Improving cervical cancer screening in Ghana using biomarkers

Ama Afrah
University of Ghana, Ghana

Screening and management of abnormal cytology has resulted in a marked reduction in invasive cervical cancer using Pap smear. However, many women screened are not found to have significant precursor lesions. This is due to the poor specificity of high-risk human papillomavirus triage. More specific cervical cancer biomarkers may be more effective triage tools. Molecular markers have been extensively investigated with a view to providing early and accurate information on and prediction of response to treatment of early cervical cancer. Proliferation is a key feature of the progression of tumors and is now widely estimated by the immunocytochemical assessment of the nuclear antigen Ki-67. The proliferative rate determined with Ki-67 antibody may provide information regarding cell kinetics of cervical carcinoma and their precursor lesions with a high rate of cell proliferation, potentially useful in identifying patients in order to improve the therapeutic approach, by a rapid, practical, and easily performed immunocytochemical method. p16 on the other hand is also widely used as immunocytochemical marker in gynecologic pathology and for that matter Pap smears. Strong and diffuse cytoplasmic and nuclear expression of p16 in squamous cell carcinoma of the female genital tract is strongly associated with high-risk human papilloma virus infection and neoplasms of cervical origin. The majority of squamous cell carcinomas of uterine cervix express p16. This study will evaluate whether a dual stain for p16 and Ki-67 may improve the triage of abnormal Pap smears.

Biography

Ama Afrah has MPhil in Pathology and BSc in Medical Laboratory Sciences. She is currently pursuing PhD in Applied Parasitology. She is a Cytologist at Korle-bu Teaching Hospital. She has 3 publications to her credit.

aafrah@st.ug.edu.gh