

A silent threat: Clear cell carcinoma within a benign-appearing endometrial polyp

Siti Nawwal Ahmad Nasfy¹, Nurfiyanti Afrina Roslan², Noor'ain Mohd Yasir³

¹Department of Obstetrics and Gynaecology, Faculty of Medicine & Health Sciences, UPM, ²Department of Obstetrics & Gynaecology, Hospital Sultan Abdul Aziz Shah, UPM, ³Department of Pathology, Hospital Sultan Abdul Aziz Shah, UPM

ABSTRACT

Introduction: Endometrial polyps are typically benign, but in postmenopausal women, the risk of malignancy increases. Clear cell carcinoma (CCC) of the endometrium is a rare and aggressive subtype, comprising 1-6% of endometrial cancers. Its occurrence within a polyp, especially without myometrial invasion, is exceedingly uncommon. **Case Description:** We report the case of a 52-year-old postmenopausal Malay woman who presented with abnormal uterine bleeding. Initial Pipelle biopsy suggested a benign endometrial polyp, and she was treated with medroxyprogesterone acetate. Due to persistent symptoms, she underwent total laparoscopic hysterectomy with bilateral salpingo-oophorectomy (TLHBSO). Gross examination revealed a 40 x 20 x 10 mm polyp near the uterine fundus. Histopathology confirmed clear cell carcinoma confined to the polyp, with no evidence of myometrial invasion. Immunohistochemistry showed diffuse AMACR and PAX8 positivity, patchy Napsin A and estrogen receptor expression, null-type p53 staining, and a low Ki-67 index (<5%). No malignancy was detected in the remaining uterus, ovaries, or fallopian tubes. **Discussion:** This case underscores the rare but significant potential for malignant transformation of endometrial polyps, particularly in postmenopausal women. While most polyps are benign, risk factors including advanced age, postmenopausal status, abnormal uterine bleeding, obesity, larger polyp size, and hormone-related conditions such as PCOS or tamoxifen use have been associated with increased malignant risk. This case highlights the importance of maintaining a high index of suspicion and considering early surgical intervention in symptomatic postmenopausal women, even when initial findings appear benign. Long-term follow-up is crucial due to the uncertain behaviour of polyp-confined malignancies.