

SYSTEMIC REVIEW**What is the Endometrial Polyps Malignancy Rate in Postmenopausal women?**

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ABSTRACT

Background: The endometrial polyps are overgrowths of localized endometrial tissue. These Polyps vary in size and can be pedunculated or sessile, single or multiple and they contain blood vessels and stroma in varying amounts covered by pseudo stratified epithelium. Depending on the pattern analyzed and the resection techniques used, occurrence rate of malignancy related to endometrial polyp levels from 0.8% to 8%¹.

Aim: To find out the rate of malignancy of endometrial polyps in postmenopausal women that are symptomatic.

Method: In this systematic review data extracted by different search engines. The following search engines provided data for this systematic review, PubMed, Medline, Science direct, NCBI, Medscape, and Google scholars.

Results: A literature review of more than 25 articles was included in this review, it is found that endometrial polyp is an asymptomatic disease so it can occur in both groups of reproduction and postmenopausal. The mean age of all subjects is about 76.5. The prevalence of this condition is about 24% to 30% in the general population and 40% to 45% in postmenopausal women. It is also concluded that the chance of endometrial polyps increases in postmenopausal women at about 45.23%.

Conclusion: A literature review of more than 25 articles was included in this review. It is concluded that the incidence of malignancy in endometrial polyps is lower in the general population and higher in postmenopausal women at about 45.23%. The chance of developing endometrial polyp is more common at the mean age of 76.5.

Keywords: Endometrial polyps, postmenopausal women, malignancy in endometrial polyps

INTRODUCTION

Endometrial polyps are focal and localized outgrowths and can occur anywhere in uterine cavity

They include a variable amount of stroma, blood vessels, and glands. Their relative quantities have an impact on the visible hysteroscopy appearance of polyps². Polyps can be soft or firm and cystic or fibrous; they can be pedunculated or sessile, single or multiple, and range in length from small – with minimal uterine cavity distortion – to big, filling the whole cavity. Those women who have the cessation of menstruation for 12 months after the age of 45, they were considered as postmenopausal women³.

The exact cause and underlying mechanism of endometrial polyp formation stays doubtful and it's far believed to be multifactorial⁴. Endometrial polyps are usually found in affiliation with abnormal uterine bleeding. They have an effect on both women of reproductive and post-reproductive age⁵.

Prevalence in the regular population is about 24% (range 13–50%) and in women with abnormal uterine bleeding (AUB) ranges from 10 to 30%⁶. In literature the reported incidence of malignant transformation in endometrial polyps varies and it ranges from 0.5% to 13%⁷. The endometrial polyps specific occurrence is unknown in postmenopausal women because many polyps are asymptomatic. In women of all age groups investigated for a ramification of reasons the pronounced average occurrence ranged from 7.8% to 8.9. In women with PMB, it ranged from 5.3 %, to 32.9% whilst in asymptomatic postmenopausal ladies, it ranged from 13% to 37.9%⁸.

The pathogenesis and origin of endometrial polyps are not well known, and there are some factors such as polyp size, advanced age and associated bleeding these might be related to progression to a malignant lesion. The prevalence of malignant lesions among endometrial polyps varies from 1% to 3%⁹. Although published data are conflicting, there are numerous identified hazard elements including, Menopause, weight problems, superior age, arterial high blood pressure, extraordinary bleeding, length of polyp, use of hormone therapy or tamoxifen in women with a records of breast cancers¹⁰.

Transvaginal ultrasound TVS is a beneficial modality to hit upon endometrial polyps at once or in a roundabout way in case of an abnormally thickened endometrium. The growing use of

sonohysterography improves the diagnostic performance of transvaginal ultrasound inside the prognosis of endometrial polyps. However, diagnostic hysteroscopy or office hysteroscopy with coloration visualization of an endometrial lesion is the finest research for diagnosing endometrial polyps¹¹. Polyps are classified potentially malignant when they have multiple feeding vessels, irregular surface abnormal adjacent endometrium or signs of myometrial invasion¹². Hysteroscopy is considered the gold standard for diagnosis of endometrial polyps. Diagnostic hysteroscopy, commonly completed with out anesthesia within the office placing, may additionally allow for identity of the polyp size, its location inside the uterine hollow space, and the variety of polyps¹³.

The main objective of this review study is to find out the rate of malignancy of endometrial polyps in postmenopausal women that are symptomatic

METHOD

In this systematic review data extracted by different search engines. The following search engines provided data for this systematic review, PubMed, Medline, Science direct, NCBI, Medscape, and Google scholars. For searching articles following keywords were used Endometrial polyps, post-menopausal women, malignancy in endometrial polyps. After performing unbiased searching on databases only those articles were included using keywords endometrial polyps, post-menopausal women, malignancy in endometrial polyps. Only those articles were included in which patients were suffering from endometrial polyps in the population of female. Researches were assessed for quality as well as applicability. Extraction of data was done from full journal articles.

RESULTS

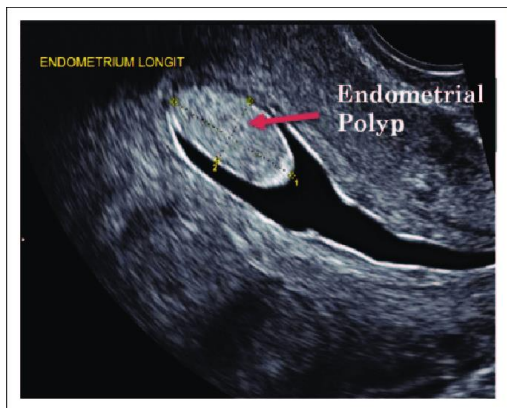
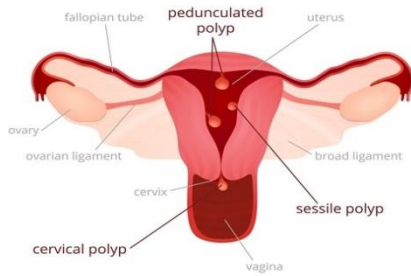
A literature review of more than 25 articles was included in this review, it is found that endometrial polyp is an asymptomatic disease so it can occur in both groups of reproduction and postmenopausal. The mean age of all subjects is about 76.5. The prevalence of this condition is about 24% to 30% in the general population and 40% to 45% in postmenopausal women. It is also concluded that the chance of endometrial polyps increases in postmenopausal women at about 45.23%.

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Endometrial polyp on ultrasound²⁹

UTERINE POLYPS (endometrial Polyps)



DISCUSSION

To evaluate the difference and comparison between two groups having the same disease a study was conducted in which women of malignant and premalignant endometrial polyps were noted. It was concluded that 57% of the women were at postmenopause with endometrial polyps while 43% of women with endometrial polyps were not having menopause. It was concluded that polyps of the endometrium can cause symptoms and can be asymptomatic as well. It can be malignant or benign¹⁴.

Endometrial polyps can be benign or malignant. They need surgery to be removed to face fewer complications. The benign-looking endometrial polyps are also associated with hyperplasia and cancer. There is a 5.5-fold risk of hyperplasia in women with endometrial polyp and there is a 3.5-fold risk of cancer in endometrial polyps. It was concluded that BMI may also affect the endometrial polyps of the patient. Therefore, it was concluded that hyperplasia and cancer in benign polyp is increasing¹⁵.

One of the diagnostic criteria for endometrial polyps involves sonography. A study was conducted in which endometrial thickness and poly size in postmenopausal women were included. It was concluded that the thickness of the endometrium in women can be evaluated by using transvaginal sonography. While the use of hysteroscopy is also very useful for the detection of the size of the polyp. It was also concluded that the polyp having a size of greater than 19.5mm is more likely to predict premalignant or malignancy¹⁶.

Malignant and premalignant changes in the endometrium of the women can be noted by using sonography accurately. There is an association between polyp and cancer of the endometrium in women of different age groups with different risk factors. A study in which 93.8% of postmenopausal women diagnosed with endometrial polyps were included. They were having symptoms of bleeding¹⁷.

The incidence of malignant endometrial polyps is unknown. They can be seen under sonography and hysteroscopy. The

frequency and characteristics of the polyp can be noted by using sonography. A study was conducted in women after surgery of endometrial polyps. Out of 300 women, four polyps were malignant (1.3%) while all other polyps were benign. So it was concluded that whether benign or malignant endometrial polyps should be removed surgically¹⁸. A retrospective study was conducted in 2014 in which the target was to evaluate the association between clinical factors and the progression of endometrial polyps. The malignant polyps were associated with hormones, hypertension, diabetes mellitus, and BMI, etc. it was concluded that postmenopausal and old women have a high risk of developing malignant endometrial polyps. Group of women having premenopausal symptomatic polyps or women having postmenopausal asymptomatic polyps, both are at higher risks of malignancy¹⁹.

A study includes women of different age groups of menopause and premenopausal. Means age was 57.5 (10.6) years. 95.8% of women were diagnosed with benign endometrial polyps having menopause. The women without menopause were having endometrial polyps were 1.6%. it was concluded that women having menopause are at higher risk to develop endometrial polyps²⁰.

Many different clinical parameters are associated with malignancy endometrial polyp in women. A study concluded that women with malignant endometrial polyps are diagnosed with hyperplasia without atypia (11.4%), being older is also a risk factor. premenopausal patients with no symptoms should be observed for polyps under sonography²¹.

Women having endometrial polyp before or after menopause should be on follow-up even after treatment. It can reduce the chance of this condition again²².

Endometrial polyps in postmenopausal women should be treated with surgery. But their surgery risk factors should also be considered. Tree model can be used in these patients before surgically resectioning polyps²³.

In women after the age of 50 years the malignancy rate in endometrial polyps increases. The prevalence to diagnose the malignancy lesion is low on ultrasound. With ultrasonography, age, BMI, women should be asked for their surgery plans also²⁴. Pathological evaluation should also be considered in women with endometrial polyps. Studies show 9% prevalence of endometrial cancer in women with and endometrial polyp²⁵.

Five hundred and sixteen cases of endometrial polyps were conducted in the study (2002-2006) with risk factors of age, menopause, abnormal bleeding, BMI, hypertension, and diabetes mellitus. After the study, it was concluded that with an increase in age, menopause, overweight, and diabetes mellitus women have more risk to develop malignancy endometrial polyp²⁶.

In 2017,631 patients were included in a study from which 4.75% were diagnosed with malignant disease, 91.76% were having simple polyp, and 1.74% were diagnosed with simple hyperplasia of endometrium while 1.74% with complex hyperplasia. The chance of developing malignant was seen to be increased in women than benign. It was concluded that the risk of developing a malignant disease is 12% higher in women having menopause²⁷.

CONCLUSION

A literature review of more than 25articles was included in this review. It is concluded that the incidence of malignancy in endometrial polyps is lower in the general population and higher in postmenopausal women at about 45.23%. The chance of developing endometrial polyp is more common at the mean age of 76.5. Postmenopausal women who have endometrial polyps are at more risk of malignancy in the polyp than pre menopausal women.

Conflict of interest: Nil

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