

# Multiple Primary HPV-Associated Malignancies: Cervical and Subsequent Vulvar Cancer in Young Female Patients – Diagnostic Errors

Professor Kartashov Serhiil 1,3, Phd Kartashova Maryna 2,  
PhD Oleshko Kateryna 3, PhD Bilodid Olga 3, Kartashova Daria 2.

1 Medisense Clinic - Kharkiv (Ukraine), 2 Kharkiv National Medical University -  
Kharkiv (Ukraine), 3 Molekyla Centre - Kharkiv (Ukraine)

## Introduction

Multiple primary tumors of the anogenital region, although rare, are often underdiagnosed and misinterpreted as recurrences.

We report a clinical observation of five patients initially diagnosed with cervical cancer (FIGO stage T1b1-3N0M0), who later developed vulvar cancer. These cases were initially considered recurrences of cervical cancer.

## Materials and Methods

- Five patients aged 21–27 at diagnosis
- Early sexual activity (ages 12–14) in all
- Three patients had a history of smoking from ages 12–14
- Early childbirth between ages 16 and 18 in all
- All underwent type III radical hysterectomy, two after neoadjuvant chemotherapy
- Both primary and secondary tumors were HPV-associated squamous cell carcinomas
- All patients developed vulvar lesions within 1–3 years; two cases involved inguinal-femoral lymph node metastases, and two showed vaginal involvement

## Results

- Radiochemotherapy was ineffective in all cases
- Immuno- and chemotherapy were administered afterward
- Patients were referred at the stage of vulvar and perianal involvement with rectal extension (4 cases); three had invasion of the vagina, urethra, bladder, and pelvic bones
- Lesions were extensive but locally confined, with no spread to iliac, pelvic, or abdominal regions

## Conclusion

1. The isolated lesions, uniform morphology, and lack of metastasis suggest secondary vulvar cancer, not cervical cancer recurrence. Early accurate diagnosis could have altered treatment strategies and led to improved outcomes.
2. Distinguishing cervical cancer recurrence from second primary cancer is vital, especially in young HPV-related patients.
3. A multimodal approach (histopathology, HPV genotyping, PET-CT, immunohistochemistry) is essential for new tumor lesions.
4. Early surgical intervention is crucial in unclear cases.

