Pathology

Retrospective evaluation study of pap smear as a screening method in patients attending Ain Shams Maternity Hospitals

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Background and Purpose: Analyzing of the different types of cervical lesions diagnosed by Pap smears as regards to their prevalence and clinico-pathologic correlation in Egypt.

Material and Methods: Retrospective analysis of 5054 cervical Pap smears of patients who attended Ain Shams Maternity University Hospital, Early Cancer Detection Unit (ECDU) during the span of 3 years from January 2012 to December 2014.

Results: The 5054 Pap smears were classified according to The Bethesda system (2001). 4893 (96.8%) cases were diagnosed cytologically as negative for intraepithelial lesion or malignancy (NILM). Epithelial abnormalities were diagnosed in 161 (3.2%) and distributed as follows; atypical squamous cell of undetermined significance (ASCUS) 0.25%, low grade squamous intraepithelial lesion (LSIL) 2.5%, high grade squamous intraepithelial lesion (HSIL) 0.04%, squamous cell carcinoma (SCC) 0.2%, atypical glandular cells of undetermined significance (AGUS) 0.06%, adenocarcinoma insitu (AIS) 0.02%, endocervical adenocarcinoma 0.04% and undifferentiated carcinoma 0.04%. Among the 5054 cases examined 402 (7.9%) cases designated as group of clinically unhealthy cervix and were exposed furtherly to colposcopy, biopsy and histopathology. NILM was diagnosed cytologically in 370 (92%) cases while epithelial abnormalities was seen in 32 (8%). Statistical analysis (Kappa test 0.79) revealed strong agreement between Pap smear cytological diagnosis and histopathology (p value < 0.001).

Conclusion: The cervical Pap smear test proved to be a reliable test for screening and early detection of precancerous and cancerous lesions of the cervix. To enhance its sensitivity, advanced techniques such as Liquid based cytology (LBC) should be introduced.