

PREVALENCE OF ANAL HUMAN PAPILLOMAVIRUS (HPV) AND ASSOCIATED RISK FACTORS AMONG MEN WHO HAVE SEX WITH MEN (MSM) IN LISBON, PORTUGAL - PROJECT CHECKLIST



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BACKGROUND AND OBJECTIVE

Anal HPV infection has been associated with a higher incidence of anal cancer, especially in MSM^{1,2}. HPV infection, particularly HPV 16, is causally associated with anal cancer.

Screening from anal HPV was conducted in MSM who attended a community based STI clinic for MSM in Lisbon, Portugal - CheckpointLX. MSM with or without HIV infection were included. Baseline prevalence and risk factors for anal HPV infection in MSM were analyzed.

METHODS

Demographic and risk factors were collected in accordance to CDC guidelines (number of partners, sexual practices and condom use, previous diagnose of STI)³. Participants were submitted to a Papanicolaou test using Thinprep® liquid solution. Samples were used for HPV detection and genotyping, using PCR in real-time (In House), and anal cytological analysis. Chi-square test and multivariate analysis was performed.

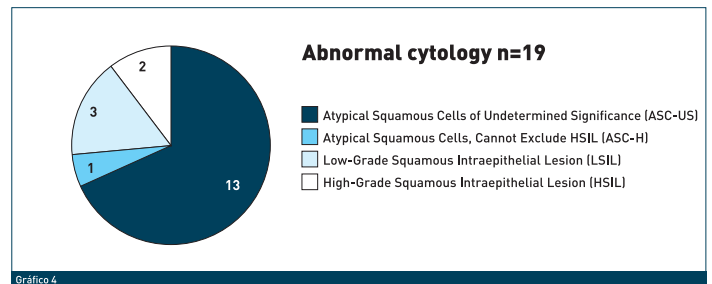
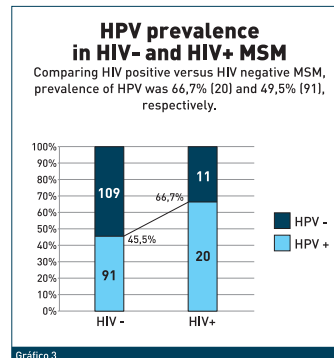
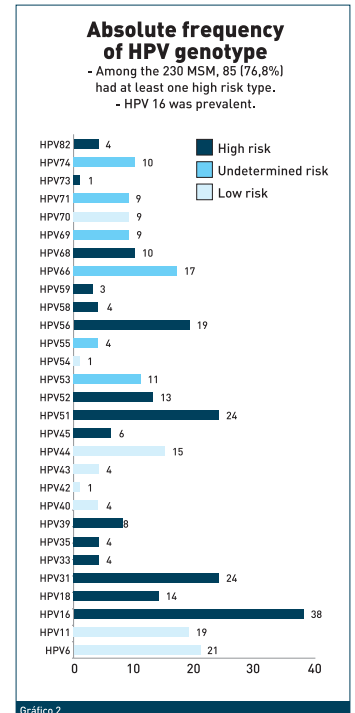
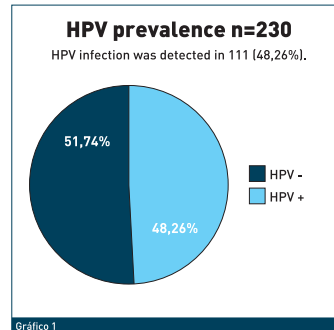
RESULTS

The study population consisted of 230 MSM with a median age of 30 (SD9,7). HIV infection was present in 30 patients (13%), HPV infection was detected in 111 (48,3%) among which 85 (76,8%) had at least one high risk type. HPV 16 was prevalent (38). Comparing HIV positive versus HIV negative MSM, prevalence of HPV was 66,7% (20) and 49,5% (91), respectively.

On a multivariate analysis, among age, HIV status, sexual practices, condom use and number of sexual partners, only HIV-positivity correlated significantly with the presence of anal HPV ($p=0,05$). We found 19 (8,3%) abnormal cytological results. Considering the HIV-negative MSM, 7,0% showed cytology abnormalities against 16,7% between HIV-positive MSM ($p=0,07$).

CONCLUSION

HPV anal infection is highly prevalent among MSM. HIV infection is correlated with a higher prevalence of HPV and abnormal anal cytology seems to be more frequently observed in HIV patients. Number of sexual partners, consistent condom use, anal sexual practices and age were not correlated with HPV anal infection in this group of MSM.



¹ Muñoz, N.; Castellsagué, X.; González, A.; Gissmann, L. (2006) Chapter 1: HPV in the etiology of human cancer, Vaccine, 24(3), p.S1-S10.

² Howard, K. (2012) The cost-effectiveness of screening for anal cancer in men who have sex with men: a systematic review. Sexual Transmitted Diseases, 39(9), p.726-732.

³ Centers for disease control and prevention (n.d.) A guide to taking a sexual history. USA: CDC