

Radiological Insights into a Rare Case of a Giant Endometrial Polyp in a Perimenopausal Woman

Manu Upadhyay¹, Suryansh Ahuja², Vishal Chanan³, Madhan Ramchandran⁴, Nitishkumar Yeslawath⁵

^{1, 2, 3}Junior Resident, Radiology, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry, Puducherry, IND

⁴Assistant Professor, Radiology, Sri Lakshmi Narayana Institute of Medical sciences, Puducherry, IND

⁵Professor and Head of Department, Radiology, Sri Lakshmi Narayana Institute of Medical sciences, Puducherry, IND

¹Corresponding Author Email: [manuupadhyay508\[at\]gmail.com](mailto:manuupadhyay508[at]gmail.com)

Abstract: *Endometrial polyps are common benign growths of the endometrial lining, often identified during routine gynecological exams. This report describes a rare case of a large, 8 cm endometrial polyp in an asymptomatic perimenopausal woman. The initial assessment, performed via transvaginal ultrasound TVUS, revealed a well - defined echogenic mass within the uterine cavity. A pelvic MRI was performed to further evaluate the lesion, confirming its size, vascularity, and benign nature, ruling out the possibility of malignancy. This case report describes a rare occurrence of an 8 cm endometrial polyp identified in a perimenopausal woman during a routine examination. The lesion was first detected through transvaginal ultrasound TVUS, which revealed a well defined mass within the uterine cavity. A subsequent pelvic MRI confirmed the polyps size and benign nature, ruling out malignancy. The case emphasizes the importance of imaging techniques in diagnosing large endometrial polyps and guiding clinical decisions regarding management and treatment. This report contributes to the growing body of literature on the variable presentations of endometrial polyps and their diagnostic considerations. This case report aims to highlight the diagnostic process for identifying large endometrial polyps using advanced imaging techniques and discuss the clinical implications of such findings.*

Keywords: Endometrial polyp, transvaginal ultrasound, pelvic MRI, uterine cavity mass, gynecological imaging

1. Introduction

Endometrial polyps are benign growths originating from the endometrial lining and typically present as localized masses within the uterine cavity. While many polyps remain asymptomatic, they can cause abnormal uterine bleeding, especially in postmenopausal women. Their prevalence increases with age, and their clinical significance lies in the potential for atypical changes or, in rare cases, malignancy.

Radiological identification of endometrial polyps is often made during imaging studies performed for abnormal bleeding or as part of routine evaluations in women with risk factors such as obesity, hypertension, or tamoxifen use. Transvaginal ultrasound (TVUS) is the primary imaging method used, offering a detailed, real - time view of the uterus. In cases where the polyps are large or atypical, pelvic MRI and sonohysterography provide valuable insights into the polyp's size, vascularity, and potential malignancy. [1]

This report discusses a rare case of a large, 8 cm endometrial polyp in a perimenopausal woman, emphasizing the role of advanced imaging in differentiating benign polyps from other conditions such as submucosal fibroids or malignancies. The report also explores the contribution of imaging in guiding treatment decisions.

2. Case Presentation

A 46 - year - old woman, with no symptoms, presented for a routine examination at the obstetrics and gynecology department. Upon palpation, her uterus appeared bulky and irregular with a firm consistency. The patient was referred to the radiology department for an ultrasound of the abdomen and pelvis. The ultrasound identified a pedunculated submucosal hyperechoic lesion with internal vascularity, arising from the uterine fundus and extending down to the cervical canal, which was noted to be dilated.

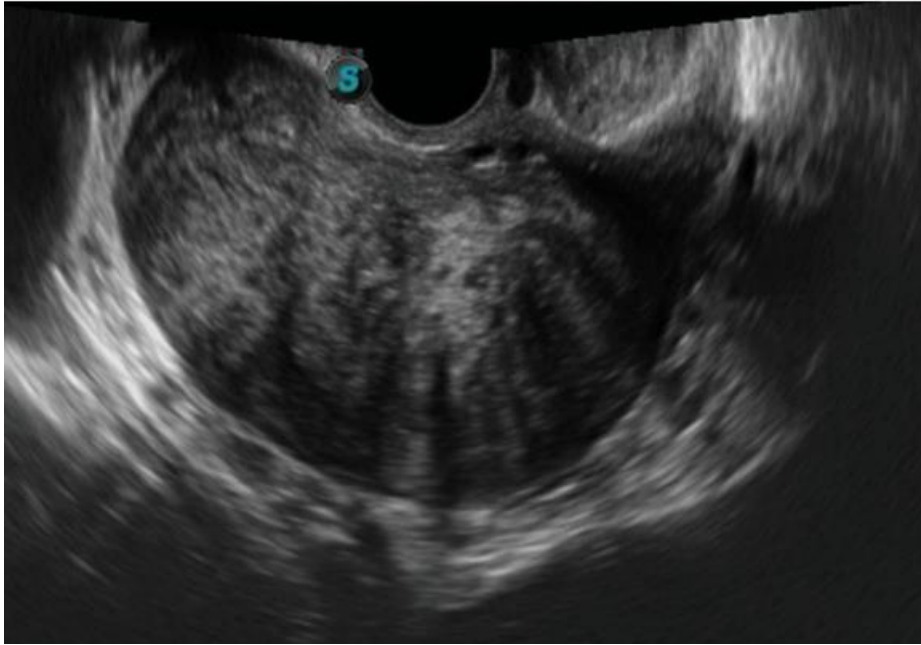


Figure 1: Transvaginal ultrasound (TVUS)

A large pedunculated echogenic lesion (measuring 8.0 x 3.2 cm) noted arising from the uterine fundus and protruding into the endometrial cavity and endocervical canal with significant widening of endocervical canal. A thin fluid rim is noted separating the lesion from the endometrial lining at few places, suggestive of endometrial polyp.

On Transvaginal ultrasound (TVUS) Color Doppler (not shown) shows a single prominent vessel noted supplying the above-mentioned lesion (feeding artery sign).

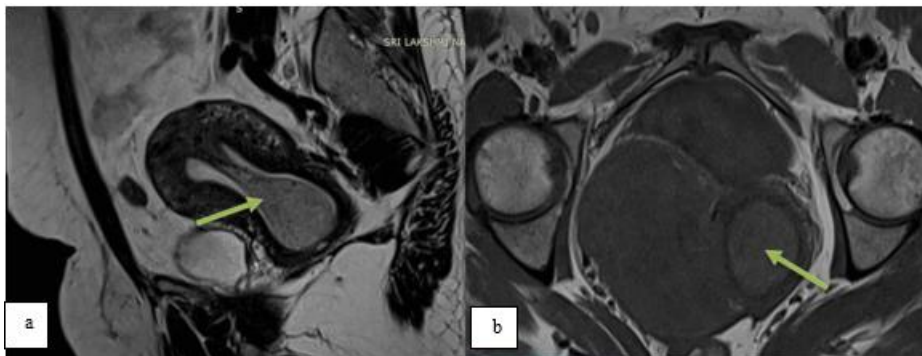


Figure 2: MRI Pelvis

Sagittal T2 Weighted MRI; Figure 2(a) and axial T1 Weighted MRI; Figure 2(b) show a large pedunculated T2 hypointense, T1 isointense intracavitary lesion (measuring 3.8 x 3.2 x 8.0 cm; AP X TR X CC) surrounded by hyperintense fluid and endometrium noted arising from the uterine fundus and protruding into the endometrial cavity and endocervical canal with significant widening of endocervical canal, suggestive of giant endometrial polyp (shown by green arrow).

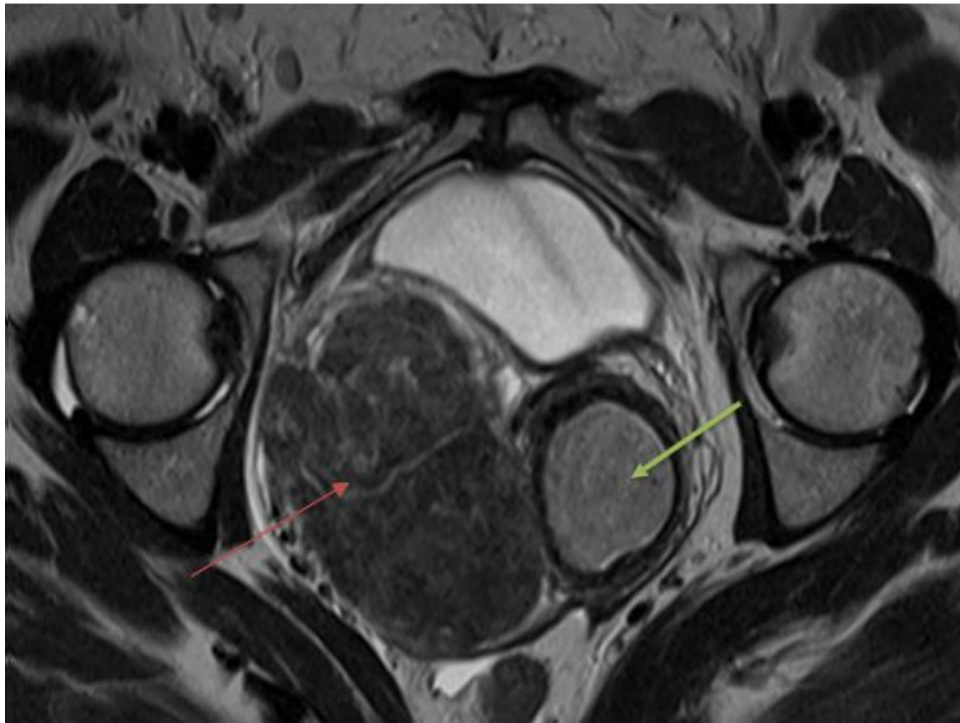


Figure 3: MRI Pelvis

Axial T2 Weighted MR shows a hypointense lesion measuring (9.3 x 6.6 cm x 8.7 cm; AP X TR X CC) noted in the right adnexa displacing uterus to the left side, vascular pedicles noted arising from right lateral uterine wall reaching the above mentioned lesion- possibly subserosal pedunculated fibroid (shown by red arrow). Giant endometrial polyp also seen (shown by green arrow).

3. Discussion

Endometrial polyps are benign intrauterine growths that can present with a wide range of symptoms, from being asymptomatic to causing abnormal uterine bleeding. In this case, a 46 - year - old woman was found to have an endometrial polyp incidentally during a routine gynecological exam. Physical examination revealed a bulky, irregular uterus, prompting further imaging. Transvaginal ultrasound (TVUS) revealed a pedunculated submucosal hyperechoic lesion with feeding artery sign, extending from the uterine fundus to the cervical canal.

Ultrasound, particularly transvaginal ultrasound is the preferred imaging modality for assessing endometrial polyps. [2] In this case, the presence of internal vascularity confirmed the benign nature of the lesion and helped differentiate it from other conditions such as submucosal fibroids, adenomyosis, or malignant tumors. The large size of the polyp and its extension into the cervical canal, although rare, raises concerns for potential future complications such as mechanical obstruction or the development of abnormal bleeding or pain.

Although the patient was asymptomatic at the time of diagnosis, large polyps like this one require close monitoring to detect any symptom changes. Hysteroscopic resection is recommended for cases in which symptoms develop or there is concern about malignant transformation.

A submucosal fibroid is seen on ultrasound as a solid, hypoechoic mass accompanied by posterior acoustic shadowing and an irregular or lobulated outline. It has a broad attachment to the myometrium, leading to noticeable distortion of the uterine cavity. On Doppler imaging, it exhibits peripheral blood flow, with vessels surrounding the lesion. This contrasts with endometrial polyps, which are characterized by a central feeding artery, highlighting the importance of these features in differentiating the two conditions. [3]

MRI can help differentiate between endometrial carcinoma and polyps by focusing on distinct morphological signs. Features that suggest the presence of a polyp include a well - defined fibrous core, the presence of small cystic spaces within the lesion, and no evidence of invasion into the surrounding myometrial tissue, which contrasts with the typical presentation of carcinoma. [4]

4. Conclusions

This report emphasizes the critical role of advanced imaging techniques, particularly transvaginal ultrasound and pelvic MRI, in identifying and managing large endometrial polyps. Early detection, even in asymptomatic patients, is essential to avoid potential complications. The case underscores the importance of regular gynecological evaluations in perimenopausal women.

The significance of this case lies in its contribution to radiological literature, particularly in demonstrating the utility of multiple imaging modalities in distinguishing large benign endometrial polyps from other uterine conditions.

Additional Information

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