Guidelines for antimicrobial therapy of urinary tract infections in Taiwan

Infectious Diseases Society of the Republic of China,
Medical Foundation in Memory of Dr. Deh-Lin Cheng,
Foundation of Professor Wei-Chuan Hsieh for Infectious Diseases Research and Education,
Lee CY's Research Foundation for Pediatric Infectious Diseases and Vaccine

A consensus conference for establishing guidelines for antimicrobial therapy of urinary tract infections in Taiwan was held on March 11, 2000, following a symposium on urinary tract infections (UTIs) held in conjunction by the Infectious Diseases Society of the Republic of China (IDSROC), the Medical Foundation in Memory of Dr. Deh-Lin Cheng, Foundation of Professor Wei-Chuan Hsieh for Infectious Diseases Research and Education, and Lee CY's Research Foundation for Pediatric Infectious Diseases and Vaccine. Participating parties to this consensus conference included board members of the IDSROC, and experts in the field of infectious diseases. This is the second consensus conference of this nature, and abided by the three principles established during the first consensus conference on antimicrobial therapy of pneumonia in Taiwan, held in 1999:

1. Establishment of guidelines from the viewpoint of primary care physicians.

- 2. Antimicrobial agents recommended in the guidelines were agents already marketed in Taiwan.
- 3. Guidelines were based on academic principles rather than the regulations of the Bureau of National Health Insurance on antibiotic usage.

In addition, the following two points were also considered:

- 1. Guidelines were tailored to the local epidemiology, including commonly seen pathogens and antimicrobial resistance patterns.
- 2. Guidelines included recommendations on prophylactic antimicrobial usage.

Treatment guidelines were passed through the board of IDSROC, and a copy was sent to primary care physicians, in the hope of ensuring appropriate use of antimicrobial agents in the community. These treatment guidelines were published as a supplement in the *Journal of Immunology, Microbiology and Infection*, to serve as a reference to all practicing physicians in Taiwan.

Guidelines for antimicrobial therapy of urinary tract infections

Diagnosis	Drug of choice	Alternative choice
Asymptomatic bacteriuria ^a	Nitrofurantoin 1° or 2° cephalosporins Trimethoprim ^b Trimethoprim/sulfamethoxazole ^b	Ampicillin or amoxicillin ^c Ampicillin/sulbactam ^c Amoxicillin/clavulanate ^c
Acute bacterial cystitis	Nitrofurantoin 1° or 2° cephalosporins Trimethoprim Trimethoprim/sulfamethoxazole ^b Quinolones ^d	Ampicillin or amoxicillin ^c Ampicillin/sulbactam ^c Amoxicillin/clavulanate ^c Fluoroquinolones ^e
Acute uncomplicated pyelonephritis	Trimethoprim/sulfamethoxazole 1° or 2° cephalosporins Aminoglycosides	Ampicillin or amoxicillin ^c Ampicillin/sulbactam ^c Amoxicillin/clavulanate ^c Aminoglycosides (single) + 1° or 2° cephalosporins
Acute complicated pyelonephritis/ emphysematous pyelonephritis/ renal and perinephric abscess	1° or 2° cephalosporins or Ampicillin or amoxicillin ± Aminoglycosides Trimethoprim/sulfamethoxazole	3° or 4° cephalosporins Ticarcillin/clavulanate Piperacillin/tazobactam Aztreonam Imipenem or meropenem Fluoroquinolones ^e

Continued

Diagnosis	Drug of choice	Alternative choice
Acute bacterial prostatitis	Ampicillin or amoxicillin 3 ^o cephalosporins Trimethoprim/sulfamethoxazole	Fluoroquinolones ^e
Chronic bacterial prostatitis	Trimethoprim/sulfamethoxazole Fluoroquinolones ^e	_
Nosocomial/catheter-related UTIs	3° or 4° cephalosporins Ureidopenicillins Fluoroquinolones ^e Ampicillin or amoxicillin ^f ± Aminoglycosides	Imipenem or meropenem
UTIs in pregnancy	Ampicillin or amoxicillin ^c Nitrofurantoin 1° or 2° cephalosporins	3° or 4° cephalosporins Ureidopenicillins
UTIs in children	Ampicillin or amoxicillin ^c or 1 ^o or 2 ^o cephalosporins + Aminoglycosides Trimethoprim/sulfamethoxazole	3° or 4° cephalosporins
Suppressive recurrent UTIs	Nitrofurantoin Trimethoprim Trimethoprim/sulfamethoxazole	_

^aNo treatment except during pregnancy, after a catheter removal and prior to urologic surgery.

*Consensus Conference Participants (in alphabetical order):

Feng-Yee Chang, Shan-Chwen Chang, Yao-Shen Chen, Ming-Yuan Chou, Mong-Ling Chu, Chang-Phone Fung, Wei-Chuan Hsieh, Po-Ren Hsueh, Clement C.S. Hsu, Cheng-Hua Huang, Fu-Yuan Huang, Kun-Yen Huang,

Yhu-Chering Huang, Chien-Ching Hung, Kao-Pin Hwang, Chi-Kan Lan, Chin-Yun Lee, Sai-Cheong Lee, Hsieh-Shong Leu, Yeu-Jan Lau, Cheng-Yi Liu, Ching-Chuan Liu, Yung-Ching Liu, Kwen-Tay Luh, Fu-Der Wang, Lih-Shinn Wang, Wing-Wai Wong, Muh-Yong Yen, Kwok-Woon Yu.

^bExcept during pregnancy.

^cFor enterococcal infection.

^dNalidixic acid, pipemic acid, cinoxacin.

^eNorfloxacin, ofloxacin, enoxacin, ciprofloxacin, pefloxacin, lomefloxacin, fleroxacin.

^fFor gram-positive infection.