

¹G Ogilvie, ²L Smith, ²D van Niekerk, ²F Khurshed, ³S Greene, ³S Hobbs, ²A Coldman, ⁴E Franco. ¹University of British Columbia, Vancouver, BC, Canada; ²BC Cancer Agency, Vancouver, BC, Canada; ³University of North Carolina, Chapel Hill, Chapel Hill, NC, United States; ⁴McGill University, Montreal, QC, Canada

Background Primary HPV testing for cervical cancer screening (HPV-CCS) could result in significant CCS programme changes including extended screening intervals, later age to start of screening and use of a test for a sexually acquired infection. We examine the predictors of women's intentions to undergo HPV-CCS compared to screening with Pap smears in different screening scenarios. **Methods** Participants from a Canadian trial of primary HPV CCS completed a survey which determined women's intentions to attend CCS in three different models - (a): HPV-CCS conducted annually; (b): HPV-CCS conducted every 4 years; and (c): HPV-CCS conducted every 4 years and starting after age 25. Demographic and health data were assessed, and scales for attitudes about HPV testing (AT), perceived behavioural control (PBC) and direct and indirect subjective norms (SND, SNI) were created. Three logistic regression models were created, to determine predictors of women's intentions to attend HPV-CCS in each scenario.

Results 981 of 2016 emailed surveys were completed. Eighty four percent of women intend to be screened with HPV, which decreased to 54.2% with an extended screening interval, and 51.4% with a delayed start of age 25. Predictors of intention to undergo HPV-CCS screening in Model A were attitudes (OR 1.22; 95% CI 1.15, 1.30), SNI (OR 1.02; 95% CI 1.01, 1.03) and PBC (OR 1.16; 95% CI 1.10; 1.22). In Model B, predictors were attitudes (OR 1.32; 95% CI 1.28; 1.37), and in Model C, predictors were attitudes (OR 1.26; 95% CI 1.23; 1.30), education (OR 0.59; 95% CI 0.37; 0.93), and PBC (OR 1.06; 95% CI 1.02; 1.10).

Discussion Women's intentions to be screened for cervical cancer with HPV decreases substantially with an extended screening interval and delayed screening start. CCS programmes considering primary HPV screening must ensure robust planning to mitigate any negative impact on screening attendance.

010.4 EFFICACY AND SAFETY OF INTRALESIONAL (IL) INJECTION OF MYCOBACTERIUM W VACCINE VS. IMIQUIMOD CREAM IN THE TREATMENT OF ANOGENITAL WARTS: A DOUBLE BLIND RANDOMISED TRIAL

doi:10.1136/sextrans-2013-051184.0140

S Gupta, L Dar, P Kumar, V Sharma, K Verma, S N Dwivedi. *All India Institute of Medical Sciences, New Delhi, India*

Introduction External Anogenital warts (EGW) are associated with poor response to treatment and high recurrence rates. There is a need for development of immunotherapeutic agents for treatment of AGW.

Objectives To compare efficiency and safety of IL injection of killed Mycobacterium w (Mw) Vaccine and Imiquimod cream in complete resolution of EGWs, recurrence rates, and reduction in HPV viral load.

Method 89 patients (71 male and 18 female) with EGW were recruited over a period of 3 years. Patients were randomised in to two Group: Group A Patients (Male 34, Female 10) received Imiquimod cream and IL placebo injection; Group B patients (Male 37 and female 8) received Placebo cream and IL Mw injections. HPV Genotyping was done by reverse line blot hybridization by the Linear Array (Roche) and viral load was done by Real Time quantitative PCR.

Results Mean percentage reduction in Imiquimod and Mw groups were 84.7% and 83.2%, respectively (P > 0.05). Overall, 59% and 66.7% of patients in Imiquimod and Mw groups respectively showed complete clearance. There was no significant difference in adverse events and recurrence rates. HPV DNA was detected in anogenital

warts samples in 84 (94.38%) of 89 patients. The predominant types were HPV-6(55%), 11(41.5%) followed by HPV 16(5.6%), 18(4.4%), and others(27.5%). 22(24.7%) showed infection by multiple HPV types. Baseline HPV 6 and 11 DNA load ranges were 1.4×10^2 – 2.1×10^8 and 2.6×10^2 – 2.1×10^8 copies/mg, respectively (P value < 0.001). After treatment, there was a significant decline in viral load of HPV 6 in both the groups, but of HPV 11 only in Mw group.

Conclusions There was no significant difference in efficacy and adverse events in both the treatments. HPV viral load declined significantly and correlated with clinical resolution. Further studies are needed to explore whether injection Mw works for patients who do not respond to topical imiquimod.

010.5 HUMAN PAPILLOMAVIRUS (HPV) GENOTYPES ASSOCIATED WITH PERSISTENT HSIL ISOLATED BY LASER CAPTURE MICRODISSECTION

doi:10.1136/sextrans-2013-051184.0141

^{1,2}A M Cornall, ³J Roberts, ^{1,4,2}S M Garland, ⁵R J Hillman, ⁶M Poyten, ⁶F Jin, ⁶A E Grulich, ^{1,4,2}S N Tabrizi, on behalf of the SPANC study team. ¹Regional HPV Labnet Reference Laboratory, Department of Microbiology and Infectious Diseases, The Royal Women's Hospital, Parkville, Victoria, Australia; ²Murdoch Children's Research Institute, Parkville, Victoria, Australia; ³Cytology Department, Douglass Hanly Moir, Macquarie Park, New South UK, Australia; ⁴Department of Obstetrics and Gynaecology, University of Melbourne, Parkville, Victoria, Australia; ⁵The Western Sydney Sexual Health Centre, University of Sydney, Westmead Hospital, Westmead, New South UK, Australia; ⁶HIV Epidemiology and Prevention Program, The Kirby Institute, University of New South UK, Sydney, New South UK, Australia

Background Anal squamous cell carcinoma (ASCC) is preceded by persistent high-grade squamous intraepithelial lesion (HSIL). A small proportion of HSIL will progress to ASCC; estimates in men who have sex with men (MSM) suggest one in 400 per year in HIV-positive men and one in 4,000 per year in HIV-negative men. There are no tests to predict which HSIL are more likely to persist and potentially progress to ASCC. As MSM are often concurrently infected with multiple anal HPV genotypes, the role of each in progression to ASCC is unclear.

Methods Biopsies of suspected HSIL collected during high-resolution anoscopy from participants enrolled in the ongoing SPANC cohort of homosexual men (Sydney, Australia) between November 2010 and December 2011. Samples taken at 0, 6 and 12 months were formalin-fixed, paraffin-embedded then sandwich sectioned. Sections 1 and 5 were stained (haematoxylin and eosin [H&E]) and section 2 placed on a PEN-membrane slide. H&E sections were reviewed and lesions annotated using Aperio ScanScope software. Annotated abnormal tissue was isolated using laser capture microdissection (LCM), DNA was extracted and HPV genotypes present determined by reverse hybridisation assay (HPV SPF10-LiPA25, Labo Bio-medical Products).

Results From a pilot study comprising 16 men diagnosed with HSIL at one or more visits, 94% were positive for at least one HPV type. HPV16 was the most common genotype detected in HSIL (28%), followed by 45, 18 (each 17%), 58 (11%), 56, 31, 52, 34 and 33 (each 6%). Three participants had HSIL that persisted over three consecutive visits: 2 were positive for HPV16 and 1 for HPV18. An additional 28% of HSIL persisted for 2 consecutive visits, and were positive for HPV58 (40%), 16, 18 or 33 (each 20%).

Conclusion Overall, 10% of HSIL persisted for longer than 12 months with HPV16 being present in majority of these.

010.6 A POTENT COMBINATION MICROBICIDE GEL INHIBITS SHIV-RT, HSV-2 AND HPV INFECTIONS IN VIVO

doi:10.1136/sextrans-2013-051184.0142

L Kizima, A Rodriguez, J Kenney, M Hsu, **N Derby**, O Mizenina, R Menon, T Zydowsky, M Robbiani, J Fernandez-Romero. *Population Council, New York, NY, United States*