# Adherence to weekly anal self-examination among men who have sex with men for detection of anal syphilis Ei Aung<sup>1,2</sup>, Christopher Fairley<sup>1,2</sup>, Jason J Ong<sup>1,2</sup>, Tiffany Phillips<sup>1,2</sup>, Julien Tran<sup>1,2</sup>, Marcus Chen<sup>1,2</sup>, Kate Maddaford<sup>1</sup>, Eric Chow<sup>1,2</sup> 1.Melbourne Sexual Health Centre, Alfred Health, Australia<sup>2</sup>, Central Clinical school, Monash University

## Introduction

- Men who have sex with men (MSM) who practise exclusively receptive anal sex are more likely to present with secondary syphilis than primary syphilis.
- This implies anorectal syphilis lesions are likely to be missed.
- Weekly anal self-examination could detect anorectal syphilis and early detection might lead to reduction in infectious period.

# **Objective**

• To examine the adherence to weekly anal self-examination.

Figure 1. Neurosyphilis admission by sex and year between 2007 and 2020

Demographic characteristics and sexual practices	•	Number of participants, Percentage (%)		
Age (median, interquartile range) (years)	32 (IQR: 27-41)			
Gender				
Men	30	100%		
Sexual orientation				
Men who have sex with men	30	100%		
Men who have sex with men and women	0	0%		
HIV and PrEP				
Living with HIV	8	27%		
Taking PrEP	11	37%		
Not taking PrEP & not living with HIV	11	37%		
Anal sex position in the past 12 months				
Receptive penile-anal sex only	14	47%		
Receptive and insertive penile-anal sex	16	53%		
Past syphilis infection				
Yes	9	30%		
One infection	7	23%		
More than one infection	2	7%		
No	21	70%		
Condom use in the past 3 months <sup>^</sup>	N=29			
Always	3	10%		
Never	9	31%		
Sometimes	17	59%		
No anal sex	0	0%		
Ever inserted their fingers in their anus previously				
Yes	25	83%		
No	5	16%		
Previous abnormalities reported by men who had inserted their fingers in their anus *	N=25			
Yes†	9	36%		
No	16	64%		
Reasons for inserting their fingers in their anus among those who had performed previously*§	N=25			
To check for symptoms of STI	15	58%		
On recommendation by health professionals or friends/family/partners	4	15%		
To check for abnormalities	3	12%		
Pleasure/masturbation	2	8%		
Hygiene	2	8%		
Anal cancer screening	1	4%		
Median sexual partners for receptive anal sex in the past 3 months*	4 [IQR: 1-7]			
Median frequency of anal self-examination* (per 4 weeks)	1 [IQR: 0.3-4]			
Mean frequency of anal self-examination* (per 4 weeks)	1 [SD±1.1]			

#### **Method**

- We conducted a longitudinal feasibility study examining the adherence to weekly anal self-examinations among MSM attending a sexual health clinic in Melbourne, Australia between December 2020 and June 2021.
- Adherence to weekly anal self-examinations over 12 weeks was assessed from a logbook and 4-weekly surveys.
- Participants who identified abnormalities in their anus were recommended to seek medical review.

### **Results**

- 36 men were recruited, and 30 men were included in the analysis.
   6 men were lost to follow-up.
- Demographics, sexual practice and experience of anal self-examination were reported in Table 1.
- Of the 30 men who completed the study, anal self-examination was performed at least weekly for 308 of 360 person-weeks (86% of the weeks, 95% CI: 82-89).
  The mean adherence was 3.6 (95% CI: 3.3-3.9) examinations per four-weeks per person in Weeks 1-4, 3.5 (95% CI: 3.1-3.8) in Weeks 5-8 and 3.3 (95% CI: 2.9-3.7) in Weeks 9-12 (P<sub>trend</sub>=0.06).
  Six men (20%,6/30) were seen for medical review after they identified abnormalities (Table 2), whilst eight men (27%,8/30) reported abnormalities, but did not seek medical review.

No participants were diagnosed with syphilis during the study period.

**Table 2.** Findings of 6 men who reported abnormalities and returned for review

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Participant	Number of weeks first reported abnormality	Description of abnormality	Locatio n of medical review	Diagnosis	Syphilis serology	Syphilis PCR
3	12	Pain, bleeding	MSHC	Anal tear	Negative	Negative
12	11	Pain, bleeding, itch	GP	Rectal chlamydia	Negative	Not done
17	1	Lump	MSHC	Possible anal wart	Negative	Negative
23	2	Lump	GP	No abnormality found*	Negative	Not done
25	11	Itch, rash	MSHC	No abnormality found*	Negative	Negative
30	3, 12	Discomfort/pain	MSHC	Recurrent HSV-2	Negative	Negative

Try to look at your anus:

legs apart.

You can use a mirror or smartphone app with

against an object and sit on the floor with your

Spread your butt cheeks to look at your anus.

You can use a flash light for better lighting.

selfie mode or mirror app to see your anus.

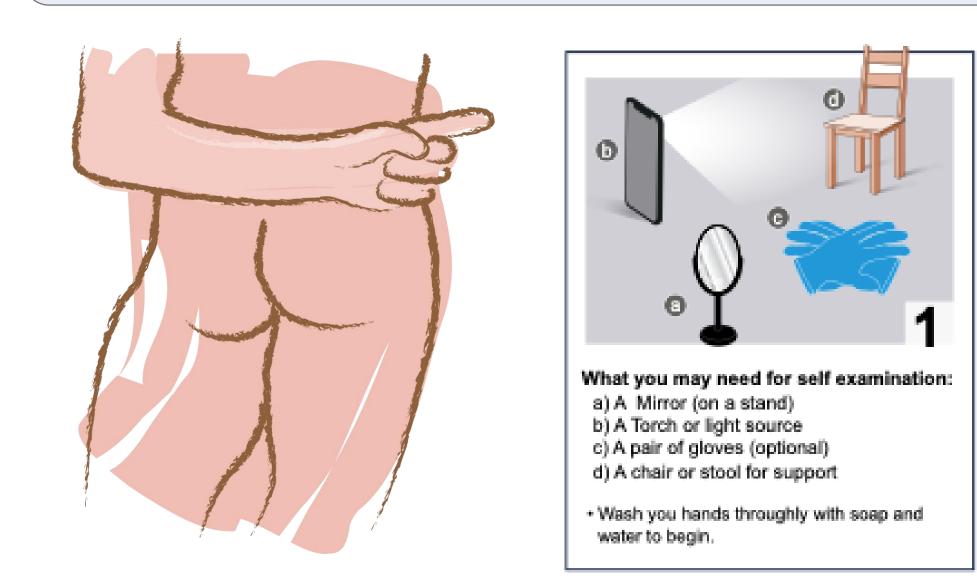
Use a mirror with a stand or lean a mirror

## Conclusion

- We conclude that men adhered well to weekly anal self-examination.
- Therefore, it is feasible to trial this as a routine practice among MSM.
- Future studies should investigate possible reductions in adherence over time

and ways to increase medical review for abnormalities that men find.





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