DETECTION BIOMARKER KI67 FOR PROGNOSIS OF PROLIFERATIVE ACTIVITY OF CERVICAL CANCER IN HIV INFECTION WOMEN

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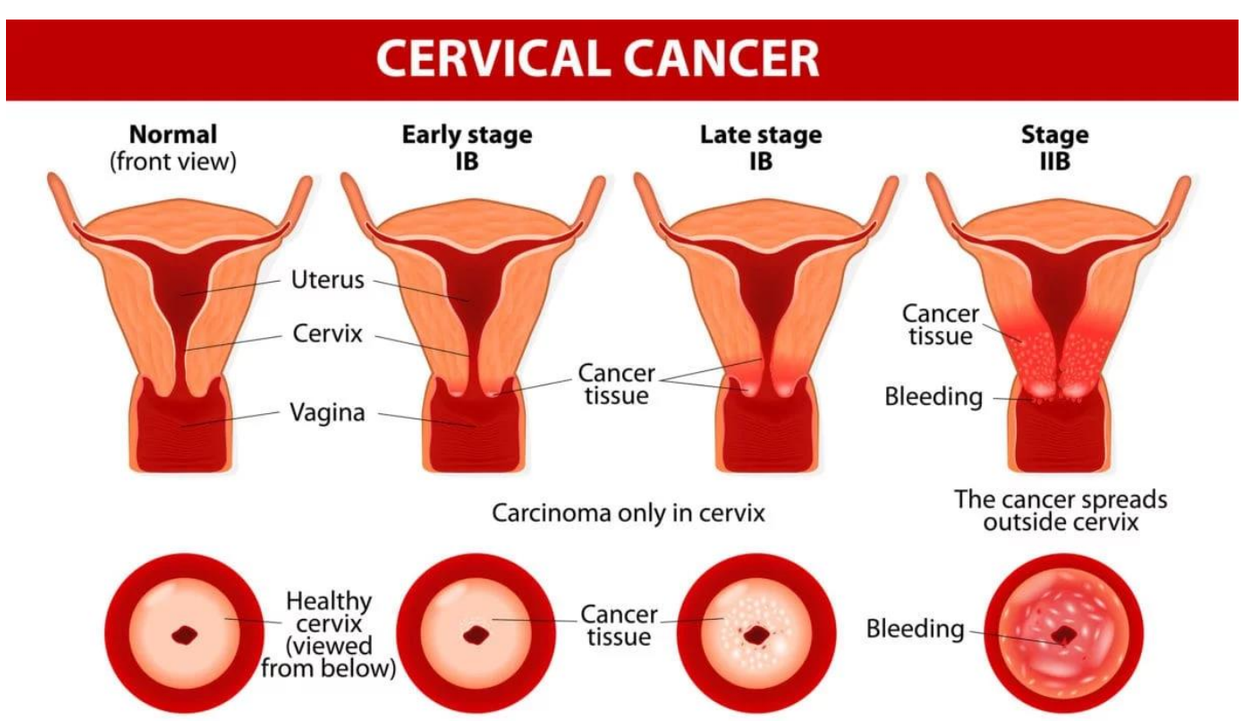
Background: Cervical cancer represents one of the most challenging public health problems in developing countries. HIV-infected women have a higher risk of cervical cancer which is an AIDS defining cancer

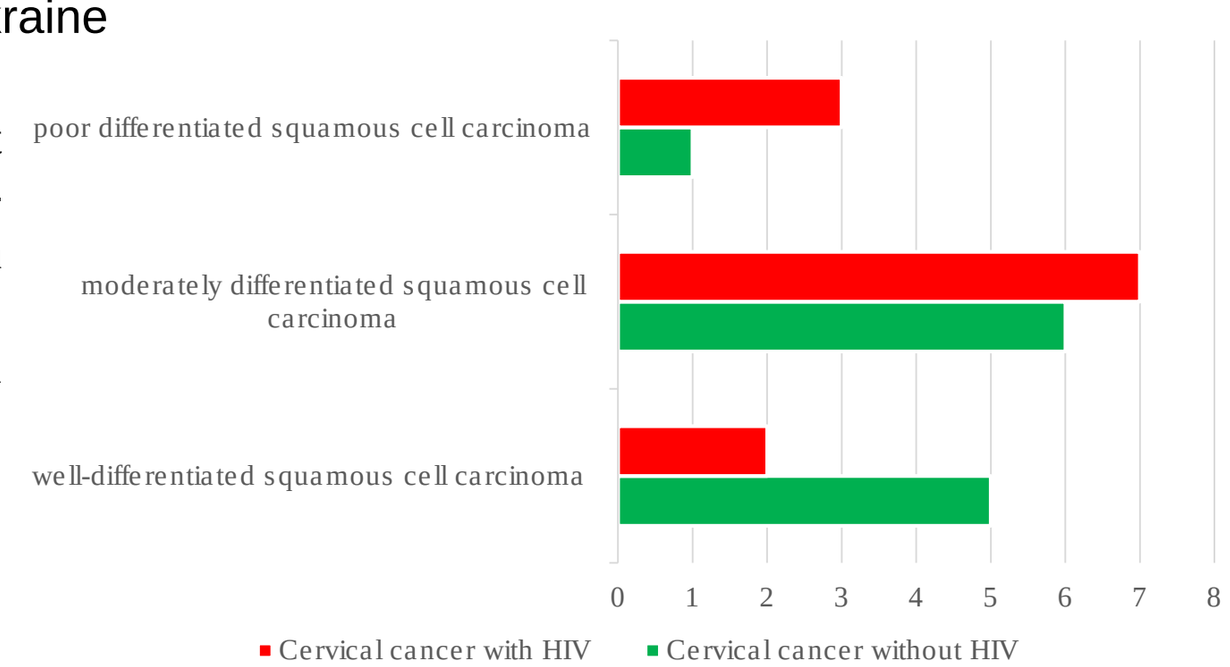
Clinical evidence of cervical cancer by immunohistochemical study of protein Ki67 on early stage can decrease morbidity.

Materials and methods: for the study have been selected 12 patients with HIV and in 12 patients without HIV infection with histologically confirmed cervical cancer averaged age was 35.5. Positive Ki-67 expression was diagnosed with nuclear stain in the intermediate and superficial cells.

Aim: detection of proliferative activity in cervical cancer in women with HIV infection with Ki- 67 immunohistochemical examination.



Conclusion: Depend of histological type, expression of Ki-67 increased from 4.7±3.8% in well-differentiated squamous cell carcinoma till 89.2±5.1% in poor differentiated squamous cell carcinoma for group with HIV 21.3±2.4% till 79.4±3.7 in group without HIV accordingly.



Results: As a result of IHC it was detected that positive Ki-67 expression expression have been revealed in 100%, but percentage of cell with positive staining was uneven in investigated groups. So, percentage of cell with positive staining Ki67 was ranged from 11.32 to 85.4 % (averaging 48.8%) in group without HIV. But it was ranged from 27.41 to 93.4 (averaging 62.5%) in HIV group.

IHC localization and intensity of response to Ki-67 have been depending of invasive growth varies on the degree of differentiation. Thus, in poor differentiated squamous cell carcinoma positive nuclear reaction for Ki- 67 was detected in the majority of cells without a particular pattern. Status of Ki-67 could be detected as an independent predictor disease free survival and presence of numerous Ki-67 positive stained cells is expected results for developed cervical carcinoma. Level of Ki-67 is progressively increased in both investigated groups, but level of proliferation is significantly higher in group with HIV. So, averaging level for all histological types in group without HIV was 48.8±5.2% with 62.5±5.6% in group with HIV. Level of proliferation was more pronounced in group with HIV and in all histological types of cervical cancer.

Histological types	Ki-67	
	No HIV (n=12)	HIV (n=12)
Well-differentiated squamous cell carcinoma	21.3±2.4	34.7±3.8*
Moderately differentiated squamous cell carcinoma	45.8±4.2	63.7±4.3*
Poor differentiated squamous cell carcinoma	79.4±3.7	89.2±5.1*
Averaging level	48.8±5.2	62.5±5.6*

** - p<0.05 significant between groups with and without HIV*