THE DEGREE OF AGREEMENT BETWEEN HPV TESTING, PAP SMEAR AND COLPOSCOPY IN CERVICAL DYSPLASIA DIAGNOSIS

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THE DEGREE OF AGREEMENT BETWEEN HPV TESTING, PAP SMEAR AND COLPOSCOPY IN CERVICAL DYSPLASIA DIAGNOSIS (Abstract): Material and methods: The current study analyzed the degree of agreement between HPV testing, Pap smear, and colposcopic directed cervical biopsies. The study was performed on a group of 332 patients diagnosed and treated for cervical dysplasia at Cuza-Vodă Obstetrics-Gynecology Clinic Hospital and Suceava County Hospital between 2006 and 2011. Results: 190 patients (57.23%) were positive for HPV, 56 (35%) were positive for two HPV types and 42 (22.10%) for three or more HPV types. High grade cervical squamous intraepithelial lesion (HSIL) accounted for 88 (26.5%), low grade cervical squamous intraepithelial lesion (LSIL) for 92 (27.71%), atypical squamous cells of undetermined significance (ASC-US) for 69 (20.78%) and squamous cell carcinoma accounted for 5 (1.5%) of referral Pap smears. Colposcopic directed cervical biopsies reported no pathological abnormality (negative) in 64 (19.28%), HSIL in 105 (31.62%), LSIL in 83 (25%) and other lesions in 80 (24.1%) women. Exact degree of agreement between Pap smear and cervical biopsy was fair ($k = 0.5$) when analyzing for high grade cervical squamous intraepithelial lesion. The high-risk HPV types 16, 18, 66 and 68 and the low-risk HPV types 11, 54, 83, and 61 were the most frequently detected HPV types. Conclusions: The current study showed the fair agreement between Pap smear and colposcopic biopsy. Incorporation of HPV testing into the present Pap screening program has the potential to make screening for cervical cancer more effective, and a necessary prelude to assessing this is determining the prevalence of the high-risk types. Key words: CERVICAL CANCER, PAP SMEAR, COLPOSCOPY, CERVICAL BIOPSY, HPV TESTING

According to the American Congress of Obstetricians and Gynaecologist Practice Bulletin, it is estimated to be the second or third most common cause of cancer in women worldwide, despite the fact that a screening test, Pap smear, is available and has been demonstrated to reduce the incidence of the disease by at least seventy percent (1). Several tests are required to screen and diagnose cervical dysplastic lesions: cervical cytology, colposcopy, colposcopic-guided cervical biopsy histopathology, HPV DNA. Currently, there is great interest in the possible application of Human Papilloma virus (HPV) testing to supplement Pap screening for cervical cancer. Many epide-