<u>Clin Infect Dis.</u> 2007 Sep 1;45(5):e60-7. Epub 2007 Jul 19.

Risk of recurrent nontyphoid Salmonella bacteremia in HIV-infected patients in the era of highly active antiretroviral therapy and an increasing trend of fluoroquinolone resistance.

Hung CC, Hung MN, Hsueh PR, Chang SY, Chen MY, Hsieh SM, Sheng WH, Sun HY, Huang YT, Lo YC, Hsiao CF, Chang SC.

Department of Internal Medicine, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan. hcc0401@ntu.edu.tw

BACKGROUND: Risk of recurrent nontyphoid Salmonella (NTS) bacteremia and trends of antimicrobial resistance of NTS remain unknown in human immunodeficiency virus (HIV)-infected patients receiving highly active antiretroviral therapy (HAART). METHODS: Ninety-three patients who received a diagnosis of NTS bacteremia from June 1994 through June 2006 were prospectively followed up. Incidence of recurrent NTS bacteremia was compared between the pre-HAART era (June 1994-March 1997) and the HAART era (April 1997-June 2006). Prevalence of antimicrobial resistance was compared among the NTS isolates obtained in the pre-HAART era, the early HAART era (April 1997-June 2002), and the late HAART era (July 2002-June 2006). RESULTS: Compared with patients enrolled in the pre-HAART era, patients who received HAART had an incidence of recurrent NTS bacteremia that was significantly reduced by 96%; the incidence of recurrent NTS bacteremia was 2.56 cases per 100 person-years in the HAART era, compared with 70.56 cases per 100 personyears in the pre-HAART era (rate ratio, 0.036; 95% confidence interval, 0.012-0.114; P<.001). In the HAART era, the incidence of recurrent NTS bacteremia did not increase among patients receiving fluoroquinolone prophylaxis for <or=30 days (1.69 cases per 100 person-years), compared with among patients receiving fluoroquinolones for >30 days (3.95 cases per 100 person-years), with a rate ratio of 0.43 (95% confidence interval, 0.07-2.58). Although resistance to ampicillin, cotrimoxazole, and chloramphenicol decreased, the proportion of NTS isolates resistant to fluoroquinolones increased from 0% in the pre-HAART era to 6.2% in the early HAART era and 34.2% in the late HAART era (P=.002). CONCLUSIONS: The risk of recurrent NTS bacteremia decreased significantly in the HAART era, although NTS isolates obtained from HIV-infected patients were increasingly resistant to fluoroquinolones.

PMID: 17682981 [PubMed - indexed for MEDLINE]