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ABSTRACTS



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CytoPath®Easy: screening of cervical cancer

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Recently, CytoPath@Easy kit was created by DiaPath S.p.A. and started to be commercially available for the screening of cervical cancer. Using this methodology, epithelial cells are immersed in a preservative liquid, and a thin-layer of cells in the slide is obtained through gravity sedimentation and filtration.

The main objectives of this study are to evaluate the efficacy for the processing of cervical samples, for the detection of pre-neoplastic lesions and for the nucleic preservation and extraction by the kit. For this purpose, 215 cervical samples obtained by self-sampling were used: 174 were collected and processed by CytoPath@ Easy and, as a control, 41 were collected and processed by the Thinprep® method. The samples were processed, stained by the Papanicolaou method, and independently evaluated microscopically for various morphological parameters; nucleic acids were isolated and evaluated for purity and integrity by spectrophotometry.

Results obtained showed that both methods have a good performance, allowing the morphological evaluation of the cervical epithelium. However, the statistical analysis reveals that the methods are different from each other, with overall lower results being obtained in the method under study ($p < 0.001$). In turn, both methods allow the extraction of good quality and quantity of DNA.

Although some differences were found regarding morphology of the cells fixed and processed by the CytoPath@Easy method, this new methodology reveals efficient for the preservation of nucleic acids. Thus, its use in cervical cancer screening is recommended.

Keywords: pre-neoplastic lesion, CytoPath@Easy, Thinprep®, extraction of nucleic acids

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