

NEISSERIA GONORRHOEAE POSITIVITY IN ASYMPTOMATIC CONTACTS

SUE QIAN, YEAR 4 MEDICAL STUDENT UNIVERSITY OF SYDNEY

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BACKGROUND & RATIONALE



Previously...

Asymptomatic gonorrhoea contacts were treated with empiric antibiotics at the point of testing.

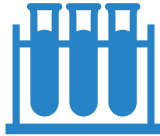


From December 2018...

Asymptomatic gonorrhoea contacts offered testing and then fast-tracked to treatment clinics if positive.



RATIONALE FOR EMPIRIC TREATMENT OF ASYMPTOMATIC GONORRHOEA CONTACTS



Previous tests had
lower sensitivity
and longer
turnaround times



Reduce loss to
follow-up +
repeat visits



Reduce risk of
transmission and
complications

1. Wright S McNulty A. 2016 Australian Sexual Health Conference, Adelaide. Poster 39.
 2. Dutt K et al. BMC Public Health 2015; 15: 658.
 3. Pearce E, Chan DJ, Smith DE. IntJSTDAIDS 2019; 30:137-139
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EMERGING RESISTANCE OF
GONORRHOEA TO
ANTIBIOTICS



IMPROVED SENSITIVITY AND
SHORTER TURNAROUND
TIMES WITH NAAT



THE MAJORITY OF
GONORRHEA CONTACTS
TEST NEGATIVE

RATIONALE FOR CHANGE IN GUIDELINES

AIMS

Primary: To determine the proportion of asymptomatic contacts who are positive for gonorrhoea

Secondary: To determine any correlation between patient characteristics and likelihood of gonorrhoea positivity.

METHODS

Retrospective study of
asymptomatic gonorrhoea contacts

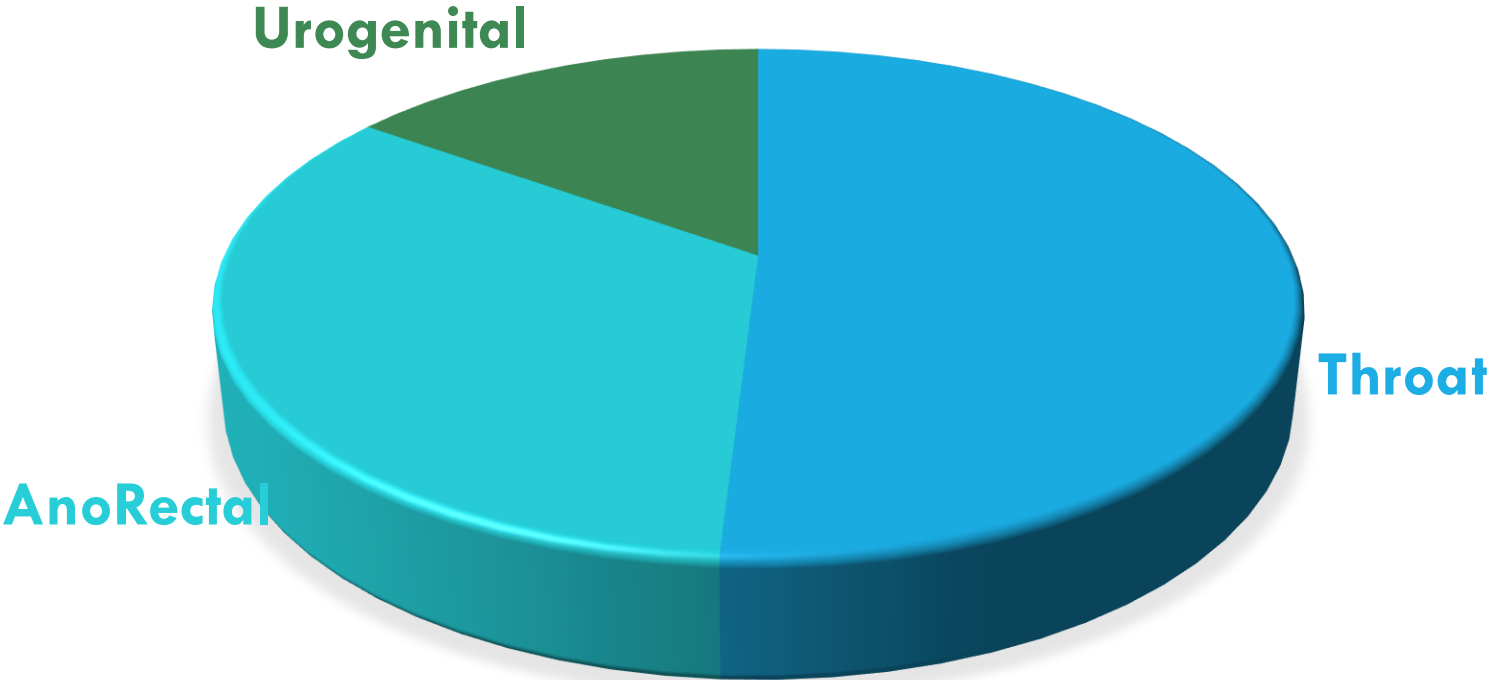
1st Jan to 30th Jun 2018

RESULTS

295 episodes of care

82 (27.8%) positive for gonorrhoea
at any site

GONORRHOEA SITE POSITIVITY



	Total	Gonorrhoea positive n (%)	95% confidence intervals	P value
Gender				
male	261	69 (26.4%)	21.2-32.2%	0.007
female	25	13 (52.0%)	31.3-72.2%	

RESULTS

	Total	Gonorrhoea positive n (%)	95% confidence intervals	P value
Sex partners last 12 months	N=252			
sex with men	227	65 (28.7%)	22.8-35%	0.027
sex with women only	25	2 (8.0%)	0.9-26.0%	

RESULTS

RESULTS

	Total	Gonorrhoea positive n (%)	95% confidence intervals	P value
Use of PrEP	N=227			
on PrEP	32	4 (12.5%)	3.5-29.0%	0.029
not on PrEP	195	61(31.2%)	24.8-38.3%	

RESULTS

	Total	Gonorrhoea positive n (%)	95% confidence intervals	P value
Sex work in the last 12 months				
Sex work	8	4 (50.0%)	15.7-84.3%	0.176
No sex work	278	78 (28.1%)	22.9-33.7%	
Country of birth				
Australia	103	33 (32.0%)	23.2-42.0%	0.345
Not Australia	183	49 (26.8%)	19.5-34.6%	
Preferred language				
English	235	65 (27.7%)	22.0-33.9%	0.417
Not English	51	17 (33.3%)	20.8-47.9%	
Number of partners				
<5 (last 3 months)	146	48 (32.9%)	25.3-41.1%	0.108
≥ 5 (last 3 months)	140	34 (24.3%)	17.4-32.2%	

RESULTS

	Odds ratio (95% CI)	P value
Gender		
Male	1	0.001
Female	8.64 (2.30-32.43)	
Sex partners		
MSM	1	0.02
Not MSM	0.28 (0.10-0.82)	
PreP status		
On PrEP	1	0.03
Not on PrEP	1.80 (1.04-3.09)	

RESULTS

	N=295	Gonorrhoea positive	Gonorrhoea negative
chlamydia positive	43 (14.5%)	21 (48.8%)	22 (51.1%)
Throat	4	2	2
Urogenital	16	5	11
Anorectal	24	13	11

CONCLUSIONS

Majority of contacts were negative for gonorrhoea

Majority would therefore receive unnecessary and/or incorrect antibiotics if treated empirically

Findings support change in local guidelines to test and treat according to results

DISCUSSION

How do we minimise loss to follow-up after testing?

Is there a role for point of care testing for gonorrhoea?

Could we develop a clinical score to help guide individualized treatment decisions – might some individuals benefit from empiric antibiotic treatment?