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P2452 Bloodstream infections caused by carbapenem-resistant *Acinetobacter baumannii*: clinical features, therapy and outcome from a multi-centre study

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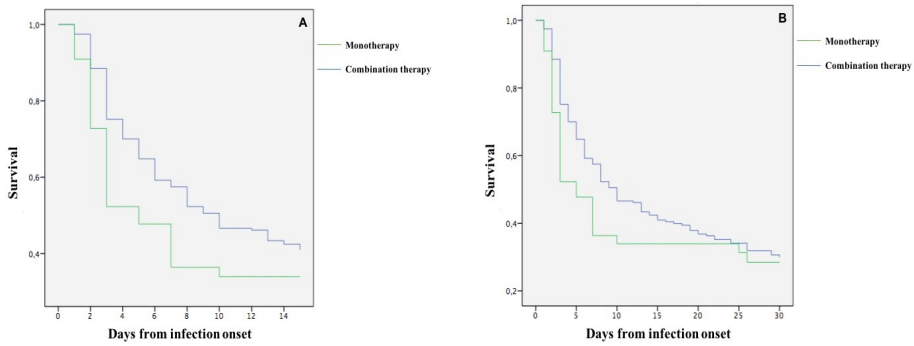
Background: bloodstream infections (BSI) due to multidrug-resistant (MDR) *Acinetobacter baumannii* (AB) have been increasingly observed among hospitalized patients. Aim of the present study was to analyse clinical features, antimicrobial treatment and outcome of patients with BSI due to MDR-AB.

Materials/methods: prospective, observational study conducted among 12 large tertiary-care hospitals, across 7 Italian regions. From June 2017 to June 2018 all consecutive hospitalized patients with bacteremia due to MDR-AB were included and analyzed in the study. Primary endpoint of the study was evaluation of risk factors associated with survival or death at 14 and 30 days after BSI onset.

Results: During the study period 281 episodes of BSI due to MDR-AB were observed: 98 (34.8%) episodes were classified as primary bacteremias, and 183 (65.2%) as secondary bacteremias; 177 (62.9%) of them were associated with septic shock. Based on microbiological reports, 98.6% of AB strains were considered extensively drug-resistant (XDR) and 1.4% pandrug-resistant (PDR). Overall, 14-day mortality was observed in 172 (61.2%) patients, while 30-day mortality in 207 (73.6%) patients. Rates of 30-day mortality were 71.7% in patients treated with monotherapy, 74.04% in combination therapy, 70.6% for two-drug combination, 78.3% for three-drug combination, 68.7% for four drug combination, 70.9% in colistin-containing regimen, and 73.1% in carbapenem-containing regimen. On multivariate analysis, previous surgery, continuous renal replacement therapy, inadequate source control of infection, pneumonia, and SOFA score>3 were independently associated with higher risk of septic shock. Instead, septic shock and Charlson Comorbidity Index >3 were associated with 14-day mortality, while adequate source control of infection and combination therapy with survival. Finally, septic shock, previous surgery, and aminoglycoside-containing regimen were associated with 30-day mortality, while colistin-containing regimen with survival. No differences in 30-day mortality were reported for monotherapy compared to combination therapy.

Conclusions: BSI caused by MDR-AB represents a difficult challenge for physicians, considering the high rates of septic shock and mortality associated. Our observations suggest that new antibiotic options are mandatory for treatment of patients with this severe infection.

Figure 1. Kaplan-Meier curves about 14-day (**A**) and 30-day (**B**) survival of patients treated with monotherapy (green line) or combination therapy (blue line).


A
Monotherapy
Combination therapy
Survival
1,0
0,8
0,6
0,4
0
2
4
6
8
10
12
14
Days from infection onset
B
Monotherapy
Combination therapy
Survival
1,0
0,8
0,6
0,4
0,2
0
5
10
15
20
25
30
Days from infection onset