Pier Luigi Cherchi et al., J Vaccines Vaccin 2014, 5:5
http://dx.doi.org/10.4172/2157-7560.S1.022

OMICS Group Conferences
Accelerating Scientific Discovery

4th International Conference on
Vaccines & Vaccination
September 24-26, 2014 Valencia Convention Centre, Spain

P16 Immunostaining and HPV testing in histological specimens from uterine cervix

Pier Luigi Cherchi and **Giampiero Capobianco**
Sassari University School of Medicine, Italy

Background: The cellular tumor suppressor protein p16INK4a (P16) has been identified as a biomarker for transforming HPV infections. P16 is a cyclin-dependent kinase inhibitor that regulates the cell cycle and cell proliferation by inhibiting cell cycle G1 progression.

Objective: To confirm the role of P16 as biomarker for transforming HPV infections.

Methods: 56 biopsies of the cervical canal were collected from January 2012 to September 2012 in the Institute of Pathology of Sassari University. The search for HPV immunohistochemistry was performed with the monoclonal antibody DAKO 1:25, while for the detection of p16 was used CINtecTM p16 (INK4a) Histology Kit (Dako Cytomation).

Results: In 56 biopsies performed in women aged between 23 and 69 years we highlighted, by histological analysis, 24 cases of low-grade lesions (LSIL-CIN1) and 31 cases of high-grade lesion (HSIL-CIN2/3); 15 CIN2, 14 CIN3 and 2 cervical Squamous cell Carcinoma *in situ* (SCIS). One case was an Infiltrating Squamous cell Carcinoma (ISC). In 24 CIN1, there was 16.67% positivity for p16 and an equal percentage occurred for HPV. In 15 cases of CIN2 the percentage of positivity for p16 was considerably increased (73.33%), unlike the search for HPV which had a positivity rate of 20%. Finally, in cases CIN3 (14), and 3 carcinomas the positivity for p16 was equal to 100%, however the search for HPV positivity was between 0% and 7.14%.

Conclusions: We have shown that p16 overexpression increased with the severity of cytological abnormalities and that had a great ability to identify the viral infection.

Biography

Pier Luigi Cherchi has completed his MD at the age of 23 years from Sassari University and Postdoctoral studies from Sassari University, Italy. He is the Director of Chair of Gynecologic Oncology at Sassari University. He has published more than 500 papers in international Gynecologic journal.

pcherchi@uniss.it