Extragenital Gonorrhoea Culture And Test Of Cure: Completion And Positivity Rates At Western Sydney Sexual Health Centre (Wsshc) During The Covid-19 Pandemic

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Background:
Pre-treatment gonococcal culture testing (GCT) and post-treatment test-of-cure (TOC) are important responses to *Neisseria gonorrhoeae* (Ng) antimicrobial resistance. To inform service improvements, WSSHC assessed internal GCT and TOC completion and positivity patterns during pandemic-related service disruptions

Methods:
12-month (1/1//2021-31/12/2021) retrospective analysis of routinely-collected electronic record data (attendance reason ‘asymptomatic screening', positive throat/rectal Ng nucleic-acid amplification tests (NAAT) and Ng treatment at WSSHC). GCTs occurred ≤14 days following positive NAAT; TOCs ≤31 days post-treatment. Self-collection was routine, however specific (self/clinician) collection-method data were unavailable. Chi-squared tests compared GCT positivity/TOC completion among age-groups and genders (significance threshold p=0.05).

Results:
118 encounters analysed (57% throat/43% rectal NAATs, median age 32, 91% male, 57% overseas-born, 2% Indigenous, 18% with HIV, 91% men having sex with men (MSM), 6% injecting-drug use (any previous), 11% sex-work (any previous), 42% HIV Pre-exposure Prophylaxis (previous 3 months)). Documented ‘recent’ (previous 12 months) WSSHC negative throat and rectal Ng NAATs occurred in 51% (median 3 months previously, where data available). Documented ‘recent’ WSSHC-diagnosed infection (≥1 Chlamydia/Gonorrhoea/Infectious Syphilis) occurred in 27% (median 4 months previously, where data available).

106/118 (90%) received GCT. Median positive NAAT-GCT time interval=5 days (IQR 3-7); positivity=29/106 (27%); 94%/100%/15% Azithromycin/Ceftriaxone/Ciprofloxacin susceptibility, respectively. Positivity 50%/45% in shortest/longest NAAT-GCT interval quintiles, respectively. MSM GCT completion=97/107 (91%); positivity=27/97 (28%). Female GCT completion=9/11 (82%); positivity=2/9(22%); no significant positivity differences by age-group <40/40+years (p=0.49) or gender (p=0.83)

71/118 (60%) received TOC. 38/47(81%) without TOC defaulted/cancelled pre-booked TOC appointments. Median treatment-TOC interval=20 days (IQR 14-23); positivity=2%. MSM TOC completion=65/107 (61%), female completion=6/11 (55%); no significant TOC completion differences for age-group (p=0.56) or gender (p=0.74)

95/118 (81%) had subsequent rectal/throat Ng NAATs 1-12 months post-treatment. 38/47 (81%) without TOC had such testing (positivity=1/37 (3%) after median 3 months).

Conclusion:
Novel strategies should prioritise enhancing GCT positivity/yield and maximising TOC follow-up.

Disclosure of interests:
the authors declare no conflicts of interest