

# Chapter 205

## Gonorrhea, mycoplasma and vaginosis

Ted Rosen

### REFERENCES

- Centers for Disease Control and Prevention: *Sexually transmitted diseases in the United States, 2009*, <http://www.cdc.gov/std/stats09/trends.pdf>, accessed Nov 27, 2010
- Fowler T et al: Previous history of gonococcal infection as a risk factor in patients presenting with gonorrhea. *Int J STD AIDS* 21:277, 2010 [PMID: 20378901]
- Nicoletti A: The STD/Alcohol connection. *J Pediatr Adolesc Gynecol* 23:53, 2010 [PMID: 20123416]
- Fang L et al: Trends in ge disparities between younger and middle-age adults among reported rates of Chlamydia, gonorrhea and infectious syphilis in Canada: Findings from 1997–2007. *Sex Transm Dis* 37:18, 2010 [PMID: 20118675]
- Kent CK et al: Prevalence of rectal, urethral, and pharyngeal chlamydia and gonorrhea detected in 2 clinical settings among men who have sex with men: San Francisco, California, 2003. *Clin Infect Dis* 41:67, 2005 [PMID: 15937765]
- Todar K: *The Pathogenic Neisseriae in Todar's Online Textbook of Bacteriology*. Madison, Wisconsin, University of Wisconsin-Madison Department of Bacteriology, 2008, [http://www.textbookofbacteriology.net/medical\\_4.html](http://www.textbookofbacteriology.net/medical_4.html), accessed Nov 4, 2010
- Rosen T: Unusual presentations of gonorrhea. *J Am Acad Dermatol* 6:369, 1982 [PMID: 7068965]
- Kaul R et al: The genital tract immune milieu: An important determinant of HIV susceptibility and secondary transmission. *J Reprod Immunol* 77:32, 2008 [PMID: 17395270]
- Giannini CM et al: Culture of non-genital sites increases the detection of gonorrhea in women. *J Pediatr Adolesc Gynecol* 23:246, 2010 [PMID: 20434928]
- Little JW: Gonorrhea: Update. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 101:137, 2006 [PMID: 16448912]
- Crossman SH: The challenge of pelvic inflammatory disease. *Am Fam Physician* 73:859, 2006 [PMID: 16529095]
- Judlin P: Current concepts in managing pelvic inflammatory disease. *Curr Opin Infect Dis* 23:83, 2010 [PMID: 19935421]
- Peter NG, Clark LR, Jaeger JR: Fitz-Hugh-Curtis syndrome: A diagnosis to consider in women with right upper quadrant pain. *Cleve Clin J Med* 71:233, 2004 [PMID: 15055246]
- Woods CR: Gonococcal infections in neonates and young children. *Semin Pediatr Infect Dis* 16:258, 2005 [PMID: 16210106]
- Darling EK, McDonald H: A meta-analysis of the efficacy of ocular prophylactic agents used for the prevention of gonococcal and chlamydial ophthalmia neonatorum. *J Midwifery Womens Health* 55:319, 2010 [PMID: 20630358]
- Rice PA: Gonococcal arthritis (disseminated gonococcal infection). *Infect Dis Clin North Am* 19:853, 2005 [PMID: 16297736]
- Centers for Disease Control and Prevention: *Sexually Transmitted Diseases Treatment Guidelines 2006; Diseases Characterized by Urethritis and Cervicitis*, <http://www.cdc.gov/std/treatment/2006/urethritis-and-cervicitis.htm#uc6>, accessed Nov 4, 2010
- Tabrizi SN et al: Evaluation of opa-based real-time PCR for detection of *Neisseria gonorrhoeae*. *Sex Transm Dis* 32:199, 2005 [PMID: 15729160]
- Whiley DM et al: Exploring “best practice” for nucleic acid detection of *Neisseria gonorrhoeae*. *Sex Health* 5:17, 2008
- Centers for Disease Control and Prevention: Sexually transmitted diseases treatment guidelines, 2010. *MMWR Morb Mortal Wkly Rep* 59(RR-12):1-114, 2010
- Centers for Disease Control and Prevention: Update to CDC's Sexually Transmitted Diseases Treatment Guidelines, 2006: Fluoroquinolones no longer recommended for treatment of gonococcal infections. *MMWR* 56:332, 2007 [PMID: 17431378]

22. Saperstein AK, Firnhaber GC: Should you test or treat partners of patients with gonorrhea, chlamydia, or trichomoniasis? *J Fam Prac* **59**:46, 2010 [PMID: 20074503]
23. Trelle S et al: Improved effectiveness of partner notification for patients with sexually transmitted infections: Systematic review. *BMJ* **334**:354, 2007 [PMID: 17237298]
24. Anttila T et al: Serotypes of Chlamydia trachomatis and risk for development of cervical squamous cell carcinoma. *JAMA* **285**:47, 2001 [PMID: 11150108]
25. Madeleine MM et al: Risk of cervical cancer associated with Chlamydia trachomatis antibodies by histology, HPV type and HPV cofactors. *Int J Cancer* **120**:650, 2007 [PMID: 17096345]
26. Rours IG et al: Chlamydia trachomatis as a cause of neonatal conjunctivitis in Dutch infants. *Pediatrics* **121**:e321-e326, 2008 [PMID: 18245405]
27. Motrich RD et al: Chlamydia trachomatis occurrence and its impact on sperm quality in chronic prostatitis patients. *J Infect* **53**:175, 2006 [PMID: 16376990]
28. Ouzounova-Raykova V, Ouzounova I, Mitov IG: May Chlamydia trachomatis be an aetiological agent of chronic prostatic infection? *Andrologia* **42**:176, 2010 [PMID: 20500746]
29. Chandran L, Boykan R: Chlamydial infections in children and adolescents. *Pediatr Rev* **30**:243, 2009 [PMID: 19570922]
30. Hislop J et al: Systematic review of the clinical effectiveness and cost-effectiveness of rapid point-of-care tests for the detection of genital chlamydia infection in women and men. *Health Technol Assess* **14**:1, 2010 [PMID: 20557810]
31. Low N et al: Effectiveness of chlamydia screening: Systematic review. *Int J Epidemiol* **38**:435, 2009 [PMID: 19060033]
32. Reitmeijer CA et al: Incidence and repeat infection rates of chlamydia trachomatis among male and female patients in an STD clinic: Implications for screening and rescreening. *Sex Transm Dis* **29**:65, 2002 [PMID: 11818890]
33. Anschuetz GL et al: Determining risk markers for gonorrhea and chlamydial infection and reinfection among adolescents in public high schools. *Sex Transm Dis* **36**:4, 2009 [PMID: 18813031].
34. Hartmann J: Genital mycoplasmas. *J Dtsch Dermatol Ges* **7**:371, 2009 [PMID: 19500195]
35. Martin DH: Nongonococcal urethritis: New views through the prism of modern molecular microbiology. *Curr Infect Dis Rep* **10**:128, 2008 [PMID: 18462587]
36. Larsen B, Hwang J: Mycoplasma, ureaplasma, and adverse pregnancy outcomes: A fresh look. *Infect Dis Obstet Gynecol pii*:521921, 2010 [PMID: 20706675]
37. Centers for Disease Control and Prevention: *Sexually Transmitted Diseases Treatment Guidelines 2006; Trichomoniasis*, <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5511a1.htm>, accessed Nov 4, 2010
38. Schwebke JR, Burgess D: Trichomoniasis. *Clin Microbiol Rev* **17**:794, 2004 [PMID: 15489349]
39. Soper D: Trichomoniasis: Under control or under-controlled? *Am J Obstet Gynecol* **190**:281, 2004 [PMID: 14749674]
40. Fornia F, Gulmezoglu AM: Interventions for treating trichomoniasis in women. *Cochrane Database Syst Rev* **2**:CD000218, 2003 [PMID: 12804391]
41. Okun N, Gronau KA, Hannah ME: Antibiotics for bacterial vaginosis or Trichomonas vaginalis in pregnancy: A systematic review. *Obstet Gynecol* **105**:857, 2005 [PMID: 15802417]
42. Ogino M, Iino K, Minoura S: Habitual use of warm-water cleaning toilets is related to aggravation of the vaginal microflora. *J Obstet Gynaecol Res* **36**:1071, 2010 [PMID: 21058441].
43. Ness RB et al: Douching in relation to bacterial vaginosis, lactobacilli, and facultative bacteria in the vagina. *Obstet Gynecol* **100**:765, 2002 [PMID: 12383547]
44. Marrazzo JM et al: Prevalence and risks for bacterial vaginosis in women who have sex with women. *Sex Transm Dis* **37**:335, 2010 [PMID: 20429087]
45. Fredricks DN, Fiedler TL, Marrazzo JM: Molecular identification of bacteria associated with bacterial vaginosis. *N Engl J Med* **353**:1899, 2005 [PMID: 16267321]
46. Klebanoff MA et al: Vulvovaginal symptoms in women with bacterial vaginosis. *Obstet Gynecol* **104**:267, 2004 [PMID: 15291998]
47. Centers for Disease Control and Prevention: *Sexually Transmitted Diseases Treatment Guidelines 2006; Bacterial Vaginosis*, <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5511a1.htm>, accessed Nov 4, 2010
48. Klebanoff MA et al: Is bacterial vaginosis a stronger risk factor for preterm birth when it is diagnosed earlier in gestation? *Am J Obstet Gynecol* **192**:470, 2005 [PMID: 15695989]
49. Myer L et al: Bacterial vaginosis and susceptibility to HIV infection in South African women: A nested case-control study. *J Infect Dis* **192**:1372, 2005 [PMID: 16170754]

50. Boyle DC et al: Is bacterial vaginosis associated with cervical intraepithelial neoplasia? *Int J Gynecol Cancer* **13**:159, 2003 [PMID: 12657117]
51. Uthayakumar S et al: Bacterial vaginosis and cervical intraepithelial neoplasia—Cause or co-incidence? *J Obstet Gynaecol* **18**:572, 1998 [PMID: 15512183]
52. Koumans EH, Kendrick JS: CDC Bacterial Vaginosis Working Group. Preventing adverse sequelae of bacterial vaginosis: A public health program and research agenda. *Sex Transm Dis* **28**:292, 2001 [PMID: 11354269]
53. Hay P, Ugwumadu AHN, Manyonda IT: Oral clindamycin prevents spontaneous preterm birth and mid trimester miscarriage in pregnant women with bacterial vaginosis. *Int J STD AIDS* **12**(Suppl 2):70, 2001 [PMID: 12660054]
54. Ugwumadu A et al: Natural history of bacterial vaginosis and intermediate flora in pregnancy and effect of oral clindamycin. *Obstet Gynecol* **104**:114, 2004 [PMID: 15229009]
55. Centers for Disease Control and Prevention: Trends in HIV and STD-related risk behaviors among high school students—United States, 1991–2007. *MMWR* **57**:817, 2008

