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CINtec PLUS cytology as a cervical cancer screening test at the IPO of Porto

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Cervical squamous cell carcinoma of the cervix is the fourth most common cancer between women and seventh globally. There are many women undergoing colposcopy without real need, so more effective screening tests are needed to decide who among HPV-positive women should receive additional diagnostic evaluation to avoid unnecessary colposcopies. So, this study is intended to evaluate CINtec PLUS cytology as a screening test for cervical cancer in the IPO-FG of the Port of women with hpv test positive other than 16/18, improving the referral for colposcopy.

CINtec PLUS cytology is an immunocytochemistry kit that simultaneously detects p16 and Ki-67 proteins. The presence of these proteins in the same cell indicates a deregulation of the cell cycle, and may be a marker of the persistence of HPV infections, their greater probability of progression and the severity of lesions secondary to the infection.

An experimental research was carried out, in which the immunostaining of 73 non-16/18 HPV cervico-vaginal hpv samples was performed from 73 women integrated in cervical cancer screening in the North region carried out at the IPO-FG of Porto. The results obtained in CINtec PLUS were compared with those of cytology.

2 samples present unsatisfactory cytology for evaluation, being excluded. Cintec Plus cytology would reduce by 17% the number of women sent for colposcopy (7 (about 10%) by Cintec Plus vs 19 (about 27%) by cytology). Of the 52 NILM samples, 3 (about 6%) were positive for Cintec Plus, so they should have been referred for colposcopy and were not. Of the 10 ASC-US samples 100% are negative for Cintec Plus, as well as 5 LSIL 4 (80%) are negative, of the 3 HSIL 2 (about 67%) are negative. So, 16 women (about 23%) made colposcopy unnecessarily.

In conclusion, Cintec Plus cytology would be an interesting tool as a second screening test in non-16/18 hpv cases in place of cytology, decreasing the number of women sent for colposcopy.

Keywords: HPV, Cintec Plus cytology, Colposcopy

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