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## References:

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1. Ronald AR, Pattulo MS. The natural history of urinary infection in adults. *Med Clin North Am* 199; 75:299-312.
2. Anthony JS. Infection of the urinary tract. *Campbells urology*, 8th ed. 2002; 515-602.
3. New CH. Urinary tract infection. *Am J Med* 1992; 4A suppl:63-70.
4. Gebre-Selassie S. Asymptomatic bacteriuria in pregnancy: epidemiological, clinical and microbiological approach. *Ethiop Med J* 1998;36:185-92.
5. Pastore LM, Savitz DA, Thorp JM Jr, et al. Predictors of symptomatic urinary tract infection after 20 weeks' gestation. *J Perinatol* 1999;19:488-93.
6. Tambyah PA, Maki DG. Catheter associated urinary tract infection is rarely symptomatic; a prospective study of 1497 catheterized patients. *Arch Int Med* 2000;160:678-82.
7. Gastmeier P, Kampf G, Wischnewski N, et al. Prevalence of nosocomial infections representative German hospital. *J Hosp Infect* 2001; 38: 37.
8. Weber G, Riesenberger K, Schlaeffer F, et al. Changing trends in frequency and antimicrobial resistance of urinary pathogens in outpatient clinics and a hospital in southern Israel. *Eur J Microbiol Infect Dis* 2002; 16:834-8.
9. Allen UD, MacDonald N, Fuite L, et al. Risk factors for resistance to first-line antimicrobials among urinary tract isolates of *Escherichia coli* in children. *CMAJ* 1999;160:436-40.
10. Jones RN, Kugler KC, Pfaller MA, et al. Characteristics of pathogens causing urinary tract infections in hospitals in North America: results from the SENTRY Antimicrobial Surveillance program, 1997. *Diagn Microbiol Infect Dis* 1999; 35:55-63.
11. Abu Shaqra Q. Occurrence and antibiotic sensitivity of *Enterobacteriaceae* of Jordanian patients with community acquired urinary tract infections. *Cytobios* 2000; 101:15-21.
12. Grude N, Tveten Y, Kristiansen BE. Urinary tract infection in Norway: bacterial etiology and susceptibility. *Eur J Clin Microbiol Infect Dis* 2001;7:543-7.
13. Mathai D, Jones RN, Winokur PK, et al. Epidemiology and frequency of resistance among pathogens causing urinary tract infections in 1,510 hospitalized patients: a report from the SENTRY Antimicrobial Surveillance Program (North America). *Diagn Microbiol Infect Dis* 2003;40:129-36.
14. Zhanel GG, Karlowsky JA, Harding GKM. A Canadian national surveillance study of urinary tract isolates from outpatients: Comparison of the activities of trimethoprim - sulfamethoxazole, ampicillin, mecithicilins, nitrofurantoin, and ciprofloxacin. *Antimicrob Agents Chemother* 2000; 44: 1089-92.
15. Paulo S, Pereira AC, Dias L, et al. Community acquired urinary tract infection: etiology and bacterial susceptibility. *New Microbiol* 2003; 26:257-62.
16. Srinivasa H, Parija SC, Bhattacharya S, et al. Incidence of ciprofloxacin resistance in urinary isolates Eastern Nepal. *J Comm Dis* 1991; 31:45-7.
17. Iqbal J, Rahman M, Kabir MS. Increasing ciprofloxacin resistance among prevalent urinary tract bacterial isolates in Bangladesh. *Jpn J Med Sci Biol* 1997; 50:241-50.
18. Arakawa S, Shingemura K, Nakono Y. Pathogen occurrence and antimicrobial

- 
- susceptibility of urinary tract infection case during a 20-Year Period (1983- 2002) at a single Institution in Japan. *Med Princ Pract* 2003;13:334-9.
19. Jones RN, Kugler KC, Pfaller MA, et al. Characteristics of pathogens causing urinary tract infections in hospitals in North America: results from the SENTRY Antimicrobial Surveillance Program, 1997. *Diagn Microbiol Infect Dis* 1999;35: 55-63.