

## **Risk Factors Associated with Abnormal Smear and Histology Result**

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**Objective:** To identify risk factors linked with high-grade histology, including human papillomavirus (HPV) changes found in Pap smears.

**Setting:** Department of Obstetrics and Gynecology, Bahrain Defense Force Hospital.

**Design:** A Retrospective Study.

**Result:** One hundred forty-two females had colposcopy and cervical biopsy. Four (2.8%) females with risk factors had high-grade histology compared to 37 (26%) who had low-grade histology, P value = 0.2163.

Seven (4.9%) of the LEEP group (23) had high-grade histology (Cervical Intraepithelial Neoplasia CIN 2 and worse), and 16 (11.3%) had low-grade histology.

HPV changes in Pap smear test is a poor indicator for high-grade histology. HPV group was associated with low-grade histology, 82 (57.7%) and not high-grade histology, 17 (11.9%) only.

**Conclusion:** The study was unable to predict the progression to high-grade histology by the available data. HPV changes found in Pap test is a poor indicator for high-grade histology. Nevertheless, it is related to low-grade histology.

High-grade smear (moderate/severe dyskaryosis) is a good indicator for high-grade histology (CIN 2 or worse). Only 7 (4.9%) of patients that underwent LEEP had high-grade histology.