Human papillomavirus type distribution and correlation with cyto-histological patterns in women from Benin

Franca Piras¹, Michela Piga², Antonella De Montis³, Manuela Atzori³, Marco Pittau⁴, Daniela Murtas¹, Luigi Minerba⁵, Cristina Maxia¹, Maria Teresa Perra¹, Paola Sirigu¹

¹ Department of Cytomorphology, University of Cagliari, Italy
² Department of Pathology, ‘SS. Trinità’ Hospital, Cagliari, Italy
³ Research Laboratories, bcs Biotech, Cagliari, Italy
⁴ Cloning Laboratory, bcs Biotech S.p.A., Cagliari, Italy
⁵ Department of Public Health, University of Cagliari, Italy

Benin has a population of 2.22 millions women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 561 women are diagnosed with cervical cancer and 448 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women in Benin, and the 2nd most frequent cancer among women between 15 and 44 years of age. Human papillomavirus (HPV) infection is now a well-established cause of cervical cancer. Data is not yet available on the HPV burden in the general population of Benin.

This report, for the first time, provides informations for Benin on HPV-related statistics and cervical cancer screening practices.

Human papillomavirus (HPV) type-specific distribution was evaluated in cervical swabs collected from 725 women from the Benin undergoing voluntary screening and correlated with cyto-histological abnormalities. Only 351 samples were valuable for HPV DNA detection and 493 for PAP test. HPV DNA was detected in 35% of the samples, 90% of which had high-risk HPV infection, 36% multiple infection, and 64% single infection. HPV types 16 and 18 are responsible for about 70% of all cervical cancer cases worldwide. Our data show that in Benin the most common high risk HPV types were HPV-59 (26%) and HPV-16 (19%), followed by HPV-35 (16%), HPV-18 (15%), HPV-58 (11%), HPV-45 (9%), HPV-56 (7%), HPV-73 (6%), HPV-51 (3%), HPV-31, -33, -52 (2%) in women with both normal and abnormal cytology.

Key words  Human papilloma virus, cervical lesions