Info-MADO

Newsletter on Reportable Diseases
Nunavik Department of Public Health

Mycoplasma genitalium: emergence of an STI

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Context

Mycoplasma genitalium (*MG*) is an emerging sexually transmitted infection (STI) in Canada. Our objective is for clinicians to recognize clinical situations of infection with *Mycoplasma genitalium* and learn the process for clinical response.

Mycoplasma genitalium in Brief

Mycoplasma genitalium infection is an STI. It is caused by a globally emerging bacterium with a high level of resistance to macrolides and emerging resistance to fluoroquinolones.

Epidemiology of *MG*

In North America, the prevalence of *MG* among the general population varies between 1 and 4% among men and 1 and 6.4% among women. In a population with risk factors for STIs, the prevalence rises, ranging between 4 and 38%.

In Nunavik, as in the rest of Québec, due to the absence of data, the epidemiology of *MG* is unknown.

Risk Factors, Symptoms and Transmissibility

The risk factors for *MG* are similar to those for infection with *Chlamydia trachomatis* and infection with *Neisseria gonorrhoeae*. More specifically, the factors are multiple sexual partners, young age, history of STIs or partners who recently had an STI.

The symptomatology associated with this infection is variable and non-specific. Infected individuals are often asymptomatic. Clinical presentation does not permit differentiation of *MG* from an infection with *Chlamydia trachomatis* or *Neisseria gonorrhoeae*. *MG* can thus cause non-gonococcal urethritis, orchiepdidymitis, cervicitis and pelvic inflammatory disease (PID). Conjunctivitis in adults is also possible.

Transmission occurs through direct contact between genital mucosa. Orogenital contact does not appear to contribute to transmission. *MG* can also occur in the anal mucosa, but a link between the bacterium and proctitis has not yet been established.

MG is linked to a heightened risk of HPV infection and also increases the risk of HIV infection and transmissibility.

Testing and Specimens

For the moment, systematic testing is not recommended for either pregnant women or newborns.

Genital testing is performed using the NAAT. In light of current knowledge, acceptable specimens are urine from the first jet for men and women, urethral or meatus specimens for men and vaginal or cervical specimens for women. As current data have not established a causal link with proctitis or pharyngitis, testing for *MG* using a rectal or pharyngeal swab is not recommended.

Specimens are taken in the same way as for infections with *Chlamydia trachomatis* or *Neisseria gonorrhoeae*.

	IHC	**UTHC**
Laboratory code	MYCOP	MYCOGENIS (swab) MYCOGENIURI (urine)
Transport system (swab)	Pink COPAN UTM viral tube	Pink COPAN UTM viral tube
Transport system (urine)	Polyethylene container (orange stopper), sterile, 125 mL	Polyethylene container (orange stopper), sterile, 125 mL
Sampling technique	Same as for chlamydia/gonorrhea	Same as for chlamydia/gonorrhea
Conservation	Freezer	Freezer

Clinical Response Using the Syndromic Approach

- In the presence of a syndrome compatible with an STI (urethritis, cervicitis, orchiepdidymitis or PID)
  AND
- Tests for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* are negative
  AND
- In the absence of response to syndromic treatment recommended for infection with *Chlamydia trachomatis* and infection with *Neisseria gonorrhoeae*:
  - Offer testing for *MG* with the NAAT to the infected individual;
  - Treat the infected individual for *MG* without waiting for laboratory results;
  - Contrary to the *Institut national d'excellence en santé et services sociaux*' (*INESSS*) guide to optimal use and given our unknown epidemiology, it is reasonable to wait for laboratory results before proceeding with treatment for partners;
  - If the test for the infected individual comes back positive, offer epidemiological treatment or treatment using the syndromic approach to the partners, as the case may be.

Refer to the INESSS' guide to optimal use for the complete clinical process

Reporting to the Department of Public Health

MG is not a reportable disease. However, the Department of Public Health invites health professionals to report any sexually transmitted or bloodborne infection (STBBI) through the confidential fax number at 1 866 867-8026, **so that we can adjust our interventions and recommendations to the local epidemiology**.

Clinical Vignette

Alacie consults for abnormal vaginal discharge and post-coital vaginal bleeding that have occurred over the past few days. After your anamnesis and clinical examination, you suspect cervicitis.

After discussion, Alacie agrees to full STBBI testing and treatment using the syndromic approach. You therefore administer the treatment of first choice: a combination of Ceftriaxone IM and Doxycycline PO. After drawing up the list of Alacie's sexual partners with her, you advise her to consult again should her symptoms persist beyond 48 to 72 hours or if they reappear at the end of treatment.

Nine days later, Alacie consults you again. The symptoms mentioned at the initial consultation have not resolved. You examine the laboratory results, which came out negative for infection with *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. You suspect an infection with *Mycoplasma genitalium*.

After discussion, Alacie agrees to testing but prefers to wait for the result before undergoing a second treatment with antibiotics. If the result is positive, she will receive treatment and the nurse will proceed with tracing her partners.

Refer to the INESSS' guide to optimal use for the complete clinical process