

## **Abstract**

**Background:** Endometrial carcinoma (EC) is a common gynaecological malignancy in postmenopausal females. Diagnosis is made on endometrial biopsy, where histological subtype and tumour grade are used to predict disease progression and to plan surgical management.

**Objectives:** We aimed to determine the accuracy of preoperative biopsies compared to the final diagnosis on hysterectomy specimens in our department.

### **Methods:**

This was a retrospective, cross sectional study in which 126 biopsies and corresponding hysterectomy specimens, over a 3-year period, were reviewed. Patient demographics and histological features were recorded and statistically analysed.

### **Results:**

The most prevalent tumours were endometrioid endometrial carcinoma (EEC) (48.5%), serous carcinomas (25.4%) and carcinosarcomas (16.7%). The majority (66.7%) of tumours were high-grade tumours on biopsy and hysterectomy specimens (58.7%). EECs had a poor sensitivity level (65.12%) compared to other subtypes but had a high specificity rate 90%. There was moderate agreement between biopsy and excision specimen diagnoses. High-grade tumours had a high sensitivity (94.29%) level.

### **Conclusions:**

Our study showed moderate agreement between histopathological diagnoses on biopsy, and excision specimens. EEC was the most prevalent tumour subtype. There was a high sensitivity (94.29%) level for biopsies of high-grade tumours, concordant with other studies. The sensitivity of low-grade EECs (42-46%) was lower than international studies, likely due to the comparatively low prevalence of EECs in our population. Accurate preoperative tumour subtyping and grading are needed to guide surgical management. It is envisaged that use of a combined histological and molecular tumour classification will better guide patient treatment and allow for reproducible results.