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Obstetrics and Gynaecology Section

Wooden Foreign Body in the Uterine Cavity in a Postmenopausal Woman: A Case Report

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ABSTRACT

Foreign bodies in the uterine cavity, though uncommon, can result in significant gynaecological morbidity. This case report discusses a rare finding of a wooden twig in the uterine cavity of a 55-year-old postmenopausal woman presenting with persistent foul-smelling vaginal discharge and lower abdominal pain. Diagnostic hysteroscopy revealed the intrauterine foreign body, which was successfully removed. This report highlights the importance of maintaining clinical vigilance for retained or introduced foreign bodies in postmenopausal women.

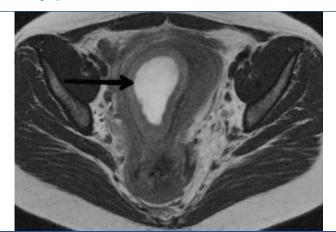
Keywords: Chronic vaginal discharge, Intrauterine foreign body, Postmenopausal gynaecology, Wooden twig

CASE REPORT

A 55-year-old para two, gravida three, postmenopausal woman (G3P2A1L2) presented to the gynaecology outpatient department with complaints of persistent foul-smelling, mucoid vaginal discharge and intermittent dull lower abdominal pain for the past six months. The discharge was non-blood-stained but copious and offensive. The pain was described as a dull ache, non-radiating, and exacerbated during physical activity. She had attained menopause at the age of 48 years and had remained amenorrhoeic since then. She reported no recent history of sexual activity, Intrauterine Device (IUD) usage, gynaecologic instrumentation, or surgical procedures. There was no documented history of childhood sexual abuse, unsafe abortion practices, or traditional cultural practices involving vaginal insertion. Obstetric history included two full-term spontaneous vaginal deliveries and one first-trimester spontaneous abortion approximately 30 years ago.

On general physical examination, the patient appeared pale and mildly tachycardic with a pulse rate of 110 beats per minute and blood pressure of 110/70 mmHg. Systemic examination was unremarkable except for lower abdominal tenderness on deep palpation. Per speculum examination revealed an unhealthy, congested cervix with purulent discharge oozing from the cervical os. Per vaginal examination demonstrated a retroverted, normal-sized uterus was fixed and tender on bimanual palpation, raising suspicion of chronic pelvic inflammation or adhesions.

Laboratory evaluation revealed anaemia with haemoglobin of 9.2 g/dL and leukocytosis with a total leukocyte count of 12,200 cells/ cm³. High vaginal swab culture yielded Escherichia coli, sensitive to commonly used antibiotics, while urine culture was sterile. Transabdominal ultrasound imaging showed the presence of free anechoic fluid in the pelvic cavity, suggestive of inflammatory exudate. However, the uterine cavity appeared irregular, and the endometrial stripe was poorly visualised, warranting further imaging. A contrast-enhanced Computed Tomography (CT) scan of the pelvis was performed, which demonstrated an ill-defined linear hyperdense structure within the endometrial cavity penetrating the myometrium, surrounded by a heterogeneous hypodense collection, raising suspicion of a retained foreign body with possible chronic endometritis. Further evaluation with Magnetic Resonance Imaging (MRI) revealed an enlarged, fluid-filled uterine cavity consistent with pyometra, with significant endometrial thickening and associated intrauterine synechiae, along with perilesional inflammatory changes [Table/Fig-1].



[Table/Fig-1]: T2-weighted MRI image of the pelvis showing markedly distended, fluid-filled uterine cavity with thickened endometrium, suggestive of pyometra.

Considering the chronicity of symptoms, pelvic tenderness, and imaging findings, differential diagnoses included chronic pyometra, infected endometrial polyp, intrauterine foreign body, uterine malignancy, or granulomatous endometritis (including tubercular aetiology). Empirical intravenous antibiotics were initiated with ciprofloxacin, gentamycin, and metronidazole based on the culture sensitivity pattern and clinical suspicion of polymicrobial infection.

Diagnostic hysteroscopy was undertaken under general anaesthesia. On hysteroscopic evaluation, multiple dense intrauterine adhesions were noted along with a linear foreign body embedded partially into the posterior uterine wall, surrounded by granulation tissue. Careful removal was performed, and the object was identified as a wooden twig, measuring approximately 3 cm in length [Table/Fig-2,3]. Hysteroscopic curettage of the cavity was done to remove necrotic debris and slough. Post-removal hysteroscopic visualisation confirmed a relatively clean uterine cavity with resolution of the adhesions and no evidence of residual foreign material [Table/Fig-4].

Histopathological examination of the endometrial tissue revealed an ulcerated endometrial lining with extensive infiltration by neutrophils, plasma cells, and occasional epithelioid histiocytes, consistent with chronic granulomatous endometritis. No malignant transformation

or caseating necrosis was identified [Table/Fig-5]. Ziehl-Neelsen staining and GeneXpert testing for Mycobacterium tuberculosis were negative. The representative histopathological image confirms these findings.



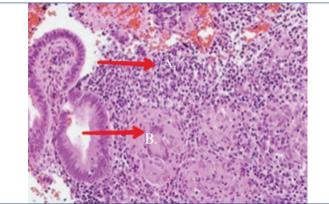
Table/Fig-2]: Hysteroscopic image showing an intrauterine foreign body embedded within the endometrial wall.



[Table/Fig-3]: Extracted foreign body, a wooden twig, measuring approximately 3 cm in length.



[Table/Fig-4]: Post-removal hysteroscopic view showing a cleaned uterine cavity with resolution of adhesions.



[Table/Fig-5]: H&E-stained histopathology slide showing ulcerated endometrial epithelium with dense neutrophilic infiltration and chronic inflammatory cells (40× magnification).

The patient had an uneventful postoperative recovery. She was continued on a 10-day course of broad-spectrum antibiotics and supportive care. Upon follow-up at two weeks and one month, she reported complete resolution of symptoms, and repeat pelvic ultrasonography showed no abnormal findings or residual pelvic fluid. Serial haemoglobin levels improved to 10.8 g/dL and leukocyte counts normalised.

DISCUSSION

The presence of a foreign body in the uterine cavity is a well-documented but uncommon clinical condition, more frequently encountered in paediatric and adolescent populations, where it is often related to accidental insertion, sexual abuse, or behavioural abnormalities [1,2]. In contrast, the detection of organic foreign bodies such as wooden twigs in the uterine cavity of postmenopausal women is extremely rare. Most reported cases have been discovered incidentally during evaluation for abnormal uterine bleeding or persistent discharge. The rarity is further accentuated by the radiolucent nature of organic materials, which are difficult to identify on conventional imaging modalities, often leading to diagnostic delays [3].

In postmenopausal women, the aetiology of retained intrauterine foreign bodies often traces back to unsafe abortion practices, insertion of traditional remedies, or unsupervised gynaecological procedures, particularly in resource-poor or rural communities. It has been documented that untrained practitioners may insert non-medical objects like sticks, twigs, or cloth into the vaginal or uterine cavity, with the intent of inducing abortion or treating menstrual irregularities [4].

Retained intrauterine foreign bodies often present with non-specific chronic symptoms, including foul-smelling vaginal discharge, lower abdominal pain, vaginal bleeding, or persistent pelvic discomfort. In postmenopausal women, such symptoms may mimic more serious pathologies like genital tract malignancies, leading to misdiagnosis and overtreatment [5].

The effectiveness of imaging in detecting intrauterine foreign bodies is highly dependent on the nature of the object. Radiopaque materials such as metal or plastic can be identified on ultrasonography or radiographs. However, wooden materials are radiolucent and may go completely undetected on standard imaging [5].

Hysteroscopy offers the advantage of being both diagnostic and therapeutic, allowing for direct visualisation and minimally invasive removal of foreign materials from the uterine cavity. In the present case, the wooden twig was successfully retrieved hysteroscopically, and the patient experienced complete symptomatic relief post-procedure. Reports by Puppo A et al., and Ciebiera M et al., reinforce that prolonged retention of foreign bodies in the reproductive tract can result in severe complications, including vesicovaginal fistula or misdiagnosis as malignancy, highlighting the need for early suspicion and intervention [5,6].

Patient perspective: In retrospect, the patient expressed relief at finally receiving an explanation and resolution for her long-standing discomfort. She admitted initial hesitation in seeking care due to social embarrassment and lack of awareness, but was grateful for the respectful and effective treatment offered. Her case highlights the vital role of empathetic, non-judgmental clinical care in encouraging timely medical attention and improving gynaecological health outcomes in older women.

A summary of similar reported cases is presented in the following table for comparative analysis [Table/Fig-6] [5-10].

This case serves as a compelling reminder that even vague or seemingly minor gynaecological symptoms in postmenopausal women should not be dismissed.

Study (author, year)	Age (years)	Type of foreign body	Location	Duration	Symptoms	Diagnosis method	Complications
Frąckowiak A et al., 2025 [7]	62	Plastic deodorant cap (calcified)	Vagina	12 years	Foul discharge, VVF	MRI, Surgery	Vesicovaginal fistula
Sharma N 3rd et al., 2022 [8]	70	Wood apple	Vagina	20 years	Discharge, UTI	Speculum + Surgery	Vaginal atrophy
Senthilkumaran D et al., 2023 [9]	44	Bony spicule (retained fetal part)	Uterus	Unknown	Bleeding	USG + HPE	Endometritis
Puppo A et al., 2009 [6]	72	Unknown (plastic)	Vagina	Unknown	Fistula	Exam + Imaging	Vesicovaginal fistula
Ciebiera M et al., 2015 [5]	73	Unknown object	Vagina	Unknown	Mimicked malignancy	Exam	Misdiagnosis risk
Chopra S et al., 2010 [10]	50	Unknown (sexual abuse)	Vagina	Years	Chronic symptoms	Imaging + Exam	None reported

CONCLUSION(S)

The presence of a wooden foreign body in the uterine cavity of a postmenopausal woman represents a rare but important diagnostic consideration. Chronic symptoms unresponsive to conventional treatment warrant hysteroscopic evaluation. Awareness of such unusual presentations and their potential complications is essential for timely diagnosis and management.

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