J Infect Chemother. 2008;14:361-7.

Fulminant septicemia of Bacillus cereus resistant to carbapenem in a patient with biphenotypic acute leukemia.

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We report a case of fulminant septicemia with Bacillus cereus resistant to carbapenem. A 33year-old man was suffering from febrile neutropenia (FN) on day 15 after the start of remissioninduction therapy for biphenotypic acute leukemia under gut decontamination with polymyxin B and nystatin. Meropenem, a carbapenem, was administered according to the guideline for FN. Two days later (on day 17), he complained of severe abdominal pain, lost consciousness, went into sudden cardiopulmonary arrest, and died. Autopsy showed multiple spots of hemorrhage and necrosis caused by bacterial plaque in the brain, lungs, and liver. B. cereus was isolated from a blood sample obtained in the morning on day 17 and it was after his death that the isolated B. cereus was revealed to be resistant to carbapenem. B. cereus obtained from blood samples has been reported to be usually sensitive to carbapenem and also to vancomycin, new quinolones, and clindamycin. If B. cereus resistant to carbapene increases, our method of gut decontamination with polymyxin B and nystatin may have to be changed to one containing a new quinolone for the prevention of septicemia. Careful watching to determine whether B. cereus resistant to carbapen increases may be also important for empiric therapy, because carbapenem is often selected as the initial therapy for FN in patients with severe neutropenia.

PMID: 18936889