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.

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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 person-years 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.

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