Hysteroscopy in cases of cervical polyps

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Summary

To assess the usefulness of hysteroscopy in cases of cervical polyps, we studied 78 patients with a lesion found during a routine gynecological examination. All women were referred for diagnostic hysteroscopy followed by endoscopic polypectomy. In 83.3% of the cases intrauterine investigation confirmed primary diagnosis – a polyp peduncle in the cervical canal. Sixty-five of those lesions were the only pathologic condition, and six (7.7%) were associated with an endometrial polyp. In the remaining 16.7% of examined patients, primary polyps identified as cervical polyps appeared to be endometrial. All women admitted to the study were successfully treated by hysteroscopy. Our results suggest that endoscopic evaluation of the uterine cavity in women with cervical polyps can clarify the initial diagnosis. Hysteroscopy allows not only a precise visualisation of the polyp peduncle but also gives the possibility to identify and treat concurrent asymptomatic intrauterine pathological conditions.

Key words: Cervical polyps; Endometrial polyps; Hysteroscopy.

Introduction

Cervical polyps are detected in about 4% of all patients undergoing gynecological examination [1, 2, 3]. In the majority of cases they are easily recognized during investigation with a speculum. Although, hysteroscopy is not popular as a diagnostic method for cervical polyps, endoscopic screening of the entire uterine cavity may improve the initial diagnosis [4, 5]. Performing an intrauterine investigation allows a precise localization of the polyp, gives the possibility to differentiate that lesion from other peduncle lesions (small fibroid, endometrial polyps) and determines the mode of treatment and its completeness [2, 6, 7]. Additionally hysteroscopy in cases of cervical polyps can exclude the presence of other, asymptomatic pathological conditions. According to the literature, a cervical polyp is a strong, independent risk factor for an endometrial polyp [2, 4]. Our aim was to study a group of women with cervical polyps to determine the diagnostic and therapeutic efficacy of hysteroscopy in those cases.

Material and methods

Seventy-eight patients from 29 to 73 years of age (average 43.2 years) with cervical polyps found during a gynecological examination were submitted to hysteroscopy followed by polyp excision. None of the women in the study had any complaints. Preoperative transvaginal ultrasound in only four out of 78 patients showed abnormalities within the uterine cavity such as structures with well-defined margins or endometrial thickening (more than 20 mm). Hysteroscopy was performed with intravenous anaesthesia, using continuous-flow operative endoscopes. The procedure began with the macroscopic evaluation of the cervical canal and uterine cavity for the assessment of the localization of the tumor and its diameter. Also a possible presence of other coexisting lesions had been determined. Identified intrauterine pathological conditions were excised with microscissors or an electric loop (in cases of concurrent endometrial polyps larger than 2 cm in diameter). In every case, the treatment was followed by cervical and endometrial biopsy. The final diagnosis was obtained on the results of microscopic examination of the resected or excised polyp and biopsy specimens.

Results

The results of diagnostic, preoperative hysteroscopy are shown in Table 1.

Table 1. — *Hysteroscopic findings in patients with cervical polyps.*

Hysteroscopic diagnosis	No.	%
Cervical polyp	59	75.6
Cervical polyp and endometrial polyps	6	7.7
Endometrial polyp	13	16.7
Total	78	100.0

In 83.3% of the cases, the polyp peduncle was localized in the cervical canal and in the remaining 16.7% of the cases within the uterine cavity. Out of the 65 cervical polyps, 59 were single lesions, and six coexisted with an endometrial polyp. Therefore, in the 78 patients, 84 lesions were found (65 cervical and 19 endometrial polyps). The type and range of operations that were performed are shown in Table 2.

Table 2. — *Hysteroscopic polypectomy.*

Hysteroscopic diagnosis	Type of endoscopic instrument		
		Microscissors	Electric loop
	No. (%)	No. (%)	No. (%)
Cervical polyp	65 (100)	65 (100)	–
Endometrial polyp	19 (41.3)	15 (78.9)	4 (21.1)
Total	84 (100)	80 (95.2)	4 (4.8)

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All 65 cases of cervical polyps were excised with hysteroscopic scissors. The same technique was applied in 15 of 19 cases of endometrial polyps. The remaining four were resected by an electric loop. A resectoscope was used when the polyp was large in diameter (> 2 cm), and the penducle thickness was over 0.5 cm. The results of the histological examination of the lesions that were excised during hysteroscopy are presented in Table 3.

Table 3. — *Histological diagnoses.*

The result of microscopic examination	No.	%
Cervical glandular polyps		
– simplex	26	40.0
– in epidermization	29	44.6
– endometrial	10	15.4
Total	**65**	**100**
Endometrial polyps		
– glandular	8	42.1
– adenomatosus	11	57.9
Total	**19**	**100**

In 44.6% of the polyps excised from the cervical canal planoepithelial metaplasia was detected in the epithelium covering the glands. Forty percent of the removed lesions were covered by proper cervical epithelium. In the remaining 15.4%, histological structure of the polyp indicated that it had been developing deeply in the cervical canal, because elements of the mucous membrane of the uterine isthmus were also contained within it. Endometrial polyps in about 60% of cases were adenomatosus.

Not even a single patient was found to have pathological lesions within the endocervix or endometrium as a result of the microscopic examination of the taken biopsies.

Discussion

Preoperative, macroscopic examination of the entire uterine cavity seems to be an advantage of hysteroscopy – not only in cases of endometrial polyps but also in cervical polyps [2, 4, 5, 8]. According to the data from the literature, up to 30% of the polyps previously diagnosed as cervical polyps had their own peduncle in the uterine cavity [9, 10]. This percentage in our results amounted to 16.7%. We also found that in 7.7% of cases cervical polyps coexisted with endometrial polyps. La Sala *et al.* [10], Coeman *et al.* [2] and Vilodre *et al.* [4] described similar observations. The frequency of the association of both intrauterine lesions reported by Vilodre *et al.* [4] depended on patient age and ranged from 10.0% (women between 31-40 yrs.) to 50% (women between 61-70yrs.). Our observations are slightly different from the above, which is probably due to the age and opposite clinical composition of patients (all women with concurrent endometrial polyps were under 40). Cervical polyps are usually small and single [1, 3]. This assessment was confirmed by our observations. Preoperative hysteroscopic examination of 55 out of 65 tumors localized in the cervical canal revealed that they were isolated and not large in size. All of them were totally excised with microscissors. David *et al.* [9] and Bao-Ling and co-workers [11] presented similar results. The endoscopic procedure was not difficult considering the diameter of the pathological condition and the fact that the peduncles were thin and implanted in the lower part of the cervical canal. In that type of lesion hysteroscopy is not an obligatory investigation because its therapeutic value is comparable to the traditional treatment. It also appears that the efficiency of operative endoscopy in cases of numerous polyps is limited. Total removal of such lesions can be done only in conjunction with curettage. Microscopic examination of removed cervical polyps showed that in 84.6% of the cases they were mucous or epithelial. It can be concluded from the studies relating to such histological structures of polyps that they are characterized by a short and thin peduncle, and that the diameter is usually not bigger than 0.5 cm [1]. Also with scissors the remaining 15.4% of the intracervical lesions were excised but the peduncles (length about 1 cm) were deep in the cervical canal. This could be ascertained from the fact that on the polyp surface elements of the endometrium were also present. Removing these lesions using a traditional method can not be complete because it results in an excision of the peduncle in its thinnest part, which is not usually at the base but rather in the border of the cervical canal and the uterine cavity [13]. The aforementioned data confirms the benefits of hysteroscopy in such cases because this procedure can prevent possible regression of the disease.

Endometrial polyps were the second group of pathologies diagnosed and treated by us hysteroscopically. Thirteen out of 19 of these lesions (16.7%) were initially recognized as cervical because they had such a long peduncle that their distal parts were detected in the external os. The remaining six (7.7%) endometrial polyps coexisted with the cervical lesions. According to the data from the literature, about 10% of endometrial polyps are asymptomatic and are found during hysteroscopy by chance [4]. In the patients with endometrial polyps the treatment was based on removing the lesion with microscissors or monopolar electrodes. The choice of instrument depended primarily on the polyp diameter. In the present study almost 79% of the lesions did not extend beyond 2 cm and were excised with scissors. This hysteroscopic procedure was not difficult because all the lesions had a long peduncle containing a small number of vessels. It seems interesting that in most cases microscopic examination of the polyps revealed that they had an adenomatosus structure. Our observations are similar to those presented in the literature [9, 14]. Like cervical polyps implanted at the border of the uterine cavity, traditional treatment of these lesions is connected with an increased risk of recurrence of the disease. Electric loop was used to remove the remaining four (21.1%) endometrial polyps which were > 2 cm. Histological examination diagnosed all of them as glandular. According to the literature polypectomy performed by resectoscope is within the limits of 28%-54% [15].

We conclude that in cases of cervical polyps hysteroscopic evaluation of the uterine cavity makes the initial diagnosis more accurate. It also allows the identification and treatment of concurrent asymptomatic intrauterine abnormalities. Additionally, in selected cases of cervical polyps hysteroscopic polypectomy seems to be more efficient than traditional investigations.

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