

URINARY TRACT INFECTION CAUSED BY MULTIDRUG-RESISTANT BACTERIA IN CIRRHOTIC PATIENTS

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INTRODUÇÃO

There are data that multidrug-resistant bacteria (MDR) might play an important role in the severity of the course and clinical outcomes of urinary tract infections. Recent investigations suggest that the prevalence of infections caused by MDR-bacteria is increasing in cirrhosis. At the same time, urinary tract infections in cirrhosis are usually symptomless. We aimed to evaluate the rate of MDR-bacteria in hospitalized cirrhotic patients with urinary tract infections.

MATERIAL/MÉTODOS

This was a retrospective study of 151 patients with cirrhosis in Department of Gastroenterology (between 2009 and 2011). Cirrhosis was clinically and/or histologically confirmed. The types of infections were defined according to conventional criteria. MDR-bacteria were defined as strains resistant to at least three of the main antibiotic families among tested antimicrobial agents according to international expert recommendations (Magiorakos A.P. et al., 2012).

RESULTADOS

In our study 151 patients with decompensated cirrhosis were enrolled, 67 patients (44.4%; 95%CI: 36.3–52.7%) had various infections, from which urinary tract infections (n=31), pneumonia (n=24) and spontaneous bacterial peritonitis (n=8) were the most frequent. Characteristics of the patients with infections were: median age was 52 (IQR 41–59) years; male 39%; median Child-Pugh score 10 (IQR 9–11). Mostly alcohol induced cirrhosis (55%). The culture-positive samples were found in 33 cases from 27 patients. Gram-positive cocci (73%) were the most common causative bacteria in nosocomial infections such as bacteremia/sepsis and spontaneous bacterial peritonitis. Urinary tract infections were caused by *Enterobacteriaceae*'s family (75%) mainly. From 16 uropathogens 5 were considered to be MDR-strains. Isolated MDR-uropathogens were the following: *Escherichia coli* (n=2), *Pantoea agglomerans*, *Acinetobacter spp.*, *Enterococcus faecalis*. On background of urinary tract infections caused by MDR-bacteria were diagnosed spontaneous bacterial peritonitis (n=1) caused by *S.aureus* and bacteremia (n=3) caused by *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Escherichia coli* during current hospitalization. The rate of MDR-bacteria was 31.3% (95%CI: 11.0-58.7%). At the same time among bacteria which caused urinary tract infections were susceptible to quinolones 93%.

CONCLUSÕES

We identified a high rate of MDR-bacteria in urinary tract infections (31.3% (95%CI: 11.0-58.7%) in our unit. Cases of MDR-urinary tract infections were combined with other severe bacterial complications of cirrhosis (spontaneous bacterial peritonitis, bacteremia). According to the results of microbiological monitoring in local unit the current management of infections in cirrhotic patients' group should be corrected.

REFERÊNCIAS

Magiorakos AP, Srinivasan A, Carey RB, et al. Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance. Clin Microbiol Infect. 2012;18:268–281