simcoe muskoka
DISTRICT HEALTH UNIT

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HealthFAX

New Gonorrhea Testing and Treatment Recommendations

Attention: Physicians, Hospital Emergency Departments, Nurse Practitioners, Walk-In Clinics, Infection Control Practitioners
Date: February 27, 2012

In December, 2011 the Public Health Agency of Canada (PHAC) released new recommendations for the testing and treatment of gonococcal infections. The recommendations were in response to the increasing gonococcal antimicrobial resistance being observed in Canada and globally. In Ontario, by the end of 2011 there had been seven cases of confirmed clinical failures associated with cefixime use for gonococcal infections. An updated version of the gonorrhea chapter for the *Canadian Guidelines on Sexually Transmitted Infections* drafted by PHAC, in consultation with an Expert Working Group, will be available in due course. In the interim, PHAC is recommending that health care providers consider the following information in the management of gonorrhea.

Testing

In order to provide information to guide the management of individual cases and to improve public health monitoring of trends in antimicrobial resistance patterns, **gonorrhea cultures should be done when possible** to allow for antimicrobial sensitivity testing under the following circumstances:

1. In men who have sex with men (MSM), cultures are recommended in symptomatic patients prior to treatment. Nucleic acid amplification testing (NAAT) should continue to be used for screening asymptomatic individuals. We encourage NAAT and culture testing for the MSM population due to the increased sensitivity of NAAT over culture.
2. For all cases, test of cure with an appropriate sample for gonococcal culture is recommended for any of the following situations:
   I. All pharyngeal infections
   II. Persistent symptoms or signs post-treatment
   III. Cases treated using a regimen other than the preferred treatment
   IV. Cases who are linked to a drug resistant/treatment failure case and were treated with that same antibiotic

Treatment

Based on safety, efficacy and rising ceftriaxone and cefixime minimum inhibitory concentrations (MIC), it is recommended that **higher doses of cephalosporins** be used (i.e. a single dose of ceftriaxone 250 mg intramuscularly or cefixime 800 mg[1] orally for individuals 9 years of age or older) to reduce the risk of gonococcal treatment failure.

[1] Cefixime 800mg is higher than the dosage listed in the product monograph for the treatment of gonococcal infection.

Due to recent cases of cefixime treatment failures reported primarily in MSM, ceftriaxone 250 mg intramuscularly is recommended as the preferred treatment for gonococcal infections in this population.

In situations where adequate tissue penetration is necessary to achieve cure (e.g., pharyngeal infection and in combination therapy for complicated cases such as pelvic inflammatory disease or epididymitis), ceftriaxone 250 mg intramuscularly is preferred as more efficacy data are available for this agent than for oral cefixime 800 mg in such cases.

Due to the rapid increase in quinolone resistant Neisseria gonorrhoeae, quinolones such as ciprofloxacin and ofloxacin are no longer recommended for the treatment of gonococcal infections in Canada. However, in some circumstances, such as an anaphylactic allergy to penicillin or known drug intolerance to a third generation cephalosporin, a single dose of ciprofloxacin 500 mg OR a single dose of ofloxacin 400 mg may be considered as an alternative treatment option (unless contraindicated) ONLY IF:
a) Antimicrobial susceptibility testing is available and quinolone susceptibility is demonstrated; OR
b) Local quinolone resistance is under 5% AND a test of cure can be performed.

Quinolones are not recommended in pre-pubertal children if other options are appropriate. Clinicians may base their treatment choices on local epidemiological data, if available.

Empiric treatment for Chlamydia is recommended for all patients treated for gonococcal infection regardless of chlamydial test results because of the high co-infection risk. A one gram single oral dose of Azithromycin is the preferred Chlamydia co-treatment option due to the dual cephalosporin-azithromycin therapeutic effect on gonorrhea, significant rates of tetracycline resistant gonorrhea and concerns regarding compliance with a seven-day doxycycline treatment. However, oral doxycycline as an alternate treatment option for Chlamydia can be used at 100 mg twice a day for 7 days if compliance is not a concern.

Notifications on updates to the Canadian Guidelines on Sexually Transmitted Infections are distributed through the Guidelines' Listserv e-mail notification service. If you'd like to subscribe to the Listserv, please visit their website: http://www.phac-aspc.gc.ca/std-mts/sti-its/email-eng.php.

If you have any questions or comments please contact the Sexual Health Program at 705-721-7520 or 1-877-721-7520or extension 8376.

Appendix A

Gonorrhea Testing and Treatment			
	Testing	**Treatment**	**Additional Notes**
MSM			
Symptomatic	Culture	Ceftriaxone 250mg IM	
	Urine	Zithromax 1gm	
	other cultures as necessary		
MSM			
Asymptomatic	Urine NAAT	Await results	If positive treat with Ceftriaxone 250mg and zithromax 1gm
	other cultures as necessary		
MSM			
Contact - asymptomatic	Culture and urine NAAT	Ceftriaxone 250mg	
	other cultures as necessary		
Men			
Symptomatic	Culture	Ceftriaxone 250 mg	
	Urine NAAT	or cefixime 800mg	
		zithromax 1gm	
Men			
Asymptomatic	Urine NAAT	Await results	If positive treat with Cefixime 800mg and zithromax 1gm
Men			
contact - asymptomatic	Urine NAAT	Cefixime 800mg	
Women			
Symptomatic - d/c	swab culture	Cefixime 800mg	
	swab NAAT	zithromax 1gm	
Women			
Asymptomatic	Urine NAAT	Await results	If positive treat with Cefixime 800mg and zithromax 1gm
Women			
Contact - asymptomatic	Urine NAAT	Cefixime 800mg	
*** If there is any indications that the case is linked to drug resistant GC treat with Ceftriaxone.**			
PHAC Recommendations - December 2011			