

PRIMARY SCREENING FOR CERVICAL CANCER IN CAMEROON:

PRELIMINARY RESULTS COMPARING SELF-COLLECTED VAGINAL SAMPLES VS CLINICIAN - COLLECTED CERVICAL SAMPLES FOR HIGH-RISK HUMAN PAPILLOMAVIRUS DETECTION

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Introduction: Cervical cancer screening by cytology in low resource setting is difficult to implement due to logistical problem as “speculum collected specimen”. Self-sampling for the detection of High Risk Human Papillomavirus (HR HPV) may become a valuable screening test. We report here preliminary data.

Objective: Our aim was to determine the agreement between HR HPV DNA test results on self-collected vaginal samples vs clinician-collected cervical samples using a flocked swab with a transport tube containing 1 mL of modified liquid Amies medium (**ESwab, Copan, Brescia, Italy**). We then correlated HPV detection with the cytological findings.

Material and Methods: Since July 2009, we have initiated a study to evaluate the accuracy of cervical cancer screening in Cameroon, based on HR HPV DNA testing by self-collected vaginal samples and visual inspection with acetic acid (VIA). Women self-collected a vaginal sampling for HPV testing using a swab, before undergoing gynecological examination. Clinicians collected then a swab cervical sample for HPV testing, and another cervical sample using a broom brush for liquid cytology. They also performed VIA, colposcopy and directed biopsy if indicated. The HR HPV test was done by a Real Time molecular assay (**Abbott Real Time High Risk HPV test**). Kappa (K) test was used to determine the concordance between self- and clinician-collected HPV test results.

Results: The Eswab samples were successfully analyzed by the Abbot PCR assay in 98% of the cases. Data were completed for 376 patients aged between 30-65 years old. The HR HPV prevalence was of 14.6%. The swab samples were positive in 46 patients in the self-collected specimens (12.2%) and in 40 patients (10.6%) in the clinician- collected specimens. Global concordance was of 93.6% (K=0.71). Abnormal cytology (ASC-US or more) was identified in 8 % of women. HPV tests were positive in 43.3% of patients with abnormal cytology. A 100% concordance was observed between self-and clinician-collected samples in patients with abnormal cytology. Self-sampling identified HR HPV in all women with high grade squamous intraepithelial lesions as did clinician sampling.

Conclusion: Preliminary data suggest that self-vaginal HPV sampling compares very favorably with clinician cervical HPV sampling and with cytological results. Complete data are ongoing in order to

estimate the feasibility, acceptability and effectiveness of cervical cancer screening by HPV self-testing in Cameroon.