ANTIMICROBIAL RESISTANCE: NEISSERIA GONORRHOEAE

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GROWING CONCERNS

Gonorrhoea affects around 80 million people annually worldwide, over half of whom live in the Asia-Pacific Region. Globally, its complications disproportionately affect women. Notifications have been rising in Australia over the past decade with gay and bisexual men and Indigenous Australians in remote communities disproportionately affected. Since the advent of sulphonamides and penicillin in the 1940s gonorrhoea has become resistant to virtually all classes of antimicrobials used to treat it. Amid recent media coverage of gonococcal antimicrobial resistance as a major public health concern, the World Health Organisation (WHO) has urgently called for the development of novel antimicrobial agents and an up-scaling of surveillance and prevention activities. In vitro resistance and clinical treatment failures with injectable extended-spectrum cephalosporins (last-line antibiotic treatment) have recently been reported across the globe, including in industrialised countries. In Australia, a concerning level of ceftriaxone resistance was reported in a female traveller (who visited several states/territories) in late 2013. Because many infections remain undiagnosed and many countries lack reference laboratories engaged in AMR surveillance, the problem as we know it is likely to represent the 'tip of the iceberg'.

ADDRESSING THE PROBLEM

Combating gonococcal AMR remains a key global health priority. The WHO Global Gonococcal Antimicrobial Surveillance Program [GASP] is a collaborative network of reference laboratories informing treatment guidelines based on quality-assured AMR surveillance data. It also provides reference strains (for quality assurance and control) and strengthens laboratory capacities in collaboration with other GASPs at national/regional levels. In 2016, the UN World Health Assembly endorsed the WHO's target: a 90% reduction in the incidence of gonorrhoea building on earlier action plans aiming to curb the spread of gonococcal antimicrobial resistance.

The Australian Gonococcal Surveillance Program and the National Neisseria Network carry out laboratory-based surveillance of gonococcal isolates received from laboratories across Australia. These activities feed into public health responses and guidelines at local levels. STI surveillance systems collate data from sexual health clinics, GPs, hospital/community health services and laboratories across Australia, providing key data on disease

patterns at local and national levels. Promising developments on the horizon include the re-use of older antimicrobials, the development of new antimicrobials and the advent of tests identifying quinolone-susceptible strains at the 'point-of-care'. Vaccines are another exciting area of research with critically important public health implications.

WHAT YOU CAN DO

Condom use remains an effective preventive strategy and should be encouraged for all at-risk individuals. However, condom use with oral sex is uncommon and pharyngeal gonorrhoea in at-risk groups may spread to anogenital sites through oral sexual practices and saliva.

Frequent testing for those at-risk is another key prevention strategy. Unlike urethral gonorrhoea, pharyngeal and anorectal infections are often asymptomatic. Screening asymptomatic gay and bisexual men (rectal and pharyngeal NAAT swabs) is recommended up to four times per year. Pharyngeal infections may be highly transmissible but short lived - therefore, infrequent testing can see such infections missed. Sex workers are also offered pharyngeal gonorrhoea testing in many sexual health clinics.

Testing is also advised for heterosexual patients with symptoms suggestive of gonorrhoea, partners (contacts) with gonorrhoea or recent sexual exposure in high-prevalence regions/countries.

Culture swabs should always be collected (from urethral, cervical, anorectal or pharyngeal sites) for cases of suspected or confirmed gonorrhoea infection prior to therapy. Providing information on antimicrobial susceptibility, culture swabs are crucial components of AMR surveillance at a reference-laboratory level.

Dual therapy (ceftriaxone and azithromycin) is usually recommended as a barrier to the development of AMR. In those with penicillin allergy the risk of reactions to ceftriaxone is low, but if there are concerns or a history of adverse reactions with macrolides or cephalosporins consult your local Sexual Health Service for advice. After treatment, patients should abstain from sexual intercourse for 7 days. Partners (contacts) from the past 2 months should be offered testing and treatment, with a number of resources aiding clinicians in this process. Consider a test-of-cure may (2 weeks after treatment) for non-urethral infections and repeat testing in 3 months to exclude re-infection.

The recent media coverage and increasing societal awareness about gonorrhoea and AMR may generate anxiety, confusion and important questions for clinicians and patients alike. Support and confidential counselling is available at your local Sexual Health Service.

References

- 1. Australian Sexually Transmitted Infection and HIV testing guidelines for men who have sex with men, 2014. Accessed via: https://stipu.nsw.gov.au/wp-content/uploads/STIGMA_Testing_Guidelines_Final_v5.pdf
- $2. \ \ Australian STI \ Management \ Guidelines \ (2016): Gonorrhoea. \ Accessed \ via: \ http://www.sti.guidelines.org.au/sexually-transmissible-infections/gonorrhoea.$
- 3. The Kirby Institute. HIV, viral hepatitis and sexually transmissible infections Annual Surveillance Report. [2016]. The Kirby Institute, UNSW Australia, Sydney, NSW 2052.
- 4. Wi, T., Lahra, M., Ndowa, F et al., 2017. Antimicrobial resistance in Neisseria gonorrhoeae: Global surveillance and a call for international collaborative action. PLoS Medicine, 14[7], e1002344. http://doi.org/10.1371/journal.pmed.1002344
- 5. World Health Organisation (WHO), 2017. Media Release: Antibiotic-resistant gonorrhoea on the rise, new drugs needed. Accessed via: http://www.who.int/mediacentre/news/releases/2017/Antibiotic-resistant-gonorrhoea/en/

UPDATED STI/HIV TESTING TOOL

The STI/HIV Testing Tool for GPs and other primary care clinicians has been updated.

The tool shows how to:

- Offer routine STI/HIV testing in different consultations
- Conduct a brief risk assessment (sexual history)
- Conduct routine STI/HIV testing
- · Conduct contact tracing
- Access available resources and additional support
- Order hardcopies at https://stipu.nsw.gov.au/order-resources

HEPATITIS A UPDATE



- MSM are a high risk group for hepatitis A
- Routinely recommend vaccination to MSM
- Test patients who have symptoms of acute viral hepatitis for hepatitis A IgM
- Notify suspected cases of acute viral hepatitis to your local public health unit immediately so that timely prophylaxis for contacts can be provided

SEXUAL HEALTH SERVICES



Sydney Sexual Health Centre

www.sshc.org.au

Sydney Hospital Macquarie Street, Sydney

9382 7440

Short Street Centre

St George Hospital Short Street, Kogarah

9113 2742

SouthZone Sexual Health Centre

430 The Kingsway, Caringbah

9113 2742

The Albion Centre

www.thealbioncentre.org.au

150 Albion Street, Surry Hills

9332 9600

Clinic 180

180 Victoria Street, Kings Cross

9357 1299



RPA Sexual Health

www.slhd.nsw.gov.au/communityhealth/sexualhealth.html

16 Marsden Street, Camperdown

9515 1200



Clinic 16 www.clinic16.com.au

20 Herbert Street, St Leonards

9462 9500

Health
Western Sydney
Local Health District

Western Sydney Sexual Health Centre www.wslhd.health.nsw.gov.au/ Western-Sydney-Sexual-Health-Centre

Parramatta clinic: Level 1 Jeffrey House 162 Marsden Street Parramatta

9843 3124

Mount Druitt Clinic: Kelly Close Services (back of Community Health building) Kelly Close Mount Druitt

9881 1206





STIs in Gay Men Action Group

This newsletter is an initiative of the STIs in Gay Men Action group (STIGMA).

Partners include:

South Eastern Sydney Local Health District, Sydney Local Health District, Northern Sydney Local Health District, Western Sydney Local Health District, Western Sydney Local Health District, Ministry of Health, ASHM, Central and Eastern Sydney Primary Health Network, Centre for Social Research in Health, The Kirby Institute, Australian Federation of AIDS Organisations (AFAO), Positive Life NSW and ACON.

NEW RESOURCE - FIRST PASS URINE SPECIMEN COLLECTION

STI/HIV TESTING TOOL Easy as 1-2-3



A first pass urine specimen can be collected at any time of the day when testing for Chlamydia trachomatis or Neisseria gonorrhoeae using a NAAT (PCR).

A new one page resource covers what is a first pass urine specimen, how to instruct a patient to provide the specimen, and why the first pass is important. Order hardcopies at https://stipu.nsw.gov.au/order-resources/

DECREASE IN HIV NOTIFICATIONS



NSW has recorded the lowest rate of new HIV notifications since surveillance began in 1985. The decrease has been attributed to a mix of strategies, including high rates of HIV testing, high uptake of antiretroviral treatment, and increased availability of HIV pre-exposure prophylaxis through the EPIC-NSW trial. Gay and homosexually active men, the most at-risk group for HIV, had 25% less HIV notifications in the first six months of 2017 compared to the previous five years. However, the diagnosis of people born overseas and heterosexual people remains stable.

HIV TESTING IS NOW EVEN EASIER

HIV testing is now easier than ever as patient 'informed consent' is all that is required to test. GPs also have the NSW HIV Support Program when making a diagnosis. For more information, visit www.endinghiv.org.au



Thank you for considering HIV testing among your patients - together, we can end HIV transmission by 2020.

Invitation THE GAY FRIENDLY GP LIST

Some GPs have nominated themselves on the Gay Friendly GP list:

https://stipu.nsw.gov.au/stigma/gay-friendly-gps/

We would like to invite any interested GPs to be on this list so that we may refer gay men to GPs with particular interest in and knowledge of working with gay men.

Please contact Elissa Magner, email: elissa.magner@health.nsw.gov.au

WANT TO BE MORE GAY FRIENDLY?

Becoming more gay friendly in your practice is an online module that explores stigms and discriminating

online module that explores stigma and discrimination, sexual health screening, common STIs, and specific issues faced by gay men and men who have sex with men (MSM).

Duration: 1 hour

CPD: RACGP 2 Category 2 QI&CPD points **Target Audience:** GPs, health professionals

LINK: www.stipu.nsw.gov.au/stigma/becoming-more-gay-friendly/

SUBSCRIBE

We extend an invitation to GPs, practice nurses and relevant clinicians to receive this free twice-yearly newsletter and updates on sexual health. To subscribe please email your name, job title and workplace to: solomon.wong@health.nsw.gov.au