestive of a polyp and its confirmation through histopathological analysis. Other conditions that should be considered include secretory endometrium, proliferative endometrium, submucosal leiomyoma, and adenocarcinoma. In the literature, despite being scarce in terms of hysteroscopic and anatomopathological correspondence of patients undergoing video-hysteroscopy biopsy, we have studies such as the one carried out by Campaner et al 2006[3], which analyzed 82 women undergoing evaluation hysteroscopic examination of the uterine cavity, followed by polypectomy hysteroscopic. The evaluation definitive histological analysis of the specimens obtained showed endometrial polyps without malignancy in 63 women (76.8%), polyps with hyperplasia in 17 cases (20.8%), seven with complex hyperplasias without atypia (8.6%) and ten with hyperplasias simple without atypia (12.2%). Polyps were found in two women neoplastic (2.4%) [3.] It is worth mentioning that approximately 95% of PEs are benign, and the incidence of malignant or hyperplastic polyps is higher in postmenopausal patients compared to premenopausal patients (5.4% *versus* 1.7%, relative risk [RR]

3.86, 95% CI =2.9- 5.1)[3]. Furthermore, the risk of malignancy was also higher in patients with AUB when compared to patients who did not present this symptom (4.2% *versus* 2.2%, RR 2.0, 95% CI=1.2-3.1)[8].

At last, the hypothesis of the present study was to find a correspondence hysteroscopic and histological tests in hospital patients participating in the study, like what was found in the literature, whether there were symptoms indicative of the pathology. Therefore, the objective of the study was to present clinical and ultrasonographic characteristics of patients referred to the university hospital and to correlate the correspondence of hysteroscopic findings with anatomopathological findings in patients undergoing polypectomy.

METHOD

This is an observational, analytical, and cross-sectional study that was carried out during the Hysteroscopy Course of the Minimally Invasive Gynecology Postgraduate Course at a university hospital, in the city of Belo Horizonte. It is noteworthy that the researchers followed the modules practical postgraduate classes, which took place for one week per month, from March 2022 to March 2023, in the hospital's outpatient clinic.

The sample included patients using the Service National Health Service (SUS) who came to the hospital to undergo a video hysteroscopy exam. The inclusion criteria adopted by the study were: women aged 18 or over, who, for some reason, were referred for diagnostic hysteroscopy and who, during the examination, underwent polypectomy with the specimen sent for biopsy or referred for surgical hysteroscopy in the same service , and who agreed to participate in the research. Exclusion criteria were: pregnant women or women who had undergone total or subtotal hysterectomy, or who had not undergone polypectomy hysteroscopic.

In the questionnaire applied by the researchers to the women included in the study, the following variables were evaluated age, menopause, comorbidities, patient complaint (abnormal uterine bleeding, pelvic pain, asymptomatic, other unspecified), previous uterine surgery, infertility, polyp and/or thickening visualized on TVUS. Subsequently, after the hysteroscopy examination, the researchers recorded in the chart of hysteroscopic findings the changes in the patient's uterine cavity seen by the postgraduate student and her preceptor, in addition to whether a biopsy was performed. Once the biopsy was performed, the patients returned to the service with the results and the researchers recorded the conclusion and findings of the examination.

Regarding the data analysis methodology, the variables categorical variables were presented as absolute and relative frequencies and the variables numerical, such as mean ± standard deviation and/or median (1st quartile – 3rd quartile). The numerical values of the variables were subjected to the Anderson-Darling Normality test. For the comparison of means, either the t-test or the Mann-Whitney test was used.To evaluate associations between variables for categorical data, the Chi -square test or Fisher's Exact test was used. A significance level of 5% was used and data were analyzed using R software, version 4.0.3.

This study was approved by the Research Ethics Committee (CEP), in accordance with Resolution 466/12 of the National Health Council (CAAE 52619321.6.0000.5134).

RESULTS

Throughout the investigation period, a total of 552 patients attended the hysteroscopy clinic, of which 280 (50.7%) had a polyp identified during the procedure. According to Table 1, 59% of patients with polyps identified at hysteroscopy had already gone

through menopause, with the main complaints being pelvic pain (44%) and SUA (55%). In the transvaginal ultrasound examination (TVUS) performed prior to hysteroscopy, 61% of women presented endometrial thickening during the examination and 52% presented polyps. These findings showed a significant association with the presence of a polyp identified during hysteroscopy (p <0.001). Furthermore, the observation of polyps on examination was also associated with postmenopausal women (p <0.001).

Table 1: Clinical and ultrasound characteristics of patients referred to the university hospital between March 2022 and March 2023 who presented with polyps on hysteroscopy.

		Visualization of Polyps at Hysteroscopy		
Characteristics	**n**	**No (%) n=272**	**n**	**Yes (%) n=280**	**p-value [1]**
Menopause	271		279		
No		170 (63%)		113 (41%)	<0.001
Yes		101 (37%)		166 (59%)	
Comorbidity	272		280		
No		120 (44%)		113 (40%)	0.400
Yes		152 (56%)		167 (60%)	
Previous Uterine Surgery	272		280		
No		171 (63%)		154 (55%)	0.060
Yes		101 (37%)		126 (45%)	
YOUR	272		280		
No		114 (42%)		126 (45%)	0.500
Yes		158 (58%)		154 (55%)	
Pelvic pain	272		280		
Yes		140 (51%)		122 (44%)	0.063
No		132 (49%)		158 (56%)	
Asymptomatic	272		280		
Yes		47 (17%)		75 (27%)	0.007
No		225 (83%)		205 (73%)	
Others	272		280		
No		256 (94%)		269 (96%)	0.300
Others		16 (5.9 %)		11 (3.9 %)	
Infertility	272		277		
No		227 (83%)		244 (88%)	0.120
Yes		45 (17%)		33 (12%)	
Polyp in the US	261		260		
No		194 (74%)		126 (48%)	<0.001
Yes		67 (26%)		134 (52%)	
Endometrial thickening on US	243		244		
No		170 (70%)		96 (39%)	<0.001
Yes		73 (30%)		148 (61%)	

n: sample %: percentage [1]: Chi -square test YOURS: abnormal vaginal bleeding; US: transvaginal ultrasound

Only 172 of these patients were included in the sample of the study when undergoing polypectomy, since in the remaining patient's outpatient polypectomy was not performed and many of them are still waiting on the waiting list to undergo surgical hysteroscopy. This delay in service is since this service is offered by the Unified Health System (SUS), which requires a prolonged period to resolve and meet patient demands.

The distribution of the age variable is presented in Table 2. It is observed that 66.3% of respondents fall within the range of 42 years old inclusive to 54 years old exclusive. The average age value was 53.07 years (Standard deviation – SD=11.85 years) indicating a relative variability of around 22.33%. The first quartile for ages is given by 44 years with the third quartile equal to 62 years. It is worth noting that for this variable, 89 women did not respond.

Table 2: Age distribution of the group of women referred for hysteroscopy at the university hospital between March 2022 and March 2023

Age range	Absolute frequency	Freq. Valid (%)
22-26	two	2, 4%
26-30	1	1, 2%
30-34	two	2, 4%
34-38	8	9.6 % _
38-42	15	18.1 % _
42-46	19	22.9 % _
46-50	18	21.7 % _
50-54	18	21.7 % _
AT	89	-
TOTAL	172	100

Among the women in the study, more than half, that is, 55.2%, stated that they were going through menopause, while 44.2% reported that they were not in the menopausal phase. These data are presented in Table 3.

Table 3: Menopausal status of women referred for hysteroscopy at the university hospital from March 2022 to March 2023

Menopausal status	n	%
No	76	44, 2
Yes	95	55, 2
Unknown	1	0, 6
TOTAL	172	100

n: sample
%: percentage

Regarding comorbidities, of the 172 study participants, around 41.9% reported having no comorbidities while 58.1% reported having comorbidities.

In Table 4, the variable is presented below, with the respective simple frequencies and percentages.

Table 4: Symptoms of women referred for hysteroscopy at the university hospital from March 2022 to March 2023

Symptoms	n	%
Asymptomatic	40	23.3
Infertility	1	0.6
Other	22	12.8
YOUR	109	63.4
TOTAL	172	100

n: sample
%: percentage
YOURS: abnormal vaginal bleeding

It was observed that 63.4% of patients presented AUS as their main complaint, while 23.3% presented asymptomatic symptoms. Regarding the type of procedure, 70.9% underwent outpatient polypectomy using diagnostic video hysteroscopy (VHD), while 26.7% were referred to undergo surgical polypectomy (HSC) and 2.3% of patients underwent total hysterectomy.

Of the patients in the study, around 43.6% had polyps identified on ultrasound, while 56.4% did not have polyps on US. Among the hysteroscopic findings, 47.1% of patients had findings alongto the endometrial polyp, such as submucosal myoma in 5.8%, adenomyosis in 2.4%, focal thickening in 15.2%, endometritis in 3.5% %, diffuse thickening

in 4.7%, synechiae in 4.1% and lesions suspected of malignancy in 6.5%.

Approximately 67.6% of polyps identified at hysteroscopy were confirmed by biopsy, 32.5% were differential diagnoses such as 5.3% secretory endometrium, 2.3% proliferative endometrium, 5.2% submucosal leiomyoma, 1.7% adenocarcinoma endometrium 1.2% endocervical polyp, 4.7% endometrium within normal limits and 7% inconclusive. Among the 115 polyps confirmed on biopsy, 5 (4.3%) were described with simple polypoid endometrial hyperplasia, 1 (0.8%) with simple hyperplasia with atypia, 3 (2.6%) with complex hyperplasia with atypia and 1 (0.8%) had necrosis.

In the analysis of variables alone, the only variable that demonstrated a positive association was postmenopausal patients, with a significant association between the variables (p = 0.018) demonstrated in Table 5. The rest of the associations did not show a significant association. This fact demonstrates that menopause is a condition that can increase the accuracy of hysteroscopy in identifying endometrial polyps, which may also be related to the higher prevalence of this pathology during this period. Table 5 below presents the simple frequencies and associated percentage frequencies. Fisher's exact test and the Chi-square test of independence were used to test the hypothesis of association between the anatomopathological correspondence with the hysteroscopy examination in different categories.

Table 5: Analysis of the correspondence between the hysteroscopic finding of an endometrial polyp and the anatomopathological examination between March 2022 and March 2023

Characteristics	n	Total n(%)	NO n=68	YES n=104	p-value [1]
Menopause	172				**0.018**
Unknown		1 (0.6 %)	1 (1.5 %)	0 (0%)	
No		76 (44%)	37 (54%)	39 (38%)	
Yes		95 (55%)	30 (44%)	65 (62%)	
Comorbidity	172				0.600
No		72 (42%)	27 (40%)	45 (43%)	
Yes		100 (58%)	41 (60%)	59 (57%)	
Patient Complaint	172				0.200
Asymptomatic		40 (23%)	17 (25%)	23 (22%)	
Infertility		1 (0.6 %)	1 (1.5%)	0 (0%)	
Other		22 (13%)	5 (7, 4%)	17 (16%)	
YOUR		109 (63%)	45 (66%)	64 (62%)	
Polypectomy by:	172				0.300
Hysterectomy		4 (2, 3%)	2 (2.9%)	2 (1.9 %)	
HSC		46 (27%)	14 (21%)	32 (31%)	
VHD		122 (71%)	52 (76%)	70 (67%)	
Polyp in the US?	172				0.600
No		97 (56%)	40 (59%)	57 (55%)	
Yes		75 (44%)	28 (41%)	47 (45%)	
Preview	171				>0.900
No		2 (1, 2%)	1 (1.5%)	1 (1, 0%)	
Yes		169 (99%)	66 (99%)	103 (99%)	

n: sample %: percentage [1] : Chi -square test YOURS: abnormal vaginal bleeding; SCH: surgical hysteroscopy; VHD: hysteroscopy diagnoses

DISCUSSION

Hysteroscopy provides a safe, effective, and simple way of diagnosing intrauterine pathologies, being considered the gold standard for this, representing an advance in minimally invasive gynecological surgery. It is known that endometrial polyps (PE) are commonly found in this procedure[9]. In this study, endometrial polyps were visualized in 50.8% of patients undergoing outpatient hysteroscopy. It is worth mentioning that the patients referred for this procedure at the service were being investigated for some pathological change with indication of diagnostic complementation with hysteroscopy. It is believed that the global prevalence is underestimated due to few studies and the presence of asymptomatic polyps[9,10]. However, in patients with clinical symptoms such as abnormal uterine bleeding, rates vary from 10-30%. The literature points to an increase in prevalence with increasing age, being more common in post-menopause, a fact corroborated by this study as 55.2% of patients were in menopause [9]. It is believed that the incidence of the pathology increases after menopause because of the aging process, and not exclusively due to changes resulting from ovarian failure or interruption of menstrual cycles[10].

One study identified an organic cause, such as polyps, at hysteroscopy, in approximately 39.7% to 50% of postmenopausal women with AUS, however this proportion increased to 90% when the bleeding persisted for more than six months[10]. There are hypotheses in the literature that indicate that stromal congestion within the polyp leads to venous stasis with apical necrosis and bleeding[9]. This bleeding is the main reason for recommending hysteroscopy. The main advantage of this exam is the ability to detect intracavitary lesions such as leiomyomas and polyps, and the concomitant removal or biopsy of the lesion[9]. Although accurate in identifying endometrial cancer, hysteroscopy is less accurate in endometrial hyperplasia (EH), and biopsy is recommended together, since macroscopically the hyperplastic endometrium is not characteristic, thus visualization on hysteroscopy is imprecise[9-11].

Endometrial polyp biopsy is an important tool for evaluating women with suspected endometrial disease. This technique is particularly useful for the differential diagnosis of atypical complex hyperplasia and endometrial carcinoma, as these conditions have similar clinical features, including abnormal uterine bleeding and changes in the endometrial lining. Performing a biopsy allows doctors to obtain tissue samples for histological analysis and determine whether the polyp is benign or malignant. Furthermore, biopsy can also assist in the identification of various other endometrial pathologies, such as simple endometrial hyperplasia, allowing for an accurate diagnosis and appropriate treatment for each case[9-11].

It is important to highlight that the technique used to perform endometrial sampling plays a crucial role in obtaining accurate results. It is essential that the endometrial tissue collected is suitable for accurate histological evaluation and is free from deformations or artifacts resulting from cauterization. To obtain enough tissue for pathological interpretation, pipettes or curettes are appropriate devices to be used[9]. It was observed in the present study that 7% of the samples were inconclusive, due to non-representative fragments or insufficient or even lost samples.

HE is a differential diagnosis of endometrial polyp at hysteroscopy. The histological differentiation between the two pathologies is not always straightforward, as there is no specific microscopic characteristic or clinical parameters that differentiate PE from endometrial polypoid hyperplasia[12]. This fact was observed in the study performed, since 6.9% of biopsies were described as endometrial hyperplasia, noting that

the analysis of the polyp is macroscopic of the lesion. Hyperplasia is defined by the presence of endometrial thickening with an increase in the gland/stroma ratio[11]. They are classified as simple or complex, based on the absence or presence of architectural changes, and as atypical or non-atypical, with only those that present atypia associated with the subsequent development of adenocarcinoma. A systematic literature review and meta-analysis carried out in 2019, which analyzed 41 retrospective and 10 prospective studies, showed a low incidence of malignancy 3% in patients with PE. However, in the presence of AUB in postmenopause, the risk increased to 5% in both conditions[12]. In the present study, 1.7% of polyps visualized at hysteroscopy were endometrial adenocarcinoma in the histopathological study, all in postmenopausal women. It is important to highlight that the gynecologist must completely remove the polyps, especially in postmenopausal women, to avoid the risk of false negative biopsies and the possibility of finding a focus of endometrial cancer involving the polyp stalk[14,15].

Another uterine condition seen in histopathological analysis that differs from the endometrial polyp is the secretory endometrium or the proliferative endometrium. It is known that polypectomy should be performed during the follicular phase of the menstrual cycle, when the endometrial lining is thinner, and polyps can be identified more easily[9]. In the case of the present study, patients were scheduled by the single health system according to the availability of the hospital's gynecology department and it was not possible to select patients in relation to the best phase of the cycle. In cases where the examination is performed at a stage that makes visualization difficult, the use of progesterone should be recommended to atrophy the endometrium and allow for a more reliable *second look*[9]. In 172 of the patients whose polyps were visualized during hysteroscopy, 5.3% were endometrium in the secretory phase, this is since there are periods when the glands enter secretory exhaustion and can mimic a polyp, generating a confusing factor. However, this study is subject to factors that pose challenges in accurately identifying the polyp. For instance, there have been cases where patients were unable to undergo examination due to being in the menstrual phase.

The leiomyomas can often be distinguished from endometrial polyps based on their sonographic characteristics. Leiomyomas appear as hypoechoic lesions with shadowing, while polyps appear hyperechoic and homogeneous. In addition, there are distinct differences in the Doppler flow pattern between leiomyomas and polyps. Leiomyomas typically exhibit peripheral flow, whereas polyps tend to have a single vascular supply[16,17].

Furthermore, hysteroscopy reveals noticeable variations in the appearance of polyps and fibroids. Polyps generally have a robust red appearance, are thinner and less likely to be sessile, are soft and friable when touched with an instrument, and may sometimes have dilated glands. Fibroids are firm, mainly white in color, with superficial blood vessels. Final confirmation of the diagnosis requires histological analysis of the samples obtained[17].

During the present study, some patients presented with a polyp on hysteroscopy, the anatomopathological result of which revealed the presence of a uterine leiomyoma. This situation resulted from the existence of a thin layer of endometrium covering the myoma (pseudopolyp), which acted as a confounding factor during the evaluation of the uterine cavity through hysteroscopy.

In the study, of the 172 PEs visualized at hysteroscopy, only 75 were identified at US. PE detection is important and TVUS is a reliable method and recommended as the first investigation option due to its high sensi-

tivity of 91% and specificity of 90%[5]. However, the gold standard for diagnosing PEs is hysteroscopy with guided biopsy of the lesion, which has the advantage of allowing visualization and removal of polyps simultaneously. Furthermore, it is a simple, safe, and highly accurate method, with a sensitivity of 90% and specificity of 93%. With diagnostic hysteroscopy, it is possible to make a subjective assessment of the size, location and physical characteristics of the lesion[5,7].

In one study, it was observed that both ultrasound and hysteroscopy had different accuracy rates for diagnosing endometrial polyps, being 61.2% and 73.1%, respectively[19]. Another study reported an accuracy of 60% using ultrasound [18], while the first obtained 65.8% accuracy with ultrasound and 95% with hysteroscopy. Hysteroscopy demonstrated higher diagnostic accuracy for diagnosing endometrial polyps compared to ultrasound. Therefore, outpatient hysteroscopy is always performed to ensure an accurate and appropriate diagnosis. Importantly, direct assessment of the cavity remains a crucial element in the diagnosis of endometrial polyps, as ultrasound may not be sufficient to identify endometrial lesions. In summary, the exclusive use of ultrasound cannot guarantee an accurate diagnosis of endometrial polyps[2,18-20].

In postmenopausal women, transvaginal ultrasound may be less accurate in detecting endometrial polyps due to endometrial atrophy, which may lead to falsely negative results or underestimation of polyp size[21]. Hysteroscopy allows direct visualization of the uterine cavity and can identify smaller or underestimated polyps on ultrasound[22]. Thus, it is observed that the specificity of hysteroscopy in diagnosing endometrial polyps may be affected by the woman's age and menopausal status. In general, postmenopausal women have a thinner endometrium, with less thickness, compared to women of reproductive age, allowing a greater specificity of 90-100%, as polyps tend to be more evident and easier to identify. identify during hysteroscopy[23,25]. In menopausal women, the specificity of hysteroscopy in detecting endometrial polyps is reported to be around 80-90%. This occurs because the endometrium tends to be thicker during menacme and, therefore, polyps are more difficult to identify and are confused with secretory or proliferative endometrium[23,24,26,27].

Additionally, the present study reported the identification of 172 patients with endometrial polyps and that of these, 122 patients underwent outpatient polypectomy, while the other 46 were referred for surgical polypectomy. The decision to refer for surgery was influenced by several factors, such as intolerance to the duration of the procedure without anesthesia, the presence of pain during the procedure, as well as the size and number of polyps found in some patients. According to the literature, outpatient polypectomy is not inferior to surgical polypectomy in terms of alleviating the symptoms of adherent uterus syndrome and, in general, is a safe and viable procedure that does not require anesthesia and is more economical. Although, it is important to recognize that in more complicated cases, hysteroscopy in a hospital setting may be necessary. It is critical to ensure that patients undergoing outpatient polypectomy receive appropriate pain-relieving treatment to improve patient satisfaction and tolerance.

Corroborating the current literature on the subject, endometrial polyps were the most common endometrial condition among patients in the study. The correlation between ultrasound, hysteroscopy, and anatomopathological diagnosis of endometrial polyps demonstrates that outpatient hysteroscopy, when combined with endometrial biopsy, is a highly accurate method for diagnosing this condition. Despite this, hysteroscopy as an isolated method did not show acceptable accuracy for diagnosing endometrial polyps, as the correspondence between the two tests was 67.5%.

CONCLUSION

The fact that the study was performed in an educational institution, in this case a postgraduate course in hysteroscopy, may have influenced this finding, as the learning curve related to the exam is arduous. In this perspective, greater training of gynecologist professionals, combined with detailed histological analysis of polypectomy specimens will have a direct impact on reducing the incidence and prevalence of complications and symptoms associated with PEs. Furthermore, it is worth highlighting that the available literature on the topic of this study is scarce, which further reinforces the relevance of the topic and the benefits of collecting data from this research for the medical community.

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THE AUTHORS DECLARE THAT THERE IS NO CONFLICT OF INTERESTS IN RELATION TO THIS ARTICLE.