



Mycoplasma genitalium:
An Important
Consideration in Male
Urethritis

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Overview

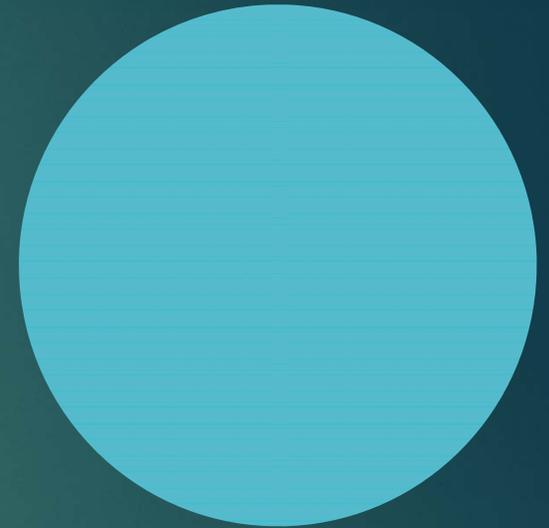
- ▶ Introduction to *Mycoplasma genitalium*
- ▶ Audit
 - ▶ Objectives
 - ▶ Standards
 - ▶ Results
- ▶ Reflection
 - ▶ AFPHM learning objectives
 - ▶ Public health



Background

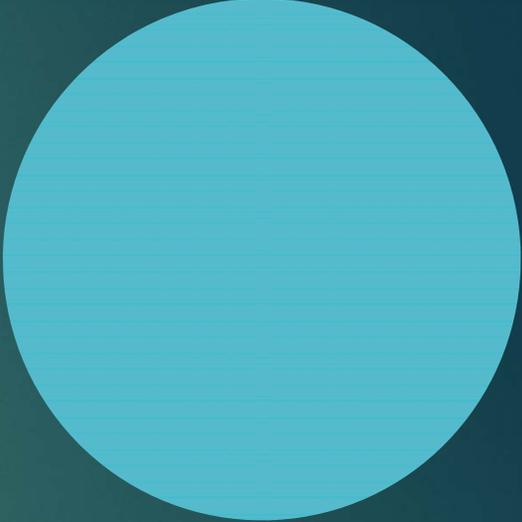


- ▶ *Mycoplasma genitalium*
 - ▶ Sexually transmissible
 - ▶ Multiple presentations
 - ▶ Urethritis
 - ▶ Asymptomatic
 - ▶ Cervicitis
 - ▶ PID
 - ▶ Infection is common
 - ▶ Often resistant to empirical treatment
 - ▶ Increasing resistance
 - ▶ High risk groups



Background



- ▶ Why is it important?
 - ▶ Persistent urethritis
 - ▶ STI transmission
 - ▶ Adverse pregnancy outcomes
 - ▶ How to test?
 - ▶ Nucleic acid amplification tests
 - ▶ Who to test?
 - ▶ Symptomatic
 - ▶ Sexual partners
 - ▶ Treatment
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Background

- ▶ Treatment – Australian STI Management Guidelines

Situation	Recommended
Macrolide- <u>susceptible</u>	<ol style="list-style-type: none">1. Doxycycline 100mg bd for 7 days, then:2. Azithromycin 1g stat then 500mg daily for three days (total 2.5g)
Macrolide- <u>resistant</u>	<ol style="list-style-type: none">1. Doxycycline 100mg bd for 7 days, then:2. Moxifloxacin 400mg daily for 7 days
Pelvic inflammatory disease	Moxifloxacin 400mg daily for 14 days

Our audit



- ▶ Setting

- ▶ Metropolitan sexual health clinic for men who have sex with men (MSM)

- ▶ Primary objective

- ▶ To evaluate of first line testing for *M. genitalium* in symptomatic clients
 - ▶ Testing policy recently instituted
 - ▶ Standard 1: 100%

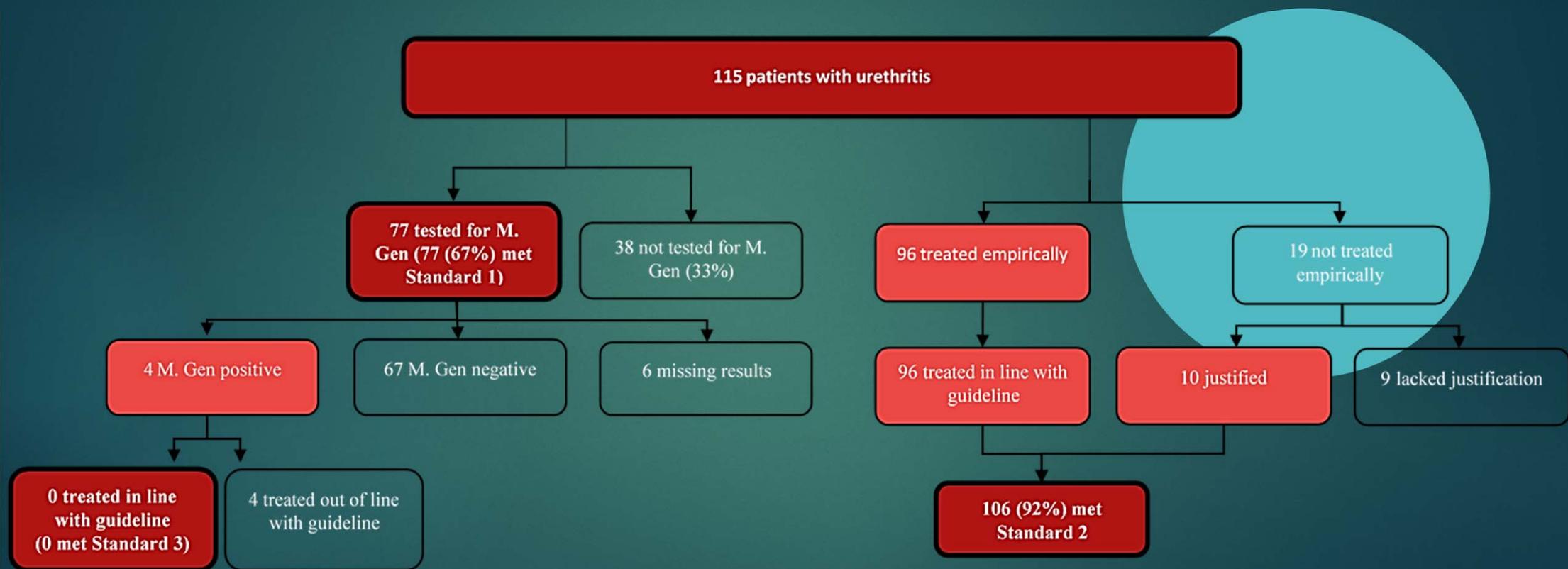
Our audit



▶ Secondary objectives

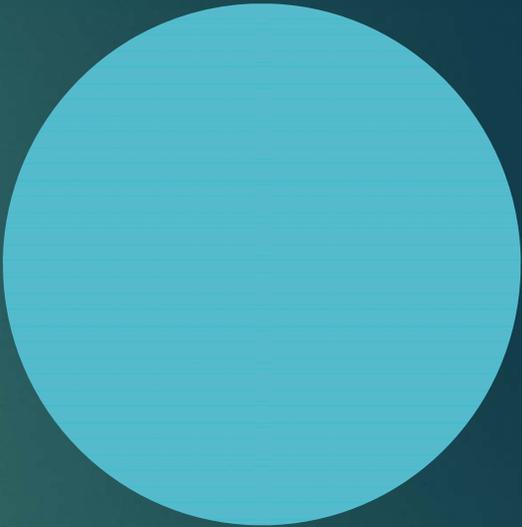
- ▶ What proportion of clients were treated empirically for urethritis?
 - ▶ Standard 2: 100%
- ▶ What proportion of M. genitalium positive clients were treated in accordance with clinic guidelines?
 - ▶ Standard 3: 50%

Results



Discussion



- ▶ No standard was met
 - ▶ Encouraging findings
 - ▶ Adherence to empirical treatment guidelines
 - ▶ Standard 1 – rate of *M. genitalium* testing
 - ▶ 67% adherence
 - ▶ Emerging infection
 - ▶ New assay and testing policy
 - ▶ Likely improved through education and process improvement
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Discussion



- ▶ Standard 2 – empirical treatment of urethritis
 - ▶ High rate of empirical treatment (96 out of 115)
 - ▶ Improved through more thorough documentation
- ▶ Standard 3 – targeted treatment of *M. genitalium*
 - ▶ Strong awareness of clinic guidelines
 - ▶ Low compliance
 - ▶ Lack of national and international consensus
 - ▶ Limited evidence behind guidelines
 - ▶ Requires ongoing review with clinician input

Reflection



- ▶ Evaluate health services and public health programs (AFPHM LO 3.3.1)
 - ▶ Audit
 - ▶ Form useful objectives
 - ▶ Determine appropriate standards
 - ▶ Evaluate performance
 - ▶ Identify strengths and weaknesses
 - ▶ Determine and implement improvements
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Reflection

- ▶ Contribute effectively to organisational processes (AFPHM LO 1.2.4)
 - ▶ Audit results
 - ▶ Strengths and weaknesses
 - ▶ Place in organisational context
 - ▶ Review of systems
 - ▶ Identified potential software update
 - ▶ Positive feedback



Reflection



- ▶ Public health knowledge
 - ▶ Management of an emerging infectious disease
 - ▶ Learning opportunities, and challenges
 - ▶ Importance of public health policy
 - ▶ Unified approach to detection and management
 - ▶ Facilitate small and large scale change
 - ▶ Reduce incidence and prevalence of emerging disease
 - ▶ Improve health outcomes
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Summary



- ▶ Audit results
 - ▶ Excellent empirical management of urethritis
 - ▶ Room for improvement in testing and management of *M. genitalium*
- ▶ Learning points
 - ▶ Audit
 - ▶ A tool to evaluate health services
 - ▶ Using results to contribute to organisational processes
 - ▶ Importance of public health policy
 - ▶ In setting of emerging infectious disease

Acknowledgements

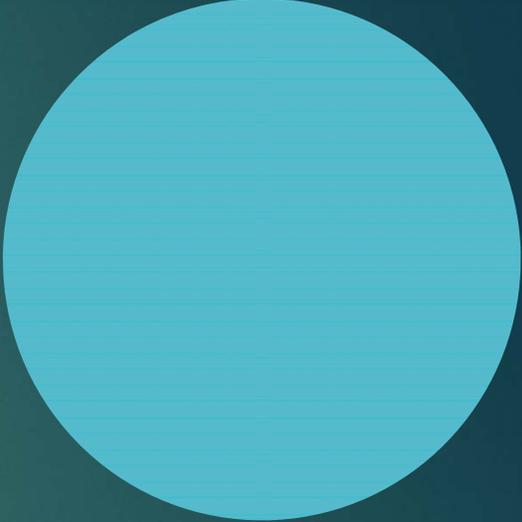


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References

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- ▶ Melbourne Sexual Health Centre [MSHC] (2017). Urethritis in Men. Retrieved from mshc.org.au.
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Supplementary slide - Treatment



- ▶ Alternative treatment regimens:
 - ▶ MSHC: same as Australian STI management guidelines
 - ▶ UptoDate
 - ▶ First line (targeted or empirical): 1g stat azithromycin
 - ▶ Second line (targeted or empirical): moxifloxacin
 - ▶ British Association for Sexual Health and HIV
 - ▶ Doxycycline 100mg BD for 7 days, or:
 - ▶ Azithromycin 500mg stat, then daily for 7 days
 - ▶ If persistent or recurrent, azithromycin 500mg stat, 250mg OD for 4 days, plus metronidazole 400mg BD for 5 days
- ▶ Emerging treatment: solithromycin

Supplementary Slide - Evidence



- ▶ Only RCT:
 - ▶ 398 men in New Orleans
 - ▶ Doxycycline 100mg BD for 7 days, or azithromycin 1g stat
 - ▶ Azithromycin more effective
 - ▶ [Clin Infect Dis.](#) 2009 Jun 15;48(12):1649-54. doi: 10.1086/599033
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