

Further studies on the application of wireless cytopathology for detection of cervical cancer and initial oral cancer screening

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On prior EB meetings, we presented our MarkPap® biomarker-based technology for early detection of abnormal cells on cervical specimens. The manual method evolved into semiautomatic procedures, and was further upgraded with telecytopathology (MarkPap® Digital). The presence of the biomarker allowed low-train technicians in remote areas of the world to detect suspicious cells and to transmit selected microscopic images to a distant place for evaluation. This is important because cervical cancer is still major killer of women in the developing world.

On the EB meeting last year, we announced the possibilities of using cell phone cameras in telecytopathology (MarkPap® Wireless) in the areas of the world where Internet is less accessible than cell phone networking. We have solved some of technical problems (proper mounting the phone on the objective, color standardization and resolution) and made this prospective more closer to realization. The follow-up data obtained with digital cameras and cell phone cameras were substantially comparable.

Wireless telecytopathology is expected to dramatically increase the outreach for cervical cancer screening in the world, not only for women, but also for men for initial screening of oral cancer.