عنوان مقاله:

The identification and in vitro antimicrobial susceptibility testing of human Brucella spp. isolated from Iranian patients

محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Brucellosis is a widespread zoonotic disease with high prevalence in both animals and humans. It is endemic in many parts of the world including Mediterranean areas. The aim of this study was to evaluate the susceptibility of Brucella strains isolated from human clinical specimens to nine antimicrobial agents commonly used for the treatment of infection disease. Bacteria were cultured and identified by molecular typing and Brucella biotyping. Minimal inhibitory concentration (MIC) and disk diffusion test were used to compare the efficacy of antimicrobial agents against and to define the susceptibility profile for each strain. In this study, all 54 Brucella isolates were identified as B. melitensis biovar 1. Our results showed that the majority of the tested antibacterial drugs, excepting Colistin and Ampicilin sulbactam had effective activity against B. melitens in both MIC and disk diffusion methods and could be implemented in therapeutic regimens with confidence. Moreover, probable resistance to colistin, rifampin, ampicillin-sulbactam and imipenem were reported in 54 isolates (100%), 1 isolate (1.9 %), eleven isolates (20.4 %) and 2 isolates (3.7%), respectively. These results suggest that the efficacy of regularly used antibiotics for brucellosis treatment should be commonly monitored. In conclusion, based on the present study, appropriate precaution should be exercised in the context of antibiotic administration to prevent future antibiotic resistance.

کلمات کلیدی:

Antimicrobial susceptibility; brucellosis; Brucella melitensis; Iran