The diagnosis of cervical dysplasia in a university hospital in Western region of Saudi Arabia (Correlational study)

Abstract

Background

Recent data confirm the addition of high-risk human papilloma virus (HPV) testing with pap smear will increase the accuracy of detection preinvasive disease of the cervix.

Objectives

To assessed the diagnostic performance of Pap smear with or without HPV testing and colposcopy in detecting pre-invasive lesions of the cervix among women with evocative symptomatology, by reference to histopathology.

Design

Retrospective review

Setting

University Hospital

Material and methods

We performed review of the clinical and pathology records of women with evocative symptomatology. The diagnostic performance of Pap smear and colposcopy was analyzed

Main outcome Measures

The sensitivity of Pap smear and colposcopy in detecting pre-invasive lesions of the cervix

Sample size

388 patients

Results

The mean age was 45.12 years, the most frequent gynecological symptoms included abnormal bleeding (17.2%), postcoital bleeding (10.9%). Histopathology showed abnormal results in 26.5% of the 388 patients, including CIN 1 (20.4%), CIN 2 (2.8%), CIN 3 (1.3%), and SCC (1.3%). Both Pap smear and colposcopy were highly sensitive in detecting CIN 1+ (94.2% *vs* 93.2%) and CIN 2+ (100.0% *vs* 95.8%) intraepithelial lesions, respectively; however, Pap smear had very low specificity in detecting both CIN 1+ (8.1% *vs* 73.7%) and CIN 2+ (8.0% *vs* 59.3%), compared with colposcopy. When combined to HPV status, the specificity of Pap smear increased considerably.

Conclusion

It becomes a high priority to improve the efficiency of CC screening program by optimizing the practice of PAP smear, to increase the test specificity, and by implementing systematic cytology-HPV cotesting.