

Sexual Health Newsletter

*Gonorrhea is the
second most
commonly reported
communicable disease
in the U.S.*

OPEN WIDE...SAY AHHHH!

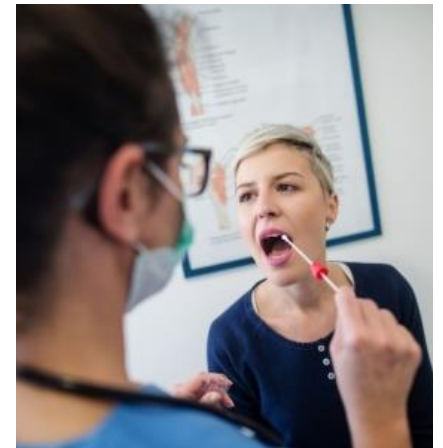
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CASE HISTORY: Project STAY (Services to Assist Youth) is a comprehensive program at CUIMC providing medical and psychosocial health services to youth living with or at-risk for HIV. A 22-year-old female presented to the Project STAY sexual health clinic at the Farrell Health Center with a chief complaint of sore throat and difficulty swallowing for several weeks. She also complained of fatigue and a “swollen neck.” She denied fever, chills, nausea, and vomiting. The patient worked in retail and denied having any colleagues with similar symptoms. Additionally, she was not aware of any family members who were ill. A thorough sexual history was taken which revealed that the patient had ended a relationship with a male partner and had resumed sexual contact with a former partner a few weeks ago. She reported use of a Nexplanon (etonogestrel implant) for contraception but denied use of condoms for oral or vaginal sex.

On examination, the patient was afebrile and in no acute distress. She was noted to have mild pharyngeal erythema with slightly enlarged tonsils but no exudate. Shotty, bilateral, non-tender cervical lymphadenopathy was also noted.

A throat culture for strep was sent along with throat and urine nucleic acid amplification tests (NAATs) for gonorrhea and chlamydia. The patient was instructed to try supportive measures (rest, fluids, throat lozenges) and to return to clinic if her symptoms worsened.

The patient’s throat culture grew out group C streptococci. Additionally, her NAAT tests were positive for gonorrhea in the throat and urine indicating oral and genitourinary gonorrheal infections. The patient was contacted with these results and returned to Project STAY with her partner. They both came to clinic and were each treated with 250mg of IM ceftriaxone and 1g of azithromycin. They were also instructed to abstain from sex for 1 week. When the patient returned for follow-up three months later, her NAAT testing of the throat and urine for gonorrhea and chlamydia was repeated and found to be negative.



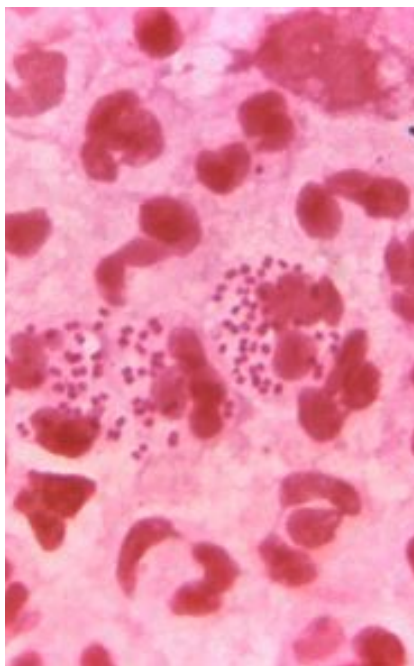
Provider taking a throat swab

ABOUT US

The NYC STD Prevention Training Center (PTC), located at Columbia University Medical Center, is one of eight PTCs funded by the Centers for Disease Control and Prevention (CDC) to improve the capacity of clinical providers to manage patients with sexually transmitted infections. This bi-monthly newsletter reviews case presentations in clinical settings and is one of our educational tools.

For more information, visit: www.nycptc.org. To receive periodic STD related updates and clinical continuing education announcements, please [sign-up for our email list](#).





Neisseria gonorrhoeae gram stain, image via CDC

Discussion: *Neisseria gonorrhoeae* is a gram-negative diplococcus that is transmitted sexually or vertically and can infect the genital tract, the rectum, the conjunctiva, and the pharynx. Gonorrhea is the second most commonly reported communicable disease in the United States, with an estimated 555,608 cases in 2017.¹ For New York City (NYC), 16,913 cases were reported to the NYC Department of Health and Mental Hygiene Bureau of STD Control in 2015.² The CDC currently

recommends extra-genital screening for Gonorrhea in at-risk men who have sex with men.³ There are currently no recommendations for extra-genital screening of women, although they do recommend testing at the site of sexual contact. As illustrated in this case, we suggest providing appropriate screening when indicated by history and/or by clinical presentation.

According to the CDC, approximately 85% of sexually active adults aged 18-44 and 33% of teenage girls and boys aged 15-17 years reported having oral sex with a partner of the opposite sex.⁴ It is important for clinicians to take a full sexual history, as in this case, to appropriately assess and diagnose the cause of a patient's symptoms. The CDC recommends using the 5 Ps approach to taking a sexual history at every clinic visit and includes asking questions about sexual Partners, sexual Practices, methods used for Pregnancy prevention, Protection from sexually transmitted infections (STIs), and Past history of STIs.⁵

Although this patient had symptoms, many gonococcal infections of the pharynx are asymptomatic. A study of over 10,000 patients in Baltimore, Maryland, examined the prevalence of extra-genital gonorrheal infections in women attending an STD clinic and reporting extra-genital sex. This study found that 2.4% of women were infected and that 30.3% of these infections would have been missed by urogenital testing alone.⁶ A 2016 study of 175 women at an STD clinic in Pittsburgh found a similar prevalence of oral gonorrhea, when compared to the prevalence of vaginal and rectal gonorrhea, in women reporting a lifetime history of receptive anal intercourse.⁷ If left untreated, oral gonococcal infections

can be spread to uninfected partners and may also lead to disseminated gonococcal infection.

The patient in this case was treated with 250 mg of intramuscular ceftriaxone and 1g of azithromycin. This is the recommended treatment for all gonorrheal infections regardless of site. In the case of azithromycin allergy, doxycycline (100 mg orally twice a day for 7 days) may be used.³ Dual therapy (two drugs) is the standard of treatment for gonococcal infection due to increasing resistance among gonococcal strains.⁸ In addition, data show that 30% of gonorrhea infections are co-infected with chlamydia and thus the azithromycin will treat chlamydia at the same time.

The patient was not treated for group C strep given there has been some controversy in the past regarding whether Group C strep is pathogenic. More recently, however, there has been some evidence showing that Group C streptococcal infections can be pathogenic and can cause pharyngitis, which usually clears with 5 days of antibiotics.⁹

REFERENCES:

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3. Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2015. Vol 64.; 2015.
4. Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2015. MMWR Recomm Rep 2015;64(No. RR-3): 1-137.
5. STD Risk and Oral Sex - CDC Fact Sheet
6. Trebach JD, Chaulk CP, Page KR et al. *Neisseria gonorrhoeae* and *Chlamydia trachomatis* among women reporting extragenital exposures. *Sex Transm Dis.* 2015 May; 42(5): 233-239.
7. Danby CS, Cosentino LA, Rabe LK et al. Patterns of extragenital chlamydia and gonorrhea in women and men who have sex with men reporting a history of receptive anal intercourse. *Sex Transm Dis.* 2016 Feb; 43(2): 105-109
8. Centers for Disease Control and Prevention Surveillance 2016: Gonococcal Isolate Surveillance Project (GISP) supplement and Profiles. February 2018. OR <https://www.cdc.gov/std/stats16/gisp2016>
9. Kakuya F, Kinebuchi T, Okubo H, Matsuo K, Kuroda M, Fujiyasu H. Acute Pharyngitis Associated with *Streptococcus dysgalactiae* Subspecies *equisimilis* in Children: The Pediatric Infectious Disease Journal. 2018;37(6):537-542.

2019 NYC ADOLESCENT SEXUAL HEALTH SYMPOSIUM

The New York City STD Prevention Training Center (NYC PTC) is a program of the [Columbia University Mailman School of Public Health Department of Sociomedical Sciences](#), and is dedicated to increasing the sexual health knowledge and skills of medical health professionals in the prevention, diagnosis, screening, management and treatment of sexually transmitted diseases. The PTC offers classroom and web-based courses, hands-on training, clinical consults and technical assistance to clinical providers. The NYC PTC is one of eight regional training centers funded by the [Centers for Disease Control and Prevention](#) and is a member of the [National Network of STD Clinical Prevention Training Centers](#).



Challenging STI Cases Panel

On March 26, 2019, the NYC PTC offered a one day CME/CNE Adolescent Health Symposium in NYC, with more than 170 providers in attendance. The PTC featured faculty from the NYC PTC, the NYC DOHMH, Physicians for Reproductive Health and Callen Lorde Community Health Center. Topics presented include Treatment of Opioid Use Disorder, Pre-Exposure Prophylaxis (PrEP), reproductive health for adolescents, adverse childhood experiences, and strategies to provide comprehensive sexual health care to transgender patients.

Keynote speaker Bruce Trigg, a physician and addiction treatment expert, discussed the need for more clinicians to know how to treat opioid misuse. Dr. Trigg discussed how teenagers ages 16 and older should be treated using buprenorphine, which both eliminates cravings and prevents overdose. One major obstacle, however, is a lack of clinicians trained to prescribe the drug.

Dr. Virginia Rauh, professor of [Population and Family Health](#) at Columbia University, presented on adverse childhood experiences (ACEs) and how the accumulation of ACEs can overwhelm a child's coping mechanisms, rewiring the brain and affecting the way he or she responds to stress. The greater the number of ACEs, the more likely they are to engage in risky behaviors, including sex, raising their chances of acquiring an STI. For more information, please read "[Why Are So Many Teens Getting STDs?](#)"

Dr. Jason Zucker, internal medicine and pediatric infectious diseases attending at Columbia Irving Medical Center and fellow with the NYC PTC, spoke about PrEP and adolescents and the importance of working with adolescents to help them consistently use and stay on PrEP.

Finally, a panel on Challenging STI Cases was held to close the conference. Led by Dr. Natalie Neu, the medical director of the NYC PTC and Project STAY, the panel focused on the diagnosis and management of STIs through cases. Many cases came from Project STAY, which provides sexual health care for young people who are HIV-positive or are at risk for HIV infection. Panelists included Dr. Thomas Cherneskie from the NYC DOHMH, Dr. Uri Belkind from Callen Lorde Community Health Center, Dr. Jason Zucker from Columbia Irving Medical Center and Caroline Carnevale FNP MPH AAHIV, from Project STAY.

The NYC PTC will offer another adolescent conference next March of 2020, so please stay tuned! To view presentations from the March 26 2019 conference, [please click here](#).

**STD CLINICAL
CONSULTATION
NETWORK**

Have a question or an interesting case? [Contact us!](#)

The Clinical Consultation Service is intended for licensed healthcare professionals and STD program staff. We do not provide direct medical care, treatment planning, or medical treatment services to individuals.