27th ECCMID Vienna, Austria 22 – 25 April 2017
The congress of ESCMID

Session: P089 HIV medicine

**Category: 1a. HIV/AIDS (incl anti-retroviral drugs, treatment & susceptibility/resistance, diagnostics & epidemiology)**

25 April 2017, 12:30 - 13:30
P1848

# Results of a screening, therapeutic and prophylaxis programme for ain2+lesions in HIV-MSM (2010-2016)

Carmen Hidalgo Tenorio*[1], Concepcion Gil Anguita[2], Jessica Ramirez Taboada[3], Samantha Elizabeth De Jesus[3], Miguel Angel Lopez Ruz[3], Javier Esquivias[4], Mohamed Omar Mohamed Balgahata[5], Rosario Javier[1], Juan Pasquau[6]

[1]*Complejo Hospitalario Universitario Granada; Hospital Virgen de Las Nieves; Infectious Diseases*

[2]*Hospital Marina Baixa*

[3]*Hospital Universitario Virgen de Las Nieves; Complejo Hospitalario Universitario Granada; Infectious Diseases Service*

[4]*University Hospital Virgen de Las Nieves; Complejo Hospitalario Universitario de Granada; Pathology Service*

[5]*University Hospital Ciudad de Jaen; Infectious Diseases Unit*

[6]*Complejo Hospitalario Granada; Hospital Virgen de Las Nieves; Infectious Diseases*

**Background:** Anal squamous cell carcinoma (ASCC) is one of the most frequent non-AIDS-defining malignancies in HIV-infected MSM. **Aims:** To analyze the prevalence and incidence of HSIL and ASCC (AIN2+lesions) in HIV-positive MSM, and risk factors related to these lesions, after initiating a program for diagnosis, treatment and prevention of ASCC.

**Material/methods:** This is a longitudinal study conducted between May 2010-July 2016. Baseline and each visit enclosed samples of anal mucosa (liquid medium) for HPV PCR genotyping (Linear Array HPV Genotyping Test,), cytology (ThinPrep® Pap Test), and high-resolution anoscopy (HRA) (Zeiss 150 fc ©); as well as medical history, sexual habits, CD4, and HIV viral load; and it was carried out

implement use of condom, and administered to 64 patients from May of 2012 to May of 2014 the quadrivalent HPV vaccine. Patients diagnosed with LSIL or normal HRA were monitored annually; patients diagnosed with HSIL were treated (mucosecotmy/ fulguration (n=49) or Imiquimod intranal x16 weeks (n=19); and subjects diagnosed with ASCC were sent to the Oncology Service. The cytological and histological classification was Bethesda's and LAST Project for HPV-Associated Lesions, respectively.

**Results:** 319 patients were included; with an average age of 36.7 years, with 2 years (IQR: 0-3) of follow up. 81.3% had High risk (HR)-HPV genotype, and the most frequent genotype was 16 (32.9%). The prevalence of AIN2+ lesions have been reduced from 42.9% in 2010 to 2.8% in 2016; p=0,011 (graph 1). 91.9% of AIN2+lesions appeared in patients aged under 50 years (29% < 30y, and 61.4% 30-50y). According to the multivariable analysis, the oncogenic HPV-68 genotype was a risk factor associated with the development of AIN2+lesions, (OR 3.58; 95% CI 1.26-10.21), whose prevalence was 13.2%. During monitoring, 28 new cases of AIN2+ lesions developed (Incidence of HSIL: 33.3x1000 p-year; Incidence of ASCC:111 x100.000 p-year); and we discovered that previous AIDS-defining illnesses was a predictive factor of new cases in the multiple logistic regression analysis (OR 4.5; 95%CI 1.3-15.6).

**Conclusions:** Routine screening of HPV and ASCC in HIV MSM patients should be implemented, especially in middle aged patients, with HR-HPV genotypes, in our patients primarily HPV-68, and previous history of AIDS; as well as therapeutic and prophylaxis programs for HPV and AIN2+ lesions. We have noticed that together these measures could decrease the prevalence of theses lesions.

**Graph 1. Prevalence of AIN2 lesions+ in our cohort**