HIGH-RISK HUMAN PAPILLOMAVIRUS SCREENED ON 1,686 ITALIAN PATIENTS: EPIDEMIOLOGICAL, CLINICAL AND VACCINAL IMPLICATIONS

Sandra Mazzoli¹, Tommaso Cai², Riccardo Bartoletti²
¹STDs Centre, Santa Maria Annunziata Hospital, Bagno a Ripoli (Florence), Italy

²Department of Urology, Bagno a Ripoli (Florence), Italy

Background: The HPV infection is a very common sexually transmitted disease. The Advisory Committee on Immunization Practices of the Centres for Disease Control and Prevention recommended vaccination routinely for girls aged 11 or 12. At present, however, vaccination for boys has not yet been approved. The role of male HPV infection in increasing risk of partner cervical cancer is well established as well as the fact that male circumcision is associated with a reduced risk of genital HPV infection in men.

Materials and Methods: From January 2006 to August 2007, 1,686 young patients, 560 female and 1,126 male (mean age 34.6 years), attending our STD Centre for chronic pelvic prostatic diseases, such as prostatitis or cystitis, were analysed. Each patient underwent microbiological analysis for common bacteria, *Chlamydia trachomatis*, yeasts, HPV and Human Herpes Viruses 1 and 2 (HSV 1 and 2) in total ejaculate and urine samples and vaginal swabs for males and females, respectively. The HPV analysis was carried out by using Alpha Watch HPV Test (AlphaGenic – DiacoBiotechnology, Trieste, Italy).

Results: 3,368 biological samples were analyzed, in order to test for HPV positivity. 187 subjects were positive for HPV: 106 males and 81 females, with the prevalence of 9.4% and 14.4% respectively. The HPV typization has demonstrated that 81/187 (43.3%) were high risk-HPV-16 and -18, while 56.6% were HPV-16 and -18 negative. In fact, HPV-16 has been detected in 21.9%, HPV-18 in 27.2%, HPV-31, -33, -45, -58 in 10,1%, 8.2% 5.3% and 10.1% respectively. In addition, 35.2% of all patients were infected with other HPV than

HPV-16, -18, -31, -33, -45, -52, -56, and -58. The present data confirm the common diffusion of high risk-HPV infection also in young sexually active subjects. In addition, our data suggest that a correct HPV vaccination program could also be extended to young sexually active males.