

THERAPEUTIC TRENDS IN FOCUS: A COMPREHENSIVE ANALYSIS OF OPTIONS AND IMPACTS IN THE TREATMENT OF UTERINE POLYPS IN WOMEN

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Abstract: Objective: This article, a narrative review based on research in the PubMed Central (PMC) database, aims to explore therapeutic options and strategies and their impact on the health of women with uterine polyps. Results: Uterine polyps are glandular and stromal proliferations found in the endometrium, often associated with the risk of abnormal bleeding. Its presentation can be asymptomatic or symptomatic, and the decision about removing polyps in asymptomatic cases is subject to controversy. Additional therapeutic alternatives and understanding the impact on women's quality of life are essential in this context. Therapeutic options include conservative and interventional approaches. In conservative treatment, preferences for oral progestins, intrauterine devices with levonorgestrel and combined oral contraceptives stand out. During surgical intervention, it is crucial to consider factors such as dimensions and anatomical location of the endometrial polyp. In some cases, a combination of both options can be adopted to optimize the therapeutic response. Final considerations: This study highlights the importance of customizing therapeutic plans according to the individual needs of each patient, aiming to optimize results and promote health.

Keywords: Endometrial polyps, Impact, Therapeutic options.

INTRODUCTION

Uterine polyps represent abnormal proliferations of the endometrial glands and stroma, and can manifest as single or multiple formations. They vary in size, from a few millimeters to several centimeters, with peduncle or sessile morphological characteristics. Common risk factors associated with the development of endometrial polyps include aging, hypertension, hyperestrogenism, and

tamoxifen use. The risk increases during the menopause period. Uterine polyps can be asymptomatic or cause abnormal uterine bleeding, postcoital spotting and/or infertility. It is important to highlight that the severity of symptoms does not correlate with the number, size or location of polyps, with malignant transformation being rare (VITALE S. G. et al., 2021).

The occurrence of endometrial polyps, even in asymptomatic patients, is common in all age groups and tends to increase due to the widespread use of transvaginal ultrasound as part of routine gynecological examinations.

Ultrasound diagnosis of endometrial polyps in patients presenting with postmenopausal bleeding raises questions about the need for hysteroscopic removal. This is due to the fact that only histological analysis can safely distinguish between benign endometrial polyps and potential malignant lesions. However, the recommendation to remove endometrial polyps in asymptomatic patients is a matter of debate, due to concerns about the possibility of not correctly identifying a malignant lesion or overlooking a lesion with low malignant potential. This uncertainty has led to the widespread adoption of the practice of preventive removal of endometrial polyps, even in patients without symptoms (PAMPALONA J.R. et al., 2015).

This overdiagnosis approach ends up resulting in unnecessary treatments for endometrial polyps, resulting in significant costs for the healthcare system, emotional burden for patients and psychological risks, without clear benefits for the health of these individuals.

The removal of endometrial polyps in asymptomatic patients is a controversial issue, highlighting the need to seek therapeutic alternatives and understand the impact of these approaches on patients' health. This is equally important for symptomatic patients

who require more aggressive treatment.

With this scenario, this study aims to investigate and synthesize the different therapeutic options for the treatment of uterine polyps, analyze the effectiveness of the treatment strategies adopted and evaluate the impact of these interventions on the overall health of women affected by this condition. The research is justified by the need for a more precise approach to the treatment of uterine polyps, taking into consideration, all the particularities involved.

METHODOLOGY

This is a bibliographic review that is performed according to the criteria of the PVO strategy, an acronym that encompasses the population or research problem, variables and outcome. This approach was used to develop research around the following guiding question: "What therapeutic options are available for the treatment of uterine polyps, how effective are these treatment strategies, and what is the impact of these interventions on the overall health of affected women?". In this context, according to the parameters mentioned, the population or problem addressed by this research refers to female patients diagnosed with uterine polyps, and the associated therapeutic approaches and treatments are investigated.

The search for articles was conducted by searching the PubMed Central (PMC) database. We use descriptors in combination with the Boolean term "AND": Uterine Polyps AND Therapeutics. Initially, 255 articles were identified, which were subsequently subjected to strict selection criteria. The inclusion criteria covered articles in English published between 1996 and 2023, which addressed the themes relevant to this research. Randomized clinical trial, retrospective cohort and integrative review studies were considered, as long as they were available in full. Duplicate

articles, those available only in abstract form, as well as those that were not directly related to the research proposal were excluded. In the end, ten articles were selected to compose the present study.

DISCUSSION

CONSERVATIVE TREATMENT

Within the scope of conservative treatment for endometrial polyps (PE), several non-surgical options are available, including oral progestins, intrauterine devices with levonorgestrel (LNG-IUD), combined oral contraceptives and expectant management with clinical and radiological monitoring. The decision to adopt conservative therapy takes into consideration, two crucial factors: the patient's reproductive age and the presence of symptoms.

As it was discussed by Mak, K. S., et al. (2023), the endometrial polyp (PE) is characterized by the abnormal growth of the endometrium, generally a benign lesion predominantly associated with premenopausal women who present abnormal uterine bleeding. Notable risk factors include advanced age, tamoxifen use, obesity, chronic conditions such as diabetes mellitus and high blood pressure, as well as hormone replacement therapy.

Hysteroscopic polypectomy is identified as the most effective intervention for the majority of endometrial polyps. However, other conservative approaches, such as oral cyclic progestin, levonorgestrel intrauterine device and oral contraceptives, may offer benefits in the management of these lesions. It is crucial to highlight that the effectiveness of these alternatives is more pronounced in women aged 50 or younger, with this age group being more suitable for the conservative treatment of endometrial polyps.

Related to the risk associated with the use of tamoxifen, which is notably effective in

treating breast cancer, it is observed that in postmenopausal women, this medication can stimulate cell division, resulting in changes in the endometrium, including the formation of polyps. One tested strategy to combat cell proliferation is the local progestin IUS-LNG, such as Mirena® from Schering AG. This method induces benign changes in the endometrium, preventing the formation of polyps, but its effectiveness is only observed in women who are undergoing such treatment (GARDNER F.J.E. et al., 2009).

As it was highlighted by Mak, K. S., et al. (2023), the expectant strategy is appropriate for premenopausal women (up to 50 years) with asymptomatic PE. This approach is supported by reports of spontaneous PE regression, ranging from 6.3% to 57.1%, due to endometrial self-desquamation during menstrual cycles (MAK K.S. et al., 2023). Ludwin, A., et al. (2020) adds, indicating that the general prevalence of malignancy in endometrial polyps is 2.7%. However, in premenopausal and asymptomatic women, this rate is significantly lower, standing at 1.1% and 1.9%, respectively, strengthening the option for expectant treatment in this subgroup. On the other hand, in postmenopausal and/or symptomatic women, the prevalence of malignancy increases to 4.9% and 5.1%, requiring different considerations and prioritization of other therapies (LUDWIN A. et al., 2020).

SURGICAL TREATMENT

When approaching the surgical treatment of endometrial polyps (PE), it is crucial to consider several factors that influence the feasibility of an outpatient approach.

According to Di Spiezio, S. A., et al. (2015), the surgeon's experience, the dimensions of the polyp - notably when they exceed 2 cm - and the anatomical location of the PE, especially in the fundal and/or cornual

region, play determining roles in this context. The performance of outpatient surgical procedures, often concomitant with diagnostic hysteroscopy, requires special attention, and it is imperative that such interventions occur during the initial proliferative phase of the endometrium in women of childbearing age. It is noteworthy that the presence of thickened endometrium can reduce the effectiveness of complete polyp removal in a single surgical procedure.

In the case of small polyps, measuring less than 0.5 cm, the most common technique involves the use of grasping forceps. These forceps are positioned with open jaws at the base of the polyp implantation, and, by gently closing the jaws, the polyp is completely detached from its parietal implantation. This procedure is repeated as necessary to completely remove the lesion. On the other hand, larger polyps, measuring more than 0.5 cm, may require more complex techniques. En bloc removal, through resection of the implantation base with forceps or a bipolar electrode, is a viable option, as long as the internal uterine orifice is large enough to allow extraction. Alternatively, the polyp can be sectioned into smaller fragments by the electrode, facilitating its removal. These technical considerations are fundamental to guarantee the effectiveness and safety of the surgical procedure (Di Spiezio S. A., et al. 2015).

Resection of endometrial polyps (EP) emerges as an essential approach, providing not only histological evaluation, but also the detection of atypia and possible malignancies, as highlighted by Frederica Scrimin et al. (2008). This strategy proved to be especially beneficial for women who wanted to preserve their uterus and appendages, as well as those with plans to become pregnant in the future. Intriguingly, insertion of a levonorgestrel-containing Intrauterine Device (IUD) after

resection has been shown to be effective in preventing polyp recurrences in a proportion of women.

On the other hand, traditional approaches such as endometrial biopsy and curettage during hysteroscopy were not considered effective diagnostics for endometrial polyps, as pointed out by H. Maia et al. (1996). Positive results were associated with polypectomy combined with endometrial resection, highlighting the importance of maintaining hormonal therapy in menopausal patients.

Jennifer R.P. et al. (2014) propose hysteroscopy with a mechanical tissue removal system as a facilitated outpatient method, presenting advantages such as reduced surgical time and less recurrence of endometrial polyps compared to bipolar electrosurgery systems. This method, despite its effectiveness, requires follow-up studies to evaluate long-term relapses and the need for additional treatment. In postmenopausal women undergoing hysteroscopy with an instrument with a diameter greater than 5 mm, considerations regarding the administration of mifepristone or misoprostol become pertinent. These considerations point to the need for an individualized approach and careful monitoring in the post-surgical management of endometrial polyps.

Given the need to prioritize the resolution of symptoms and confirm the absence of potential neoplastic transformation, hysteroscopic removal of endometrial polyps, according to Di Spiezio, S. A., et al. (2015), is justified as a safe and effective approach. This technique not only relieves symptoms, but also allows histological evaluation, being considered standard in the treatment of these lesions.

However, according to Henriquez, D.C.A., et al. (2007), it is crucial to recognize that, after hysteroscopic polypectomy, symptoms may persist or return, requiring,

in some cases, additional interventions. The combination of endometrial ablation or the insertion of a levonorgestrel-releasing intrauterine device emerges as a strategy to increase the effectiveness of treatment and offer a longer-lasting result. Given this, providing comprehensive counseling to patients becomes imperative for a holistic and personalized approach.

Scheng K. K. and Lyons S. D. (2020) highlight the relevance of hysteroscopy-guided polypectomy in symptomatic postmenopausal women, considering the small but significant increased risk of malignant transformation of these lesions in this specific group. Once the possibility of malignancy is excluded, the approach not only alleviates symptoms but also provides additional benefits. Therefore, personalization of management plans, carefully discussed in consultation with the patient, becomes essential to optimize clinical results.

FINAL CONSIDERATIONS

Taking into consideration that advanced age represents a significant risk factor for the development of uterine polyps, it is pertinent to highlight the notable increase in the number of women diagnosed with this condition. Additionally, a variety of therapeutic options are available to address uterine polyps, and it is essential to personalize the choice of treatment based on the presence of symptoms and the reproductive age of affected patients. Although several studies have been conducted on the topic, it is important to note that many studies on uterine polyposis provide outdated information. Thus, there is a pressing need to carry out additional studies that are up to date and that comprehensively address clinical outcomes and the influence on quality of life, considering both conservative treatment and surgical approaches. This more up-to-date approach is crucial to holistic understanding of uterine polyposis and guiding informed clinical decisions.

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