

O572

1-hour Oral Session

Challenges with papilloma and polyoma viruses

**Risk factors in the progression of Low grade Intraepithelial Neoplasia (LSIL) to High grade intraepithelial neoplasia (HSIL) in a cohort of HIV positive MSM**

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**Background:** Anal squamous cell carcinoma (ASCC) is one of the most frequent non-AIDS-defining malignancies in HIV-infected MSM. A protocol of early diagnosis of ASCC has been considered cost-effective

**Material/methods:** This is a single-centered study conducted between May 2010 and June 2015. The patients were included in a screening, therapeutic, and prophylaxis (implement use of condom, and qHPV vaccine (n=64 patients)) programme of HPV and ASCC. Baseline visit (V0) enclosed HPV PCR genotyping (GeneAmp PCR System 9700, Applied Biosystems), and high-resolution anoscopy (HRA). In V0 and each visit we collected medical history, sexual habits, CD4, and HIV viral load. Patients diagnosed with LSIL were subjected to an annual checkup that included HPV testing and HRA; patients diagnosed with HSIL were sent to the General Surgery Service where they underwent a mucosectomy; or they received intra-anal Imiquimod three times/week for 16 weeks. When ASCC were diagnosed the patient was sent to the Oncology Service; patients with normal HRA were evaluated every year with anal cytology and HPV PCR, in cases of anal squamous intraepithelial lesions (ASIL) and/or oncogenic HPV, a high-resolution-anoscopy (HRA) was carried out. The

cytological and histological classification was Bethesda's, and LASTS Project for HPV-Associated Lesions, respectively.

**Results:** 277 patients were included, with an average age of 36,8 years, and follow up during 18.1 months/patient (IQR: 0-34). In V0, 277 HRA were carried out: 40.8 % were normal, 44.4% LSIL, 14.4% HSIL, and 0.4% ASCC. IR of HSIL was 78.4x1000 person-year, and IR of ACSS 242x100.000 p-y. 16.1% and 1.6% of patients with normal HRA progressed to HSIL and ASCC, respectively. 19.1% of patients with LSIL progressed to HSIL. In the multiple logistic regression analysis we observed, as a predictive factor of a new case of HSIL, previous LSIL in HRA, OR 5 (IC95% 1.6-15.9). The rest of variables analyzed (history of AIDS-defining illnesses; median time of HIV duration antiretroviral therapy, education, employment, smoking, alcohol, STDs, genotypes or number of HPV, viral load, CD4 cel/uL, qHPV vaccine, imiquimod, mucosectomy) were not related

**Conclusions:** One in every five of patients with LSIL progressed to premalignant lesions in 18months. The only risk factor associated with the high IR of HSIL was preliminary diagnosis of Low squamous intraepithelial lesions.