



FAQ

UREAPLASMA UREALYTICUM

FOR HEALTHCARE PROVIDERS

What is *Ureaplasma urealyticum* (UU)?

UU is a very small bacterium that can be part of the normal genital flora and can also be pathogenic. Most infections are asymptomatic, but depending on host response, genital symptoms can occur. UU can be transmitted via vaginal, oral, or anal sex.

What are the symptoms of UU?

Most people with UU do not have symptoms and do not require treatment. In people with a high bacterial load, symptoms may occur, such as penile discharge. It still is unclear whether UU causes cervicitis, vaginal discharge, or proctitis. Pharyngeal and rectal UU infections can occur but are typically asymptomatic and represent colonization.

Who should be tested for UU?

UU is not recommended as part of routine STI screening, regardless of age or gender of sex partners. Testing should only be considered in cases where patients have persistent STI symptoms **and** have tested negative for other STIs, including gonorrhea, chlamydia, *Mycoplasma genitalium*, and trichomonas, BV, and yeast vaginitis (if applicable). In addition, providers can consider testing and treatment of sex partners of people with symptomatic UU based on shared decision making (see sex partner notification and treatment).

What if an asymptomatic patient presents with UU results from an outside provider?

The clinical significance of a positive result in the absence of symptoms is unclear. For asymptomatic patients presenting with results from an outside provider (e.g., a multiplex PCR which contains positive results for UU), counsel the patient that UU colonization is very common, and that the result may be disregarded.

Who should be treated for UU?

Because UU may clear spontaneously and may be part of normal flora, treatment is only recommended in the following situations:

- 1) People with a positive test result for UU AND symptoms (e.g., discharge) AND negative tests for other STIs as well as vaginitis (if assigned female at birth). Patients should be counseled that treatment for UU may not resolve symptoms such as chronic dysuria or discharge. If symptoms do not resolve after treatment for UU, patients should be referred to an infectious diseases specialist or urologist for further work-up (see treatment recommendations below).
- 2) Consider treatment for current sex partners of people with symptomatic UU if the partner's results are positive, even if the partner is asymptomatic (see below).

Should patients' sex partners be notified and treated?

The optimal partner management strategy for UU is unknown. If a patient requires treatment, it is reasonable for them to inform their primary partner. Testing an asymptomatic partner for UU, and treating the partner if positive, could be considered to prevent the original patient from becoming reinfected. Because UU may clear spontaneously, another approach is to forego testing and treatment of the partner unless the original patient's symptoms recur. Casual partners or those who the patient will not be seeing again do not need to be notified.

What are the implications of untreated UU?

It is unknown whether untreated UU leads to negative reproductive health consequences or increases risk of other STIs or HIV. **For patients assigned female at birth**, a recent meta-analysis on adverse pregnancy and birth outcomes associated with *M. hominis*, *U. urealyticum*, and *U. parvum* found that most studies did not adjust for bacterial vaginosis (BV), which is also associated with negative pregnancy outcomes, thus no definitive conclusion could be made due to low-quality data (Jonduo 2022). There are two conflicting meta-analyses on the relationship of UU with infertility (Ma 2021, Tantengco 2021).

What about testing and treatment in pregnancy?

Testing for UU is not recommended in pregnancy. If a pregnant patient presents with positive UU results from another provider, and is asymptomatic, treatment is not needed.

If treatment is needed, what is recommended?

First-line treatment for non-pregnant adults and adolescents with uncomplicated infections:
Doxycycline 100 mg orally twice daily for 7 days

For those who are pregnant or who cannot take doxycycline due to allergy or intolerance:
Azithromycin 1g orally in a single dose is an alternative treatment.

NOTE: Empiric treatment of patients for non-gonococcal urethritis or cervicitis with doxycycline should cover UU. Tetracycline resistance in UU exists but is rare (<10%). In some cases, symptomatic UU that persists after treatment with doxycycline may respond to azithromycin.

Is retesting recommended after treatment?

Repeat testing after treatment for UU is not recommended. If symptoms persist despite treatment, the patient should be referred to an infectious diseases specialist and/or urologist for additional evaluation.

References

1. Ma C, Du J, Dou Y, et al. The associations of genital mycoplasmas with female infertility and adverse pregnancy outcomes: a systematic review and meta-analysis. *Reproductive Sciences*. 2021;28(11):3013-3031. doi:10.1007/s43032-021-00532-6
2. Tantengco OAG, de Castro Silva M, Velayo CL. The role of genital mycoplasma infection in female infertility: a systematic review and meta-analysis. *American Journal of Reproductive Immunology*. 2021;85(6):e13390. doi:10.1111/aji.13390
3. Jonduo ME, Vallely LM, Wand H, et al. Adverse pregnancy and birth outcomes associated with *Mycoplasma hominis*, *Ureaplasma urealyticum* and *Ureaplasma parvum*: a systematic review and meta-analysis. *BMJ Open*. 2022;12(8):e062990. doi:10.1136/bmjopen-2022-062990