

# Anal cancer screening – what are we waiting for?

Richard Hillman on behalf of the SPANC team

4:50 PM - 5:02 PM September 25th, 2018







## **COI** Declarations

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## The SPANC team: 2010-2018



N>21

Structure



- Anal cancer
- SPANC
- What happens next

## HPV associated cancers (Aus/US) - 2014

	Incidence	e (deaths )	Rates/100,000		
	Male	Female	Male	Female	
Cervical cancer		898 (217)		7.4	
Anal cancer	160 (54)	225 (98)	1.4	1.9	
Penile			0.8*		
Head & neck – inc	3,342 <sup>§</sup>	<b>1,195</b> §	6.1 <sup>§</sup>	<b>1.8</b> §	
lip	(776)	(270)			
Vulvar*				1.8*	
Vaginal*				1.4*	

 $\approx$  1400 HPV-related deaths/yr

 $\approx$  150 anal cancer-related deaths/yr

\*US data 2004-8 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6115a2.htm \*Oropharyngeal SCC (US)- <sup>s</sup>approx 1/3<sup>rd</sup> HPV-related

http://www.aihw.gov.au/acim-books/





#### Anal cancer cases by state/territory (2013)

Source https://www.aihw.gov.au/reports/cancer/acim-books/contents/acim-books

Anal	cancer	demograp	ohic	stratifiers
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Key population	Incidence rates (IR) per 100 000	Reference
General female population	0.5 - 2.4	Stier 2015
Women with Cx/vag/ vulvar IN3+	13.6 0.8 to 63.8	Saleem 2011 Stier 2015
Women with HIV	3.9-30	Stier 2015
Transplant recipients	15	Grulich 2007
HIV negative MSM	37	Palefsky 2009
HIV positive MSM	131	Silverberg 2012

Stier EA et al Am J Obstet Gynecol 2015;213(3): 278-309

#### The spectrum of malignancies in HIV-infected patients in 2006 in France: The ONCOVIH study



Lanoy E et al 2011 Int J Cancer 2011;129(2): 467-75

#### Anal HPV/HSIL natural history

Normal anal epithelium

#### Anal HPV/HSIL natural history



## Anal HPV/HSIL natural history



#### High Resolution Anoscopy (HRA)



- $\bullet \cong colposcopy$
- most accurate way of identifying HSIL
- learning curve (≥ 5 years)
  → underestimation ++



#### Anal HPV/HSIL natural history



#### Anal HPV/HSIL natural history



**Evidence-based prevention/treatment strategies** require accurate information on all these steps







↑Prevalent HRHPV	Incident HRHPV	Clearance hrHPV
HIV+ Lifetime CLessRAP	(	HPV16<< other HRHPV
↑Recent (<6/12) CLRAP Younger age (<45yrs) (not: smoking)	(not: HIV, age)	

	Prevalence 74% <sup>+</sup> Incident H 59% <sup>-</sup> 21/100P		Anal HSIL highly prevalent in MSM
	HRHPV infection <	HSIL	Sectored and a
	Clearance 23/100		
Prevalent HSIL	Incident HS	Incident HSIL	
HIV+/ nadir <200 Lifetime + recent CLessRAP (AIN3) HPV16 Other HRHPV (AIN2 - recent CLRAP) (Not age/smoking)	?	HPV 1	r lesions (≥2 octs)

## Summary of SPANC

- Anal cancer significant and growing problem
- Highly prevalent HRHPV/HSIL

incidence/clearance

- Highly dynamic environment immunologically very active with high rates of
- Mechanisms to identify those at highest risk to offer intensive follow up/Rx



#### What should I do now?



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HIV HEPATITIS B HEPATITIS C STI INTERNATIONAL PROGRAMS RESOURCES CONFERENCES TRAINING ABOUT ASHM

#### Anal Cancer in Men living with HIV

Anal cancer and its screening using digital ano-rectal examination (DARE) in men living with HIV who have sex with men ASHM has commissioned a subcommittee to look at the role of screening for anal cancers in men living with HIV who have sex with men (MSM). The group will initially focus on the merits and issues around routine screening using DARE.

ASHM's HIV treatment guidelines committee has supported the recommendation from the anal cancer screening subcommittee on 17th November 2016.

#### **Recommendation:**

- MSM living with HIV aged 50 and above should have a digital ano-rectal examination annually aspart of their routine HIV care.
  The 'screening test' will also involve examination of the periamation of cooking or feeling for any abnormalities in the periamal skin abnormalities in the perianal skin (i.e. within 5 cm diameter of the anal verge).

	No		Yes		P value
	n	%	n	%	-
Had talked to your doctor about anal					
IPV					
Age					0.007
18-24	154	99.3	11	6.7	
25-34	388	88.0	53	12.0	
35-44	317	84.8	57	15.2	
45-54	266	83.9	51	16.1	
≥55	136	85.0	24	15.0	
HIV status					< 0.001
Negative/unknown	1076	89.2	131	10.9	
Positive	167	72.3	64	27.7	
Iad an anal cancer examination					
Age				$\frown$	< 0.001
18-24	132	95.7	6	4.4	
25-34	374	90.8	38	9.2	
35-44	291	86.9	44	13.1	
45-54	229	80.4	56	19.7	
≥55	93	70.5	39	29.6	
HIV status					< 0.001
Negative/unknown	960	88.6	123	11.3	
Positive	145	71.1	59	28.9	

Table 4. Experience with anal HPV and anal cancer screening in relation to age and HIV status

#### What should we do now?

What should we do now?



#### What should we do now?



- = operationalise SPANC findings
- Initially HIV positive MSMs attending SVH
- DARE + anal swab (self/clinician-collected)
- $\rightarrow$  stratify by hrHPV
- HRA to assess for HSIL
- Stratify to Rx trials
- Commencing November 2018

## **Further Research Questions**

 Biomarkers for persistence/clearance of HSIL & progression to cancer (methylation, human genome studies)



- Treatment options for HSIL
  - Pomalidomide
  - Antiva ABI-1968 (human DNA polymerase cream)
    →selective apoptosis of HPV-infected cells
    - ightarrow Phase 1 studies promising

#### Thank you

Richard Hillman on behalf of the SPANC





High Resolution Anoscopy Workshop 2018 29-30 September 2018\* St Vincent's Hospital, Sydney, Australia www.iansoc.org



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Missouri town's mayor has threatened a boycott, saying it puts the city up for ridicule



♥ @mmcgowan569 Fri 14 Sep 2018 11.38 AEST





▲ While some have criticised the name of The Uranus Examiner, the managing editor said it was decided by 'the people who love us'. Photograph: MoFasterMo/Twitter

For many in the town of Uranus, Missouri, the title of the town's new newspaper is taking some time to digest.

