

## A comparison of endometrial sampling methods on endometrial cancer grading

Balci S, Bodur T, Koyuncuoglu M, Pala G, Saatli B, Demir N, Saatli G, Saygili U  
Baskent University Medical Faculty, Izmir, Turkey

### Objective

The purpose of this study is to compare the effectiveness of Pipelle biopsy and curettage (as preoperative endometrial sampling types) in detecting endometrial tumors and to find out the accurate histological type and degree, which directly impacts patients survivals. This was done by comparing preoperative and postoperative pathological results of patients treated in one medical centre.

### Methods

The study group consists of patients treated for endometrium cancer between at Dokuz Eylul University School of Medicine (DEUSM) in Department of Obstetrics and Gynecology. In total 187 preoperative samples and postoperative hysterectomy specimens, of which 159 were obtained through curettage and 28 through Pipelle biopsy, were examined in DEUSM Department of Pathology. The Kappa statistic which examines the coherence between the two results was used in order to compare the preoperative samplings and postoperative hysterectomy findings according to histological type and degree of the tumor. As a rule of thumb values of Kappa from 0. 01 to 0. 20 are considered slight agreement, 0. 21 to 0. 40 fair, 0. 41 to 0. 60 moderate, 0. 61 to 0. 80 substantial, and 0. 81 to 0. 99 almost perfect agreement. In addition, the sensitivity in detecting tumors, the accuracy of defining histological type and degree was evaluated seperately.

### Results

In detecting the endometrial malignancy, the sensitivity levels for curettage and pipelle biopsy were 93. 1 % (148/159) and 89. 3 % (25/28) respectively. The concordance between preoperative histologic findings and postoperative pathologic results was 138 of 148 (93. 24%) for curettage and 22 of 25 (88 %) for Pipelle biopsy. Based on the results, the Kappa statistic was calculated as 0. 65 for curettage and 0. 62 for pipelle biopsy. These values were in between the substantial aggrement. Preoperative endometrial samples which show concordance in finding out both the histological type and degree, with postoperative pathological findings were 110 out of 148 (74. 32 %) for curettage and 21 out of 25 (84 %) for Pipelle biopsy. There was a modarate aggrement for curattage (Kappa statistic was 0. 47) and substantial aggrement for pipelle biopsy (Kappa statistic was 0, 61).

### Conclusion

The aim of this research was to evaluate preoperative endometrial sampling methods according to histological findings and grading in endometrial cancer. In light of the outcome of this research, both the curettage and Pipelle biopsy can be used as a dependable guide by gynocologic oncologists in evaluating preoperative clinical findings and in conducting possible surgical interventions. In addition Pipelle biopsy has better agreement between the grade of the preoperative sample and the tumor grade at final histologic diagnosis compared with curettage. In conclusion Pipelle biopsy, which is a minimally invasive outpatient procedure, may be beneficial option in detecting endometrial tumors.