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Colistin and rifampicin in the treatment of multidrug-resistant Acinetobacter baumannii infections.

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Objectives The increased incidence of nosocomial infections by multidrug-resistant organisms has motivated the re-introduction of colistin in combination with other antimicrobials in the treatment of infections. We describe the clinical and microbiological outcomes of patients infected with multidrug-resistant Acinetobacter baumannii who were treated with a combination of colistin and rifampicin. Patients and methods Critically ill patients with pneumonia and bacteraemia caused by A. baumannii resistant to all antibiotics except colistin in medical and surgical intensive care units were enrolled. Clinical and microbiological responses and safety were evaluated. Results Twenty-nine patients (47 +/- 14 years and APACHE II score 17.03 +/- 3.68), of whom 19 were cases of nosocomial pneumonia and 10 were cases of bacteraemia, were treated with intravenous colistin sulphomethate sodium (2 million IU three times a day) in addition to intravenous rifampicin (10 mg/kg every 12 h). All A. baumannii isolates were susceptible to colistin. The mean duration of treatment with intravenous colistin and rifampicin was 17.7 (+/-10.4) days (range 7-36). Clinical and microbiological responses were observed in 22 of 29 cases (76%) and the overall infection-related mortality was 21% (6/29). Three of the 29 evaluated patients (10%) developed nephrotoxicity when treated with colistin, all of whom had previous renal failure. No cases of renal failure were observed among patients with normal baseline renal function. No neurotoxicity was noted. Conclusions Colistin and rifampicin appears to be an effective and safe combination therapy for severe infections due to multidrug-resistant A. baumannii.

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